ONTARIO SOCIETY OF PROFESSIONAL ENGINEERS

November 20, 2020

Submitted online via the Environmental Registry of Ontario

ERO 019-2462 Extending Grandfathering for Infrastructure Projects and Providing Additional Flexibility for Excess Soil Reuse

The Ontario Society of Professional Engineers (OSPE) is the advocacy body and voice of the engineering profession. Ontario currently has over 85,000 professional engineers, 250,000 engineering graduates, 6,600 engineering post-graduate students and 37,000 engineering undergraduate students.

OSPE is pleased to present the following submission concerning **Extending Grandfathering for Infrastructure Projects and Providing Additional Flexibility for Excess Soil Reuse.**

OSPE has the following comments to the proposed changes:

1) Extending Grandfathering

Proposed Change 2 should be clarified to define "similar soil-related studies". Is the expectation that the soil related studies would meet the minimum sample frequency and suite of analyses described by the Soil Rules?

The rationale states that the grandfathering provision does not exempt projects from soil reuse provisions coming into effect Jan 1, 2021; only provisions coming into effect Jan 1, 2022. The requirements coming into effect on Jan 1, 2022 includes the assessment of past uses, and if required, sampling and characterization requirements.

On Jan 1, 2021, the new excess soil quality standards come into force. If sampling is not conducted at the prescribed frequency or minimum suite of analyses described in the excess soil rules, are the soils still deemed to meet the excess soil quality standards under the proposed grandfathering of the sampling and analysis plan?

2) Environmental Compliance Approval (ECA) Relief for Low Risk Soil Management Sites

Proposed Change 1 is reasonable so long as the "low risk" exemption is tied to a minimum soil quality (i.e. Table 2.1 agricultural or R/P/I). We are aware of circumstances where a source site meets the definition of a low risk use (e.g. parkland) but upon further diligence the soils are anything but low risk. This is particularly true of older urban parks that may have received fill of poor quality or been constructed on former landfills. It is possible that some may interpret the "low risk" source site exemption to mean that soils generated from these sites are more broadly exempted from the regulation and rules. Clarity should be provided that an assessment of past uses should still be completed, and that the sampling and analysis plan will be completed if PCAs are identified, unless specifically exempted under Schedule 2 of the regulation. We

recommend consideration of referring to a “lower risk” receiving site as a “less sensitive land use” receiving site instead, for consistency with the regulations and to disambiguate the use of “low risk”.

3) Enabling Site-Specific ECA Soil Management Requirements

This change is reasonable, and we agree that it increases the potential for flexibility. The ECA regime allows for the imposition of risk management measures (e.g. financial covenants, operational requirements), as well as MECP oversight.

It would be beneficial to have a forum to summarize commonly agreed to deviations under an ECA. This might help QPs, excess soil generators, and/or prospective ECA site operators to better evaluate the viability of this approach when evaluating excess soil management options.

4) Flexibility in Excess Soil Storage for Reuse

This change is reasonable.

5) Reuse of Salt-Impacted Soil

This change is reasonable, though consideration should be given to clarifying clause 1 ii (b), specifically an “area with an intended property use that may require a potable water well” as this may be open to differences of interpretation and/or abuse. Is the intent that salt impacted soil would only be placed in an area that would meet the non-potable land use criteria? Or is the intention to allow consideration of potability of the water (e.g. if the shallow aquifer is unsuitable for consumption). For example, in areas of eastern Ontario groundwater yield and/or quality may be poor, so there is greater reliance on surface water.

6) Reuse of Rock Mechanically Broken Down

This change is reasonable because it provides added clarity around mechanically broken down rock. Consideration should be given to reconciling this definition with the pit and quarry exemption. Rock material may exceed OTRs because these values were derived from near surface soil and may under-represent the range of “natural/normal” values. It is our understanding that virgin pit/quarry derived material is exempt from the excess soil regulations, but material generated from these operations could meet the definition of rock mechanically broken down into soil-like particles. Therefore, consideration should be given to adding further discussion/clarity around the intent (e.g. excavation of weathered rock in a right of way? Tunneling? But not pit or quarry derived material produced by mechanical breakdown).

Consideration should be given to a study of implied OTRs for deeper soils that might be more representative of weathered rock. This could be done in collaboration with the Ontario Geological Survey and by leveraging other public data (e.g. municipalities willing to share data resulting from their due diligence investigations) to create an improved regional understanding

of typical values and made publicly available (e.g. through publication and/or GIS data mapped against different geological formations).

The excess soil regulations exempt recycled aggregate, but further clarity is required around best practices for the use of recycled aggregate. When done properly there should be no issues, however, we have encountered circumstances where material has been received from a pit or quarry that incorporates recycled material and fails reference standards due to contamination of the source material (e.g. oily concrete, painted concrete).

7) Updates to Leachate Testing and Related Requirements

1. The proposed changes associated with the modified Synthetic Precipitate Leachate Procedure (mSPLP) and standardization of leachate method are positive, and we support them.
2. The elimination of leachate analysis for soils that meet Table 1 is a positive change. Some clarification may be required in circumstances where soil meets Table 1 (or other) standards but may still exceed a leachate screening level for a less stringent soil table. Based on discussions with MECP staff and the labs, we understand that the occurrence of this type of discrepancy may be eliminated by the mSPLP changes.
3. This is welcomed, though it is recommended that QPs and the bodies that licence them provide guidance on expectations/standards of care for making this determination. This assessment is still somewhat challenging in a setting with high heterogeneity (e.g. fill) and where there may not be reliable field screening indicators. The result may still be a tendency towards over-sampling or continued use of hold times to ensure worst case conditions are assessed.

8) Clarification on Application to Aggregate Operations

1. See comments regarding mechanically broken-down rock. This may create a disconnect where in both cases the source of the material may be the same, but in one case it is exempt from testing and in another testing is required.

We also suggest clarification on how recycled material should be addressed. We are aware of circumstances where aggregate sites are providing a recycled material that may include mechanically broken down brick, asphalt and/or concrete that is presented as an aggregate product. The exemption should clearly exclude aggregate products that include anthropogenic material such as brick, asphalt and/or concrete, as there have been circumstances where this material has failed reuse standards (e.g. due to the source concrete/brick material having been contaminated in its previous life).

9) Registry Delivery

1. This seems reasonable. Onboarding will be required as few excess soil stakeholders will be familiar with RPRA. The challenge with the Environmental Site Registry has been lack of capacity at times (i.e. larger submissions during busy periods fail, forcing filings that take multiple attempts and/or are forced into off hours – both of which drive up costs). The registry should be designed to meet demand so that users aren't discouraged from making timely filings (i.e., the registry filing process should be quick and reliable).

10) Minor Clerical Updates

1. We support this.
2. We support this.
3. We generally support the intent, but it would be helpful to see the proposed wording.
4. This is reasonable. Owners and QPs should be informed of the potential implications for demonstrating/proving this (e.g. documentation of conditions prior to placement).
5. We recommend clarification on what is meant by the minimum parameter list. Part II lists the reference standards. Part II does not appear to include reference to the minimum parameter list. The minimum parameter list is defined in Part I, Section B 2 Sampling and Analysis Plan.

The MECP should consider further clarification on minimum sampling requirements. The regulation defines a minimum suite of analytes and minimum sample frequency for meeting the "sampling and analysis plan requirement". The trigger for this plan is a registry filing. In circumstances where soil may not require filing on the registry, it is our interpretation that the excess soil standards would still apply to demonstrate that soil will not have an adverse impact. We are aware of some interpretations that the minimum frequency of sampling and/or suite of analytes is not required in the absence of a registry filing because there is no prescribed trigger in the regulation. Does the MECP expect that the minimum requirements described in the soil rules will be applied to demonstrate soil meets the applicable standards regardless of whether a formal sampling and analysis plan and registry filing are prescribed?

11) Minor Amendments to the Record of Site Condition Regulation (O.Reg. 153/04)

1. No comments on this – agreed.
2. No comments on this – seems reasonable.
3. Consider clarifying the definition of "building envelope" and "change to building envelope". For example, would adding dormers be considered a building envelope change? Consider clarifying a circumstance where a change in building envelope is made and then later converted. For example, at the time of the change in building envelope the use remains commercial; is there a minimum time limit before the upper floor conversion to residential can occur?
4. Section 49.1 paragraph 3 indicates that a QP can make a determination that fill containing a contaminant that exceeds the applicable site condition standards but does not exceed the naturally occurring range of concentrations is deemed to have met the standards. This added flexibility is helpful but would be better if expanded to include native soil and groundwater. Our understanding is that the only way to address

ONTARIO SOCIETY OF PROFESSIONAL ENGINEERS

parameters exceeding the site condition standards due to the naturally occurring range of contaminants is through a risk assessment (Schedule C, Part II, Section 8 “Estimation of Natural Local Background Concentrations”). In a circumstance where there is sufficient local data to characterize regional background (e.g. using the MECP methodology in O. Reg. 153/04), it would be beneficial for a QP to refer to that, rather than go through a risk assessment filing. The intent of this recommendation is to reduce administrative burden for the MECP and facilitate more expedient redevelopment of sites where elevated background concentrations occur.

Sincerely,

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