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MEMORANDUM

Date: May 30, 2025

TULLOCH Project No.: 25-0827

- **To**: Colin's Haulage Inc.
- From: TULLOCH Engineering Inc.

Attachments:

Figure 1 - Phase II ESA Borehole Locations and Exceedances Figure 2 - Phase II ESA Monitoring Well Locations and Groundwater Exceedances

Subject: Phase II ESA – 4548 Notre Dame Avenue, Hanmer, Ontario Preliminary Analytical Results, Potable Well Sampling - 8 and 10 Legault Lane, and Recommendations for On-Site Environmental Management

Attention: Sheldon Ellsworth

Phase II ESA

TULLOCH Engineering Inc. (TULLOCH) was retained by Colin's Haulage Inc. (herein referred to as the 'Client') to complete a Phase I Environmental Site Assessment (Phase I ESA) and Phase II Environmental Site Assessment (Phase II ESA) for the property located at civic address 4548 Notre Dame Avenue in Hanmer, Province of Ontario (herein referred to as the 'Site').

The terms of reference for this project are based on the TULLOCH proposal addressed to Mr. Sheldon Ellsworth and dated March 12, 2025. Verbal approval to proceed with the Phase I and Phase II ESA was received from the Client on or about March 17, 2025.

The Phase I and Phase II ESA were conducted simultaneously to expedite the required soil and groundwater analysis. Results from the Phase I ESA (including information contained in past environmental assessments and reports) were used to determine the installation of on-site boreholes and monitoring wells. The Phase II ESA is required to determine the potential presence and approximate location of any petroleum hydrocarbons (PHCs), volatile organic compounds (VOCs), and metals (lead) impacts to the on-Site soil and/or groundwater from on-Site historical activities, including a former retail fuel outlet. The information obtained from the Phase II ESA

will be used to assist the Client in determining if soil and/or groundwater require remediation and/or further delineation. Additionally, the information provided by the Phase II ESA will be used to comply with the requirements of the MECP Provincial Officer's Order Number 3008-BP5SMT (Incident Report No. 3888-B7VQ5H)

The on-Site assessment work associated with the Phase II ESA was conducted in general accordance with Ontario Regulation 153/04 in order to assess subsurface contamination and is not being conducted in support of a Record of Site Condition (RSC) for submission to the MECP.

The on-Site Phase II ESA Site work was completed between April 7th and April 9th, 2025, and involved the advancement of seven boreholes for soil samples and the instrumentation of each borehole with a monitoring well to assess groundwater conditions. The following summary provides the salient findings from the Phase II ESA:

- A total of eight (8) confirmatory soil samples, including a duplicate, were submitted for laboratory analysis.
- Worse case soil samples collected from BH01 through BH07 were below the MECP Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition and an Industrial/Commercial/Community Property Use for Coarse Textured soil, for PHC (F1-F4), VOCs, and metals (Lead).
- Based on previous samples collected by Pinchin Environmental in 2019, after the removal of on-Site infrastructure, including underground storage tanks, fuel dispensers, pump islands, and underground piping related to the previous retail fuel outlet, there are confirmed shallow PHC soil impacts to the north of BH07.
- A total of ten (10) groundwater samples, including one duplicate, were collected from the seven (7) monitoring wells installed at the Site, as well as from two existing off-Site monitoring wells located at the northwest corner of the Site, and were submitted for laboratory analysis.
 - Groundwater samples collected from MW01 through MW07 were below the MECP Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for All Types of Property Use (Table 2 SCS) for PHC (F1-F4), VOCs, and metals (Lead), with the exception of three samples collected from MW01, MW06 and MW07.
 - MW01 exceeded the Table 2 SCS for Ethylbenzene and Xylenes (Total);
 - MW06 exceeded the Table 2 SCS for PHCs (F1); and
 - MW07 exceeded the Table 2 SCS for Ethylbenzene, Xylenes (Total), and PHCs (F1).





Based on the above results, TULLOCH concludes that there are confirmed groundwater impacts at the Site that are likely attributed to the historical retail fuel outlet infrastructure. Impacts to the soil along the west edge of the Site were confirmed by Pinchin in 2019; however, TULLOCH did not identify any additional soil impacts as a result of the Phase II ESA drilling program.

Potable Well Sampling (8 and 10 Legault Lane)

Based on discussions between the Client and the owners of 8 Legault Lane (Mr. Gary Kalmo) and 10 Legault Lane (Ms. Christine Chiasson), it was communicated by Mr. Kalmo that he has historically experienced PHC impacts in the well water at his residence. Through further discussions, it was determined that there has historically been a solvent odour in the well water, and due to the odour, a filtration system was installed to ensure the safety of the drinking water. Due to the potential for impacts to the local groundwater quality, it was agreed to by the Client to conduct a round of water testing on the potable wells at both 8 and 10 Legault Lane for both PHC (F1-F4) and VOCs.

On May 16, 2025, an environmental technician from TULLOCH attended at both 8 and 10 Legault Lane to collect unfiltered water samples from each residence. Water samples were relinquished to Testmark Laboratories Ltd. In Garson, Ontario (Testmark). Water samples were analyzed and compared to the MECP Table 1: Full Depth Background Site Condition Standards (Table 1 SCS) for the above noted parameters. Review of the Testmark laboratory report confirmed that the unfiltered groundwater sampled from both 8 and 10 Legault Lane are within the Table 1 SCS for both PHC (F1-F4) and VOCs. Based on groundwater results, there is no indication of any on going PHC (F1-F4) and/or VOC impacts at 8 or 10 Legault Lane.

On-Site Environmental Management

Due to the nature of the proposed use of the Site and surrounding land uses, it is understood by the Client that ongoing environmental Site management is of the utmost importance. To this effect, the following measures have been recommended to the Client to ensure that Site operations do not negatively affect the soil and/or groundwater quality at the Site or adjacent properties:

- Preparation of a site grading plan that will use site grading to ensure that surface water from the Site will remain on-Site and be diverted to on-Site catch basins and storm sewers; and
- Preparation of an Environmental Management Plan for the Site that will outline operational procedures regarding items such as dedicated equipment storage areas, dedicated equipment refueling areas, spill response and remediation, and procedures for spill reporting.





It is recommended that the above noted measures be implemented prior to full operation of the Site.

Sincerely yours,

TULLOCH Engineering Inc.

Tyler Moody, A.Sc.T. Environmental Project Manager

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Robert Bressan, P.Eng., FEC Project Manager

Attachments: Figure F1 – Phase II ESA Borehole Locations & Soil Exceedances Figure F2 – Phase II ESA Monitoring Well Locations & Groundwater Exceedances







KEY	MAP
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OORDINATES
UTM
17T 504259 5166531
17T 504262 5166561
17T 504279 5166572
17T 504292 5166527
17T 504326 5166554
17T 504248 5166523
17T 504239 5166546

NOTE: GPS COORDINATES COLLECTED WITH HANDHELD GPS. ACCURACY WITHIN 4m.



<u>LEGEND</u>



MEETS TABLE 2: FULL DEPTH GENERIC SITE CONDITION STANDARDS IN A POTABLE GROUNDWATER CONDITION (INDUSTRIAL/COMMERCIAL/COMMUNITY PROPERTY USE)

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 EXCEEDS TABLE 2: FULL DEPTH GENERIC SITE CONDITION

 STANDARDS IN A POTABLE GROUNDWATER CONDITION
 (INDUSTRIAL/COMMERCIAL/COMMUNITY PROPERTY USE)

PHASE II ESA PROJECT AREA

PLAN N.T.S.





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	EXCEEDANCES		SCALE:	DATE:		
		ENGINEER'S SEAL	AS NOTED	APR. 23, 2025		



 $\underline{\mathsf{KEY}}_{N.T.S.} \underline{\mathsf{MAP}}$

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<u>LEGEND</u>



MEETS TABLE 2: FULL DEPTH GENERIC SITE CONDITION STANDARDS IN A POTABLE GROUNDWATER CONDITION (ALL TYPES OF PROPERTY USE)

EXCEEDS TABLE 2: FULL DEPTH GENERIC SITE CONDITION STANDARDS IN A POTABLE GROUNDWATER CONDITION (ALL TYPES OF PROPERTY USE)

PHASE II ESA PROJECT AREA





PAHSE II ENVIRONMEN	VTAL SITE ASSESSMENT		1 MAY	30, 2025	CM	REVISION 1	
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