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Sanjay Coelho Environmental Policy Branch Ministry of Environment, Conservation and Parks 40 St Clair Avenue West, Floor 10 Toronto, ON M4V1M2

RE:ERO posting # 013-5000: Excess soil regulatory proposal and amendments to
Record of Site Condition (Brownfields) Regulation

Dear Sanjay,

On behalf of Ontario's more than 3,000 environment and cleantech firms, the Ontario Environment Industry Association (ONEIA) is pleased to provide our comments on Environmental Registry of Ontario (ERO) #013-5000: Excess soil regulatory proposal and amendments to Record of Site Condition (Brownfields) Regulation.

Ontario is home to Canada's largest group of environment and cleantech companies. The most recent statistics show that Ontario's environment sector employs more than 65,000 people across a range of sub-sectors. This includes firms working in such diverse areas as water/wastewater/stormwater treatment and management, materials collection and transfer, resource recovery, organics processing, composting, recycling solutions, alternative energy systems, environmental consulting, brownfield remediation – to name just a few. These companies contribute more than \$8-billion to the provincial economy, with approximately \$1-billion of this amount coming from export earnings.

Members of ONEIA are committed to engaging with governments to develop policies and regulations that are consistent with our principles of sound science, sound environment and a sound economy. To that end, we convened working groups of member companies drawn from across the environment and cleantech sector to review the regulatory proposal and amendments.

In assessing the proposal, ONEIA has asked members of our Brownfields advocacy subcommittee and the Excess Soils working group, as well as the Resource Recovery advocacy sub-committee (includes landfill owners and operators), to convene member companies and gather their comments. Their feedback forms the basis of this response and each of these sub-committees is ready and willing to work more closely with the Ministry of Environment, Conservation and Parks (MECP) on the specific aspects of this response to ERO #013-5000.

This response builds upon two previous submissions by ONEIA members: a) our comments provided in June 2018 for the previously-proposed Excess Soil Regulatory package; and, b) the Brownfield and Excess Soil specific comments provided in response to the Made-in-Ontario Environment Plan earlier this year.

GENERAL COMMENTS

ONEIA members agree with the burden relief that is currently proposed with the amendments to the Record of Site Condition (Brownfields) Regulation. Further ONEIA is also in agreement with the proposed amendments to Ontario Regulation 347 respecting waste management for the definition of excess soil and liquid soil and processing. Although the subject of a separate ERO posting (#019-0023), ONEIA agrees with the concept of holding polluters accountable by enhancing the enforcement tools available to the MECP.

However, the impact statement offered by the MECP has identified that the local reuse of soil will create many benefits. From our review of the regulatory package, we question whether these measures will sufficiently promote and encourage local reuse.

Additional general comments include:

Supply and Demand Imbalance and Pit/Quarry Rehabilitation: ONEIA still believes that the mass balance of excess soils generated will significantly favour supply rather than demand, and this could result in a large volume of soil without sufficient beneficial reuse opportunity. We would suggest that one remedy for this could see the Ministry of Environment, Conservation and Parks (MECP) work closely with the Ministry of Natural Resources and Forestry (MNRF) to find ways to align policies and increase the opportunity for excess soil to be used for pit and quarry rehabilitation. The current standards require the use of virgin soil (i.e., Table 1) in Aggregate Resource facility rehabilitation. There is a significant opportunity to allow for more excess soil to be utilized for rehabilitation purposes, especially for non-geotechnically suitable soils.

Landfill Disposal: Although ONEIA generally agrees with the intent of banning the disposal of excess soil at landfills, this should be contingent on clarifying the beneficial reuse of excess soils at landfill operations. There are daily cover and construction considerations where excess soil can be beneficially reused at landfills (i.e. roads, liners, leachate systems, gas collection systems and cap rehabilitation/construction) that could be added to the cover exemption for landfills. There is a significant opportunity to allow for more excess soil to be utilized for rehabilitation purposes, especially for non-geotechnically suitable soils. Some of our members have rightly raised the issue of the precedent that a landfill ban could set, not just for soils, but for other materials.

Soil Banks: Recent regulatory proposals for Excess Soils Management have not reflected the ongoing discussion around the concept of Soil Banks. ONEIA members recommend that the Ministry consider the operation of soil banks at existing operating aggregate pits and quarries. Through two-way loads, this could achieve GHG reductions, allay dust and noise concerns and also address traffic and road wear-and-tear. Further, existing equipment and resources could be utilized for recovering valuable portions of excess soil for beneficial reuse at prospective Soil Banks. Excess soil not deemed geotechnically suitable for immediate reuse could be stockpiled and managed for eventual rehabilitation. This is anticipated to require some alignment with the Aggregate Resources Act and with the Ministry of Natural Resources and Forestry (MNRF) as identified above.

Reliance on Qualified Persons (QPs): As identified previously by ONEIA in our response to the Made-in-Ontario Environment Plan, the proposed regulatory package relies heavily on Ontario's Qualified Persons, necessitating a QP registry process that will allow for

identification, tracking and communications, as well as possible enforcement. Further, mandatory training and education programs need to be established for QPs to achieve and maintain their designation, but more importantly, to ensure a high and standardized level of practice in excess soils management (in addition to site assessment and remediation). The program could be administered through an existing provincial body in partnership with the two base Regulators of QPs (PEO/OSPE and APGO). Registration of QPs would provide a streamlined process for any enforcement and maintenance of a registry database. Modest registration and annual fees for the QPs would cover the costs of administering and maintaining the QP registration program. Further, "pay-for-use" certification and training programs would assist in cost-recovery.

Training and Outreach: The original timeline in the 2018 proposal had a two-year window in which many aspects of the proposed regulations would become effective. However, the 2019 version presents a shorter timeline of approximately 18 months. As such, training and outreach will become key for municipalities, developers and those involved in the construction, earth-moving and trucking industries. MECP-developed training programs with approved delivery should become paramount given the shortened timeline and now potential new MECP enforcement tools for non-compliance.

RESPONDING IN DETAIL

This overview offers the general feedback of these companies to the regulatory package and its elements. The table contained in Appendix A of this submission summarizes our detailed observations tied to sections of the proposed regulatory package and the responses offered by the ONEIA member companies. ONEIA looks forward to following up in detail with respect to specific sections as the Province moves towards enacting these proposed changes.

SUMMARY

ONEIA commends the MECP Policy and Operations teams for their extensive efforts in bringing these files to this point. We continue to look forward to working with the Province to implement this Regulation and amendments and to participate in consultations on the priorities and next steps. ONEIA member companies and their representatives are willing to participate in advisory panels and assist in the outreach. ONEIA understands that time is of the essence and we will collaborate with the Province in an expeditious manner with respect to advancements of actions identified within the proposed Excess Soil Regulations and amendments to the Record of Site Condition (Brownfields) Regulation.

We appreciate the ability to provide our comments and welcome any additional opportunities to discuss our ideas further. Please contact Alex Gill, our Executive Director, at agill@oneia.ca or at (416) 531-7884 should you have any questions.

Yours truly,

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Alex Gill Executive Director

APPENDIX A: Detailed comments on Draft Excess Soil Proposed Regulation 2019

Item	Regulation	Comment
1	On-Site and Excess Soil Management, Section 1 (page 4)	• The definition for "soil processing site" should perhaps be clarified to be specific to sites that have an ECA for addressing contaminated soil. Otherwise, the understanding of "soil processing" per Section 15 could create some confusion in interpreting site designations.
2	On-Site and Excess Soil Management, Section 4 (page 8)	The Tables in Section 4 should be numbered for ease of reference.
3	On-Site and Excess Soil Management, Sections 4 and 5	• Some additional language may be needed to outline the approach that would apply if only a portion of a "Project Area" is governed by an instrument (i.e. CPU within a larger Project Area).
4	On-Site and Excess Soil Management, Section 5 (page 10)	 Subsection (3) seems to indicate that site-specific standards can only be developed for a site via application of the BRAT tool; however, Section 11 (page 31) of the Soil Rules document does include allowances for developing site-specific criteria without the use of the BRAT tool. The draft regulation would benefit from some clarity on this in Subsection (3). It is unclear why the definition for the BRAT tool shows up in this Section, as opposed to Section 1 with the other definitions. In Subsection 1 Paragraph 3 it states: "There must be an identified beneficial purpose in connection with the undertaking for which the excess soil is to be used at the reuse site, such as" Please clarify that the list that follows is not exhaustive and other forms of beneficial purposes may also be allowed (for example, infilling).
5	On-Site and Excess Soil Management, Section 6 (page 10)	 This section indicates that planning (Section 7) and registration (Section 10) requirements do not apply to the circumstances outlined in Schedule 1. Schedule 1 does not recognize "Heavily Impacted Soil That Cannot be Reused at a Reuse Site", which is discussed in the Soil Rules document (page 21) with indications that full sampling and analysis is not required for these soils. Since Heavily Impacted Soil is waste, it is expected that once it is determined the soil is waste, it will be managed under Reg 347 and the requirements of the Excess Soil Regulation (including Sections 7, 10 and others) would not apply; however, this is not clear. Clarity on the requirements for these soils and which regulation applies is needed.
6	On-Site and Excess Soil Management, Section 7	 The requirement for an Excess Soil Management Plan has been removed, and instead the assessment and documentation requirements are captured in a variety of other individual reports (which may or may not be required), including an assessment of past uses report, a sampling and analysis plan, a soil characterization report, and an excess soil destination assessment report. The division of the reporting requirements among multiple reports is likely inconsequential as all the same information still appears to be captured. The soil characterization report includes a requirement to speak to soil that may be reused within the project area. Soil reused within the project area is not "excess soil" and thus should not be subject to sampling and documentation requirements geared to soils that fall within that definition. The characterization and documentation activities should be specific to the soil that is intended to be removed from the site only. The reporting and sampling requirements of subsection (2) are not required if the project does not involve the remediation of contaminated land and one of three circumstances as outlined in subsection (3). In all cases, it is unclear how one would be able to confirm that no remediation of contaminated land is occurring without, as a minimum, the completion of an assessment of past uses report and likely some additional soil characterization work. Soil removed from Agricultural land and RPI lands may still be contaminated – especially since it is possible for RPI lands to have been formerly used for industrial purposes and converted to RPI via the Brownfields regulation. The way this section is written suggests no assessment/sampling/reporting/knowledge of soil condition is needed for any of these

		types of projects, and yet it is unclear how anyone can confirm these soil movements meet reuse requirements at a reuse site.
7	On-Site and Excess Soil Management, Section 11 (page 17-18)	 Language in this section restricts deposition of excess soil that is reusable on sensitive sites at landfilling sites, although subsection (3) indicates it would be allowed if a QP declares it would be unsafe to place the excess soil at a reuse site. In concept, restricting the placement of clean fill at landfills makes sense; however, there is some potential for projects producing clean fill to not find sufficient reuse sites within the needed project delivery timeframe and thus alternate disposal options may still need to be available. It is unclear what conditions would trigger subsection (3).
8	On-site and Excess Soil Management, Section. 16	 Excavated soil processed at a local waste transfer facility operated by public body is too narrow and the exception should be broadened to be open to all local waste. transfer facilities not just those operated by public bodies.
9	On-Site and Excess Soil Management, Section 17 (page 24-25)	The amount of excess soil that can be stored at a temporary soil storage site is restricted to 2500 cubic metres, with the potential of this volume being increased to a total of 5000 cubic metres. These volume restrictions are likely too low to allow temporary soil storage sites to be a viable tool to support soil reuse projects where the timing for the generation of soil and final placement of reused soil do not directly align. It is expected that these restrictions are due to concerns regarding temporary soil storage sites becoming "permanent" – which is a valid concern. However, in establishing the maximum allowed volumes for temporary soil storage sites, other considerations (vs a blanket size restriction) should be part of the decisioning (e.g., the project leader and likelihood of abandoning the temporary site, whether financial capital can be put forward to ensure the temporary site is not abandoned to the cost of the province or municipality, the projects being completed and likelihood of the reuse site not advancing and taking the soil, etc.).
10	On-Site and Excess Soil Management, Section 21	 Subsection 4 states: "A qualified person shall retain any documents or records prepared by the qualified person or prepared under the oversight of the qualified person under this Regulation for a period of at least seven years after the date that the document or record is prepared." Given that QPs themselves are likely to change companies and are not allowed to take files with them when they do, some clarity regarding their employer's responsibility to retaining records may be beneficial.
11	Soil Rules Document, Part II, Section 4, page 10	 On-site processing per Section 15 of the regulation has the same restrictions as Temporary Soil Storage sites per Part II Section 3 of the soil rules document, including size restrictions, leaching restrictions, and contact with site vegetation. This is not practical or sensible for soil that has originated in the project area and is being processed in the project area.
12	Soil Rules Document, page 17	• Item x. 5. incorrectly references item 5 (below). It should be "item 4 (below)".
13	Soil Rules Document, page 20	 The mandatory leachate analysis requirements indicate that leach samples must be collected from the sampling locations where the highest contaminant concentrations were observed. This requirement necessitates a soil sampling program where all analysis cannot be done collectively, and must be done as first a bulk analysis program and then as a leach testing program. This will be impractical for many soil movement projects where testing is done to confirm quality shortly before the soil will need to be moved. While the need to have representative leach samples is understood, the practicality of implementing a two-step sampling program needs to be considered in setting the requirements. The QP should be responsible for establishing a sampling program that generates representative results for both bulk and leach testing. The document indicates that where a sample of soil is submitted for leachate analysis, the leachate extraction shall be completed using the Synthetic Precipitation Leaching Procedure (US EPA SW-846 Method 1312), the Toxicity Characterization Leaching Procedure (US EPA SW-846 Method 1311) or another method approved by the Director. The results of different leachate analysis methods would be expected to produce vastly different results. How could all these different methods produce values directly comparable to the leachate screening levels produced by the Ministry?
14	Soil Rules Document, page 21	 Item 5 (i) references Appendix 2 of Part IV of the document. Should this reference be Appendix 1?

15	Soil Rules Document, page 23	• In the 4 th paragraph, it would provide clarity to note immediately that the tables for the small volume excess soil standards (indicated as 1, 2, 3, 4, 5, 6, 7, 8, and 9) are not reproduced in this document and are only included in O. Reg 153/04. Similarly, the summary table on this page should include a footnote for the small volume column indicating that these Tables (1 through 9) are O. Reg 153/04 coarse textured values and are not included in the Soil Rules document.
16	Soil Rules Document, page 24	• Item 1 (ii) refers to Tables 1,2,9 in this document; however, these Tables are not included in this document. Either the sentence needs to be corrected or the Tables need to be added.
17	Soil Rules Document, page 25	Item (iii) indicates that when determining which volume tables to apply (i.e., small or independent), consideration must be given to the existing reuse site conditions and that "existing reuse site conditions must be evaluated". The text indicates that the project leader and QP must evaluate the potential cumulative impact of fill of various qualities. It is noted that the Excess Soil regulation is geared to understanding the quality of the soil being generated for reuse elsewhere, with an a priori assumption or understanding that the conditions at the reuse site align with the conditions identified in the established tables (i.e., potable or not, shallow soil or not, near surface water or not, etc.) – unless there is an interest in evolving site-specific standards. For sites for which no site-specific standards are contemplated, there is not – and should not be – a requirement for sampling at the reuse site require consideration from a cumulative fill perspective does not align with the a priori understanding inherent in the regulation. A requirement for sampling at the reuse site is impractical.
18	Soil Rules Document, page 27	 Item 6 (iii). references paragraphs A and B immediately above; should this reference be to "i. and ii. immediately above"? Item 6 (iii) references a superscript "a" following the excess soil standard in the applicable generic excess soil standards Table; however, the superscript is not visible following the
19	Soil Rules Document, Appendix 2	 excess soil standards in the Tables. Please clarity. Why has a leachate screening level only been evolved for lead in subsurface soil in Tables 4.1 and 5.1? Why is there no leachate screening level for lead in any other table? It is not clear how leach testing is protective of salt impacts as there are no leach standards for sodium, chloride, EC or SAR. What are the expectations for guarding against salt leaching to groundwater? Or are there no requirements for this beyond what is listed on page 28 of the Soil Rules document?
20	Soil Rules Document, General Comment	 The constant duplication of table numbers is confusing. While it is understood that the intent is to match up corresponding Tables to those in the Brownfields Regulation, the repetition of the same numbers (e.g., Table 3.1 for bulk standards, Table 3.1 for leaching standards, Table 3.1 for ceiling values) makes it hard to quickly reference the applicable values. The Ministry may want to instead consider using an alternate system (for example, aligning the values with lettered appendices so the following system could be used: Table A.1 Full-depth Background Soil concentrations; Table B.1 Full-depth Background Leachate concentrations; Table C.1 Full-depth Background Soil Ceiling concentrations)
21	Excess Soil - Other	 The regulation still does not appear to contemplate the material/spoils generated by the tunneling industry, nor the specific operations that are inherent in the industry during their generation of spoils (for example, the addition of amendments to support tunneling works and to solidify liquid spoils). For some operations, there may be no feasible way to presample the material to be excavated (given the expected addition of amendments during and following operations) and yet there may also be no means of storing the spoils onsite to support ex situ sampling prior to removal. Naturally elevated concentrations of parameters can be observed in tunnelled material (for example, BTEX in Georgian Bay shale) and, additionally, some prolific heavy contaminants (for example, TCE) have been found in materials removed from depth; thus, the spoils can also not just be assumed to meet generic standards. Given the volume of material generated by the tunneling industry, specific consideration of how tunneling spoils fit into this framework is needed. Knowing that complaints and issues will arise with soil movement activities, what are the options for a Project Leader to mitigate the potential for a non-compliance issue through engagement with the District Engineers or Provincial Officers? Understanding the Ministry

		 does not have an approval function on the reports outlined in Section 7, what if in response to a complaint, the Ministry reviews the documentation and disagrees with it? The regulation is still largely silent on how enforcement will work. It would be good to understand the Ministry's intentions for enforcing the regulation.
22	General – Rationale Document and BRAT	 The May 2019 EBR posting does not include an updated version the Rationale Document for how the Ministry has evolved their soil standards; however, there are references in the May 2019 BRAT model to the "Rationale Document for Development of Excess Soil Standards, dated 2019 ("Rationale Document"). What is the status of this document and has it changed from the April 2018 release?
23	Amendments to 153/04	 With the inclusion of properties used for religious purposes being added as an institutional use, it is unclear how the Ministry has guarded against interpreting churches <u>currently</u> <u>located</u> in former industrial areas as RPI use now, and thus removing requirements for further assessment should there be an interest in converting that property to residential, school, or parkland use in the future. The language in Section 15 (2) seems to guard against future changes to churches, but may not potentially cover industrial properties already used as churches. It is once again noted that no amendment to the approach to addressing soil that has a pH outside the "accepted" range is proposed. Options beyond additional sampling to average out values (not always practical), soil removal (which generally promotes unnecessary soil movement activities), or application of Table 1 Standards (prohibitive for delineation and increases redevelopment costs due to soil importation requirements) are needed. In many cases, this approach leads to soil removal to avoid application of Table 1 – even if there is no evidence that the locations with soil pH outside the allowed range are causing issues at the site, the pH issue is extensive, or the data actually represents "soil pH" (e.g., data may be skewed by concrete in the sample). The regulation should leave open options that would allow for more soil to be left in place if there is a good technical rational to do so. Blanket rules that encourage the removal of soil without any technical consideration don't really align with the Ministry's goal of preventing unnecessary movement and unnecessary landfilling of soil.