455 Phillip Street, Unit 100A
Waterloo, Ontario N2L 3X2
Canada
ghd.com

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16 December 2025

Frank Ertl
2374868 Ontario Inc.
6678 Wellington Road 34
Cambridge Ontario
N3C 2V4

Response to Review of Temporary Use By-Law Amendment Application
Trace Associates Environmental Comments– 6678 Wellington Road 34, Puslinch, Ontario (Site or Property)

Dear Frank,

1. Introduction

On July 2, 2025 GSP Group Incorporated (GSP) submitted a Zoning By-law Application (ZBA) to the Township of Puslinch (the Township) to permit the temporary use of a liquid soil management operation (the Proposed Use) on a portion of the Property for a period of up to three years that would include the following:

– A 1 storey 650 square foot office and maintenance building
– 25 hydro-vacuuming (hydro-vac) truck parking spaces
– 35 employee/visitor parking spaces
– Private servicing including:
  - Water supply wells
  - A firefighting water cistern
  - A holding tank and leach field
– Area for soil offloading and management
– Area of soil processing and stockpiling (unloading and drainage area)
– Temporary pond and drainage swale leading to an existing stormwater management pond
– An area for soil screening

Trace Associates Inc. (Trace) provided comments on the application to the Township in a letter dated November 6, 2025 (Trace, 2025). On behalf of 2374868 Ontario Incorporated (the Proponent), GHD Limited (GHD) has prepared this letter to provide responses to the comments In the following section, GHD reproduces the Trace comments in bold and italicized text, for convenience. GHD's responses to each of these comments then follows in plain text.

2. Comments and Responses

Comment No. 1

Section 2.1: 2023 Recommendation No. 1 - Every load of liquid soil brought to the Site should be sampled (soil and water) and the results should be reviewed before the liquid soil is discharged to the ground surface for processing.

November 2025 Comment - The recommendation in Item 1 has not been addressed. No significant changes to the on-site operations and/or environmental monitoring have occurred since 2023.

Response to Comment No.1

As described in Hydrogeological Impact Assessment Revision No. 1 (GHD, 2024a)[1] (the HIA), no hydrovac operations are conducted at sites with known soil or groundwater contamination or observed potential contamination (e.g., staining and odour). Trucks which have inadvertently come into contact with suspected contaminated materials are directly sent to an Ontario Ministry of Environment, Conservation, and Parks (MECP) permitted treatment or disposal facility and only return to the Site after all potentially contaminated materials are removed. The Site has been in operation for more than 10 years. The lack of significant effect on water quality in the vicinity of Site operations, after more than 10 years of operation, demonstrates that the practices that have been undertaken to date to ensure no negative impacts on the surrounding water resources, have been effective over the long term.

As described in Environmental Compliance Approval (ECA) A 500 4277838045 (the Waste ECA), Condition 28.1 requires the Proponent to construct a liner under all soil storage areas and under all process water collection and storage and conveyance pathways. Hydrovac operations have been paused while the zoning application is being processed. The liner system will be installed before operations commence. Liner systems have been widely used for many decades in the environmental industry and have been demonstrated to successfully allow the collection and prevention of liquid and solid materials from being released to the environment.

The reviewer is requesting that somehow representative samples of the clean water and soil be collected from each hydrovac truck before the liquid soils are placed on the liner system and processed. It is impractical and not feasible to collect representative separate samples of water and soil from a hydrovac truck since the mixture is heterogenous and the amounts of water and the types and amounts of soils vary by generation site and load. O. Reg 406/19 and the Soil Rules do not require liquid soil to be sampled as water and soil so the reviewer's request is inconsistent with regulatory requirements. The Waste ECA specifies that the liquid soil be processed and then dry soil and water be sampled, which is practical, feasible, and consistent with current environmental industry practices. For example, other licensed soil and disposal facilities across Ontario and North America follow the same practices for screening sites and liquid soil loads and then processing and subsequent sampling. The use of a sampling method that is inconsistent with applicable excess soil regulations, Waste ECA requirements, and industry practice is unwarranted. Additionally, the liner will provide protection for water resources, and the other multiple lines of operation and monitoring procedures (e.g., screening sites and materials prior to bringing material to the Site and extensive monitoring programs) that the Proponent is undertaking have been demonstrated to be protective of water resources and prevent adverse effects to the environment.

Comment No. 2

Section 2.2: 2023 Recommendation No. 2 - Watertight area(s)/cell(s) should be constructed on site for the liquid soil brought to the Site. Once the liquid soil is placed in the cell, it can be sampled, and once it is determined that the soil and the water meet the Table 1 site condition standards (SCS) (MOE, 2011) or other applicable regulatory requirement, the soil can be processed/dewatered on site before use as

[1] GHD, 2024a. Hydrogeological Impact Assessment Revision No. 1, 2374868 Ontario Inc. July 5.

backfill in the adjacent pit. Soil and/or water not meeting the applicable quality criteria should be removed from the site for off-site processing or disposal at a facility licensed by the MECP.

November 2025 Comment - The recommendation in Item 2 has not been addressed. No significant changes to the on-site operations and/or environmental monitoring have occurred since 2023. The Applicant has reportedly committed to install a low-permeability liner system beneath the liquid soil unloading/processing area, the temporary pond, the drainage swale, and the final pond. Water collected in the final pond will be sampled to assess its quality and no new water will be added to the pond until testing results are received. If the water results meet the Table 2 SCS (MOE, 2011), per Ontario Regulation (O. Reg.) 153/04: Records of Site Condition (GO, 2004), the water will be released from the pond "for irrigation of the vegetation in the pit rehabilitation areas" (GHD, 2024b, p. 5).

No details have been provided regarding the proposed low-permeability liner system or the protocols and procedures for conducting the sampling of water in the pond or for ensuring that no new water will be added to the pond until the pond is emptied. Also, there is no information on what will happen to the water stored in the pond if the confirmatory sample analytical results exceed the O. Reg. 153/04 Table 2 SCS.

Response to Comment No.2

Elements of this comment are very similar to Comment No. 1; see responses to Comment No.1.

GHD notes that excess soil, including liquid soil, was allowed to be imported to the existing Aggregate Resources Act (ARA) licensed area up until 2022, of which a portion is the area proposed to be used under the temporary zoning authorization. The Proponent previously applied for permanent zoning for the same area before the ARA prohibition policy came into effect. Liquid soil operations have since been paused until such time as a zoning bylaw amendment can be obtained.

The recommendation for watertight cells that the reviewer provided is fully satisfied by the liner system that will be installed before operations commence. The liner system is required to be designed and constructed in accordance with MECP requirements and industry practice.

It is not a factually accurate statement that no details have been provided regarding the protocols and procedures for conducting the sampling of water in the pond. Waste ECA Condition 28.4 requires that each surface water sample be compared against the limits set out in Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for Coarse Textured Soils, as provided in the MECP document entitled "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act", dated April 15, 2011 (Table 2 Standards). Additionally, Waste ECA Condition 28.2.2 requires that the Proponent ensure that the Site is monitored in accordance with the Monitoring Plan noted in Item 3 in Schedule 1 [the HIA (GHD, 2024a)], including sampling of the stormwater management pond on a weekly basis with samples to be analyzed for metals, volatile organic compounds (VOCs), petroleum hydrocarbon fractions 1 through 4 (PHCF1-F4), semi-volatile organic compounds (SVOCs), including polycyclic aromatic hydrocarbons (PAHs).

The reviewer notes that there is no procedure for ensuring that no new water will be added to the pond until the pond is emptied. This is an operational procedure provided in the Design and Operations Report (GHD, 2024b)[2] , which states that water in a holding pond will be held (and no further process water added) until testing results are received to confirm water quality meets Table 2 Standards, and then the water will be released to the existing stormwater management pond and/or for use in irrigation of the vegetation in the pit rehabilitation areas.

The reviewer notes that there is no information on what will happen to the water stored in the pond if the confirmatory sample analytical results exceed the O. Reg. 153/04 Table 2 Standards. This also is not a factually accurate statement. Waste ECA Condition 28.5 requires that process water that does not meet Table 2 Standards shall not be released into the natural environment, but be removed from the Site for

[2] GHD, 2024b. Design and Operations Report, Waste Processing Facility. March 26.

treatment or disposal at an approved facility. Hydrovac trucks are ideally suited to vacuum water from a holding pond and transport the water and are readily available at the Site.

Comment No. 3

Section 2.3: 2023 Recommendation No. 3 - Liquid soil brought to the Site could be processed/solidified using suitable amendments in the designated watertight area(s)/cell(s). Once the soil is dry enough to be stockpiled, the stockpiled soil can be relocated and sampled in accordance with the applicable regulatory requirements.

November 2025 Comment - The recommendation in Item 3 has not been addressed. No significant changes to the on-site operations have occurred since 2023.

Response to Comment No.3

GHD recognizes that, as specified in the Professional Engineers Ontario (PEO) guidance document *Professional Engineers Reviewing Work Prepared by Another Professional Engineer* (PEO, 2011)[3], as a normal part of the review process, reviewing engineers will have to distinguish between the positive and negative aspects of the engineering work and point out things that are incorrect, unclear, unsubstantiated or problematic in the original document. Professional Geoscientists Ontario (PGO, 2024)[4] provides similar guidance (PGO, 2024) in which they state that 'technical reviews should only identify problems and concerns regarding errors, omissions, failure to meet client expectations or noncompliance with standards and regulations.' It is not clear how the comment relates to any of these acceptable, best practices. The comment seems to be making suggestions for alternative designs and no basis for why an alternative design is necessary is provided. Both of the guidance documents note that alternative designs are beyond the scope of a technical peer review.

Comment No. 4

Section 2.4: 2023 Recommendation No. 4 - To minimize the potential for impacting the on-site groundwater with trihalomethanes, Badger should obtain a Permit to Take Water and only use water from the on-site well for hydrovac operations.

November 2025 Comment - The recommendation in Item 4 has not been addressed. No significant changes to the on-site operations have occurred since 2023.

Response to Comment No. 4

The operations use no more than 50,000 litres per day of groundwater from one on-site well and thus do not require a PTTW. In response to Source Water Protection comments on the application, the Proponent has indicated that they will install a flow meter to document that the withdrawal rate is below this threshold.

The reviewer also needs to recognize that some of the trucks do not return to the Site for overnight parking and are driven directly to construction sites, thus using municipal drinking water from hydrants for hydrovac operations.

Trihalomethanes (THMs) include chloroform ($CHCl_3$), bromodichloromethane ($CHBrCl_2$), dibromochloromethane ($CHBr_2Cl$), and bromoform ($CHBr_3$) and are present at low levels in treated municipal drinking water. These constituents are included in the suite of groundwater and surface water analyses regularly sampled consistent with the requirements of the Waste ECA.

The reviewer doesn't provide any rationale for why low-level THMs would have an adverse effect on groundwater/private drinking water wells in the area of the Site and these compounds are commonly present in municipal drinking water. Based on the 8 years of groundwater and surface water sampling completed to date, the following data for these compounds is provided:

[3] PEO, 2011. Professional Engineers Reviewing Work Prepared by Another Professional Engineer. October.
[4] PGO, 2024. Professional Geoscientists Reviewing Work Prepared by Another Professional Geoscientist. March.

	Surface Water	Ground Water
Total Number of Samples	257	120
Total Number of THM Detections	0	0

The monitoring data to date demonstrates that THMs are not present at the Site and there is no basis to believe that conditions will change in the future.

Comment No. 5

Section 2.5: 2023 Recommendation No. 5 - Additional monitoring wells should be installed along the south and west (downgradient) property boundaries of the Site, including two monitoring wells between the existing wells MW1-20 and MW2-20, one well between the monitoring well MW1-20 and the water supply well EXI, and three monitoring wells around the stormwater management (SWM) pond.

November 2025 Comment - The recommendation in Item 5 has not been addressed. Although two new groundwater monitoring wells (MW4-23 and MW5-23) were installed downgradient from the on-site operations, as shown on GHD Figure 3.10 (Appendix B), rather than being installed between the existing wells MW1-20 and MW2- 20, these new wells were installed approximately 250 m downgradient. Furthermore, no wells were installed between the existing monitoring well MW1-20 and the water supply well EXI, and no monitoring wells were installed around the SWM pond.

Response to Comment No.5

See also Response to Harden Environmental Comments.

Monitoring well MW03-20 is situated immediately adjacent to the vegetated drainage swale within the Site operations. It is considered a source strength well because the highest groundwater concentrations near the Site should be observed in this monitoring well if the source originates from Site operations. MW01-20 and MW02-20 are situated immediately downgradient of Site operations. The water supply well AGW1 is situated 24 m downgradient of MW1-20.

The reviewer has requested the installation of six additional monitoring wells:

– Two monitoring wells between MW01-20 and MW2-20
  - Monitoring well MW01-20 is approximately 180 m cross-gradient from MW02-20. As illustrated on Figures 3.15 through 3.18 of the HIA, MW01-20 is immediately downgradient of the vegetated drainage swale. Adding two additional monitoring wells would result in wells 60 m cross-gradient from one another. The existing monitoring network provides sufficient sampling locations to assess groundwater quality near the infiltration area and along the groundwater flow path.
– One monitoring well between MW01-20 and the water supply well EX1 (APW1)
  - Well APW1 is situated approximately 30 m cross-gradient from MW01-20. As illustrated on Figures 3.15 through 3.18 of the HIA, MW01-20 is immediately downgradient of the vegetated drainage swale. It is not clear what additional information the reviewer is looking to obtain from an additional cross-gradient monitoring well off the primary groundwater flow path.
– Three monitoring wells around the SWM pond.
  - Surface water is sampled weekly from the SWM pond and is compared to Table 2 Standards. Any water quality parameter measured from the SWM pond would reasonably be expected to be a higher concentration than downgradient groundwater concentrations. These three proposed wells won't provide added information related to groundwater quality.

The selection of the monitoring well network locations was to provide information related to peak water quality concentrations as well as downgradient monitoring locations. It is GHD's opinion that it is unlikely that a plume of contamination, if it ever actually occurred, would infiltrate into the vegetated swale area and go undetected by MW03-20, MW01-20, AGW1, MW04-23, and MW05-23.

Comment No. 6

Section 2.6: 2023 Recommendation No. 6 - On an annual basis, in-situ soil samples should be collected from the area(s) of the Site affected by soil processing and stockpiling activities to determine if the on-site operations resulted in impacts to the on-site soil. Impacted soil should be removed from the Site for off-site processing or disposal.

November 2025 Comment - The recommendation in Item 6 has not been addressed. No significant changes to the on-site operations and environmental monitoring have occurred since 2023.

Response to Comment No.6

Impacted soil has been removed from the Site during all operations so stating that this recommendation hasn't been addressed is factually incorrect. From 2017 to 2025, 462 soil samples were collected and 61 samples showed exceedances above Table 1 Standards, so these soils were transported to off-site permitted treatment or disposal facilities.

As described in the Waste ECA, Condition 28.1 directs the Proponent to construct a liner under all soil storage areas and under all process water collection and storage and conveyance pathways. Such liners have been used for decades in the environmental industry at thousands of sites to prevent migration of solids and liquids. If contaminated material cannot migrate through a liner then there is no need for sampling beneath a liner. Additionally, penetrating the liner for the purpose of regularly sampling below the processing and area and stockpiles is inconsistent with good liner maintenance practice as this would require liner repairs each time. GHD also notes that the heavy truck and equipment traffic in the processing area historically provided significant compaction to underlying soils which would have significantly decreased the permeability of the soil.

Comment No. 7

Section 2.7: 2023 Recommendation No. 7 - During the first year, surface and groundwater samples should be tested every month. Depending on the analytical results, the sampling frequency could be reduced, for example, to once every two months or quarterly. The frequency and the scope of the ongoing monitoring program should be reviewed on an annual basis.

November 2025 Comment - The recommendation in Item 7 has not been addressed.

Response to Comment No. 7

The Waste ECA requires that groundwater quality be sampled on a quarterly basis and surface water quality be sampled on a weekly basis. There are no technical bases or rationale provided for the recommended changes in sampling frequencies. Monitoring programs have been ongoing and expanding at the Site since 2017, encompassing hydraulic monitoring, groundwater and surface water quality monitoring, consistent with other imported liquid soil operations that includes drying and sampling in accordance with accepted MECP ECA requirements and industry practices. In addition, no hydrovac operations are conducted at sites with known soil or groundwater contaminants and trucks that have inadvertently come into contact with suspect contaminated materials (e.g., site information, visual inspection, and identification of odours) are directly sent to a MECP-permitted treatment or disposal facility and empty trucks only return to the Site after all potentially contaminated materials have been removed.

As described in GHD (2024), the results of the water monitoring program that has been undertaken at the Site demonstrates that there is no evidence of impact to groundwater or surface water quality resulting from Site operations. The observation is particularly important given that the Site was previously in compliant operation for more than 10 years. The lack of adverse effect on water quality in the immediate vicinity of Site operations after ten years of operation demonstrates that the practices currently being undertaken at the Site to ensure no negative impacts on surrounding water resources have been effective over the long term and the frequency and scope of existing monitoring programs are sufficient.

Comment No. 8

Section 2.8: 2023 Recommendation No. 8 - During the first year of monitoring, in addition to the currently proposed list of analytical parameters, the surface water and groundwater should also be sampled for per- and polyfluoroalkyl substances.

November 2025 Comment - The recommendation in Item 8 has not been addressed.

Response to Comment No.8

There is no technical basis or rationale provided to support this recommendation. PFAS are released into the environment both indirectly through degradation of PFAS-containing products, as well as directly during manufacture, use and/or disposal of products containing them. As described in the HIA, the Proponent's hydrovac trucks collect soil from non-contaminated utility, municipal, and commercial sites to ensure that utility strikes and damage do not occur to existing underground infrastructure during intrusive work. No hydrovac operations are conducted at sites with known soil or groundwater contaminants, such as chemical manufacturing sites or waste disposal sites that may have elevated concentrations of PFAS.

As there are not yet standard sampling and analysis protocols or accepted standards applied to the measurement of the many PFAS constituents that are universally recognized in Ontario, it is GHD's opinion that the Proponent should follow the monitoring program specified by the Waste ECA, which is based on current regulatory requirements.

PFAS are compounds that are ubiquitous and thus are found widely in all land use types, environmental media, humans and animals. There is no reason to single out this particular operation for PFAS sampling.

3. Closing

Should you have any questions, please contact the undersigned.

Regards
GHD Limited

Dan Puddephatt, M.Sc., P.Geo. (Limited)
Hydrogeology Lead

+1 519 340-3741
dan.puddephatt@ghd.com

Fred Taylor, P.Eng.
Project Director

+1 519 340-4222
fred.taylor@ghd.com

Ian Collins, M.Eng., P.Eng., QP$_{RA}$
Senior Environmental Risk Assessor

+1 416 640-4203
ian.collins@ghd.com

Lisa Hough, P.Eng., QP$_{ESA}$
Senior Engineer

+1 519 340-3770
Lisa.hough@ghd.com