



Ontario Ministry of the Environment, Conservation and Parks (MECP)
Environmental Policy Branch
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Toronto, ON M4V 1M2

Attention: Reema Kureishy

RE: Comments on Proposed Amendments dated September 2023 to Ontario Regulation 406/19 as part of ERO #019-7636

We are the operators of Liquid Soil Solutions Inc. (LSS). LSS has been managing liquid soil since 2016.

SUMMARY

The expectation was that Reg. 406/19 would stimulate innovative and new technologies with respect to excess soil reuse options and optimization solutions, and that is precisely what occurred.

Some of the proposed amendments to Reg. 406/19 are an injustice to the companies that made enormous investment, to develop innovative and new technologies to support the MECP's objectives. More specifically, we are referring to the proposed small liquid soil depot and exemption from Environmental Compliance Approval (ECA).

There is no consistency in the approval process at the regional and municipal level. A provincial approval process is required to meet the goals of Reg. 406/19, and to maintain a uniform process for the liquid soil management industry across the entire province.

200m³ of liquid soil is not a small operation. This equates to 20-30 trucks loads of liquid soil daily. Compliance with Reg. 406/19 comes at a high price. It is naive to expect that all small liquid soil depots will operate within compliance without clear direction and oversight through an approval process at the provincial level.

LSS has pre-screening and monitoring procedure to identify the risk associated with liquid soil loads being received at our facility. On average, 1 percent of loads are rejected due to identified risk associated with the material. We know that these rejected loads are being disposed of at other nearby liquid soil receiving sites. This is evidence enough to illustrate the problem with expecting small liquid soil depots to operate within compliance without clear direction and oversight through an approval process at the provincial level.



INTRODUCTION

Liquid soil

Hydro excavation is a process in which high pressure water is used to break up soil while vacuuming up the water and soil. Although size varies, a standard hydro excavation truck has a 4,000 L water tank, and a 10,000 L debris tank. During excavation, the water leaves the water tank and is vacuumed in to the debris tank along with the accompanying excavated soil. The combination of soil and water is often referred to as “slurry”, now defined by the province as “liquid soil”.

Background

Prior to Ontario Regulation 406/19 (Reg. 406/19), LSS was using the “dig and dump” soil management approach, as quoted from the Made-in-Ontario Environmental Plan. It was identified by the province that this approach resulted in greenhouse gas emissions produced by long-distance transport of excess soil, land use pressures, and environmental and health impacts. As a result, the province began development of an excess soil management regulation. There were several proposed versions of the regulation, with Reg. 406/16 ultimately coming in to force on November 28, 2019. The expectation was that Reg. 406/19 would stimulate innovative and new technologies with respect to reuse options and optimization solutions.

Guided by provincial best management practices, policy framework, and identified goals; Many companies made significant investment in research, and equipment to develop new and innovative business models to manage liquid soil in a manner that would support the MECP’s objectives, and comply with Reg. 406/19, while many other companies made no investment or effort and continued with the traditional “dig and dump” approach.

Dig and dump

Reg. 406/19 was supposed to eliminate the “dig and dump” soil management approach by promoting the use of new technologies for soil management and reuse. There are companies that exploit wording in Reg. 406/19 to operate liquid soil disposal sites under the guise of a fill site regulated by municipal instrument. There is no consistency in the approval process at the regional and municipal level. What is permitted in one municipality, is not permitted in another. A provincial approval process is required to meet the goals of Reg. 406/19, and to maintain a uniform process for the liquid soil management industry across the entire province.

Liquid soil is not suitable for reuse as fill, since the slurry is composed of 50 percent water. Some type of process is required to manage water and convert liquid soil in to a material that is suitable for use.



Small Liquid Soil Depots

200m³ equates to 20-30 hydro excavation truck loads per day, producing 100,000 L of water, and 100,000 L of wet soil that does not pass slump test. To put that into perspective, the average volume of a residential swimming pool is 30,000-75,000 L. This is a large volume of muddy water, and wet solids to appropriately manage.

Compliance requires a thorough understanding, and ability to interpret regulation. It also requires the financial support to carry out the requirements. The cost to manage 200m³ of liquid soil per day in compliance with Reg. 406/16 would exceed \$1,000,000 annually.

COMMENT

1. *C. Small Liquid Soil Depots*

- *These facilities would be able to accept liquid soil from various project areas, including from hydro-excavation and including stormwater pond sediment.*
- *For clarity, material from cleaning out sewage works is not excess soil and would not be permitted at these sites; nor would liquid soil that is hazardous waste, that is from a soil remediation project or from an industrial stormwater pond.*

Stormwater pond sediment would be permitted at a small liquid soil depot; however, it goes on to say that sewage works material would not be permitted at a small liquid soil depot.

Stormwater ponds are considered "sewage works" under the Ontario Water Resources Act, and maintenance and dredging activities are conditions of the Environmental Compliance Approval (ECA).

Stormwater ponds capture contaminants in the settled solids. Stormwater pond sediment should not be permitted at a disposal site without an ECA.

2. *C. Small Liquid Soil Depots*

- *The amount of liquid soil being stored or otherwise managed at the site at any one time would not be permitted to exceed 200m³.*
- *The liquid excess soil could be stored and processed using low risk processes, including dewatering.*

200m³ is not a small operation.



3. *C. Small Liquid Soil Depots*

- *Material brought to these depots for storage or processing would be required to be tested before leaving the depots to ensure it is of appropriate quality for its intended receiving site, in accordance with the Soil Rules requirements, at minimum.*

The cost to analyze excess soil in accordance with the parameters listed in the Soil Rules \$1,200.00 per sample. Consider reducing sampling to contaminants of concern identified by a pre-screening procedure.

4. *Hauling record exemptions and clarifications (Section 18. Of the Excess Soil Regulation)*

- *If soil is excavated from multiple areas (e.g., several daylighting operations at different locations) and being transported in the same truck, clarify that the hauling record would list out each of the locations that the soil was excavated from, as well as any other associated information*

Do multiple areas refer to multiple project areas, as defined? i.e., if multiple daylighting holes are completed within the same project area, is one location sufficient?

Will documented GPS tracking be accepted to support hauling records and identify that locations that soil was excavated?

5. *Hauling record exemptions and clarifications (Section 18. Of the Excess Soil Regulation)*

- *Additional clarifications are also proposed respecting the information that is provided within a hauling record, as follows. This proposal would clarify that the owner or operator of the site where the soil is being loaded for transport is required to confirm that the information provided in the hauling record is accurate, before the soil is moved off-site.*

This is an excellent suggestion if it is enforced. Before enactment of this regulation, Project Leaders could contractually exclude their liability for soil management by shifting the responsibility onto third party excavation contractors. Now, Project Leaders can no longer exclude, limit, or alter their liability through contract or other arrangement with third party excavation contractors. Therefore, Project Leaders are solely responsible for regulatory compliance under the new regulation and may be subject to a range of penalties under the Environmental Protection Act if they fail to comply.

If the owner or operator of the site (not the hydro excavation truck operator) where the excess soil is being loaded for transport is required to confirm that the information on the hauling record is accurate, this could eliminate "fly by night" liquid soil disposal that produces disproportionately lower rates compared to companies that appropriately dispose of liquid soil.



CONCLUSION

LSS does not support the proposed small liquid soil depot and associated amendments. This is not only an injustice to the companies that took necessary actions to support the MECP's objectives, but it is also backtracking on the identified environmental goals and objectives that were outlined in the provinces best management practices, policy framework, and eventually Reg. 406/19.