

April 8, 2022

Ministry of the Environment, Conservation and Parks
40 St. Clair Avenue West, 10th Floor
Toronto, Ontario
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Attention: **Ms. Laura Blease**

Subject: **Letter of Opinion – Qualified Person
Comments regarding Implementation
Pause of Excess Soil Requirements**

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Dear Madam,

Paterson Group (Paterson) has prepared the following letter in response to the proposed pause of the excess soil requirements. Paterson's position is based on professional experience and feedback from clients and partners. Paterson supports the pause in implementation; however we strongly feel the following must be addressed by the Ministry of the Environment, Conservation and Parks (MECP) during the pause:

▪ **Naturally Occurring Metals in Champlain Sea Clay**

Clay soil is very common within the limits of the City of Ottawa and surrounding region and is often referred to as Champlain Sea clay. It is well documented that clay and clay-rich soils within the region contains elevated naturally occurring metals parameters, such as barium, chromium, cobalt and vanadium. In many areas across the National Capital Region and Eastern Ontario, these metals parameters can exceed many, or all, excess soil reuse standards.

Paterson understands the MECP has provided rules for specific types of reuse sites in the *Rules for Soil Management and Excess Soil Quality Standards* document, specifically rules to manage soils with naturally elevated concentrations. In order to reuse excess soils with naturally occurring elevated metals, the qualified person must demonstrate that the naturally occurring parameters do not exceed the naturally occurring range of concentrations typically encountered within the "area of the reuse site". This wording is ambiguous, and has resulted in otherwise clean clay soil being sent to landfills. Clay soil with metals parameters that comply with reuse site standards have also been found to fail the respective leachate standards, adding additional complications to soil reuse.

Furthermore, some local reuse sites otherwise capable of accepting clay with naturally occurring metals refuse to do so, due to the stigma of “contaminated” soil and the lack of clarity in the Regulation with respect to these conditions. There appears to be a misunderstanding in certain cases, regarding the occurrence of natural metals in local clay deposits.

During the proposed pause, it is our opinion that the MECP should consider creating regional standards based on documented metals found across Eastern Ontario. This would eliminate the need to carry out background analytical testing at proposed reuse sites, which has been found to be problematic for developers and contractors looking for otherwise suitable reuse sites. Clays with naturally occurring metals will ultimately be disposed of at landfill sites due to a lack of reuse sites willing to accept this material, filling up valuable landfill space and adding a significant financial burden to development projects. Changes with respect to naturally occurring elevated metals should also be applied to Ontario Regulation 153/04.

▪ **Naturally Occurring Petroleum Hydrocarbons in Shale Bedrock and Shaley Till**

In addition to naturally occurring elevated metals in Ottawa area clays, Ottawa is also known to have areas with shale bedrock. During construction excavation, various techniques are used to remove shale bedrock. Highly weathered shale can be removed using hydraulic excavators, while more competent shale may be removed by hydraulic hammer or explosives. In most cases, due to its fragile nature, shale bedrock excavation creates a significant amount of fine material which may be classified as soil, or soil mixed with rock (under the definition of the Regulation). Soil, or soil mixed with rock, would therefore require analysis, among other potential regulatory requirements, to confirm suitability at a reuse site.

Based on analytical testing programs carried out prior to the introduction of the Regulation, shale rock mixed with soil material and shaley till breakdown has shown elevated levels of petroleum hydrocarbons, often exceeding most reuse site criteria. Although Paterson has attempted to distinguish between anthropogenic or naturally occurring hydrocarbons through specialized analytical testing, laboratories cannot necessarily make the distinction between one or the other. This has led to disposing large volumes of rock at landfill facilities, at a significant expense to developers while occupying space within landfills with an otherwise natural material.

During the proposed pause, the MECP should consider developing strategies for managing shale-related soil or shale soil mixed with rock which contains naturally elevated levels of petroleum hydrocarbons, such that the only disposal option is not at a landfill facility. Furthermore, the MECP should consider elaborating the definition of soil mixed with rock, such that shale bedrock with pulverised rock material would not require to be treated as soil mixed with rock.

▪ **Definition of Project Leader**

Over the course of 2021, and the beginning of 2022, Paterson has noted significant confusion surrounding the definition of Project Leader amongst various stakeholders. Municipalities, land developers, and contractors appear to interpret the role and responsibilities of Project Leader in different ways, resulting in potentially costly changes to contracts and project delays, due to lack of testing or reporting. Additionally, it has resulted in certain persons involved in a project “downloading” Regulation roles to other persons, resulting in the preparation of complex contracts, multiple Qualified Person involvement, or lack of oversight of the regulation in general.

The MECP should provide a more concise definition of Project Leader, such that it clearly defines the party responsible for reporting, testing, tracking, and notifying the registry, where applicable.

▪ **Lack of Outreach to Contractors and Developers**

Although the excess soil regulation has been developed over the course of several years, Paterson has noted that very few clients, which include property owners, large and small scale developers, as well as construction firms in the Ottawa area, were aware of the regulation. Paterson has also noted a total lack of regulation knowledge within certain trucking groups.

The MECP should provide general outreach and notification to developers, contractors, as well as individuals who have previously accepted clean fill, such as landowners and farmers. The MECP should proactively offer outreach and messaging to construction, building, and trucking associations to ensure the affected parties clearly understand their roles and responsibilities with respect to the regulation. The MECP should also consider providing concrete examples of how the Regulation would apply to projects these various groups might encounter. Given the large French-speaking population of the National Capital Region, outreach should also be carried out in French.

Ms. Laura Blease
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Best Regards,

Paterson Group Inc.



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