MUNICIPAL ENGINEERS ASSOCIATION

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November 30, 2023

Ms. Reema Kureishy
Land Use Policy, Environmental Policy Branch
Ministry of the Environment, Conservation and Parks
40 St Clair Avenue West, 10th Floor
Toronto, ON M4V 1M2

Dear Ms. Kureishy,:

Subject: Proposed Regulatory Amendments to Encourage Greater Reuse of Excess Soil (ERO No. 019-7636)

The Municipal Engineers Association (MEA) is a non-profit association representing the interests of over1,200 professional engineers across Ontario. The majority of our members are employed by over 100 Ontario municipalities. We also have members from provincial agencies, conservation authorities and also consulting engineers who are designated as the engineer-of-record for smaller Ontario municipalities. MEA was established nearly 60 years ago as an amalgamation of the City Engineers Association (formed 1946) and the County Engineers Association (formed 1951).

On October 17, 2023, the Ministry of the Environment, Conservation and Parks (MECP) posted a proposal on the Environment Registry (ERO No. 019-7636) amending Reg. 406/19 (the excess soil regulation) and the Soil Rules to encourage greater reuse of low-risk excess soils and to prevent usable soil from being disposed of in landfills.

Every year, municipalities and conservation authorities generate and reuse millions of tonnes of excess soil in capital projects (both infrastructure projects and non-infrastructure projects) and through the operations and maintenance of facilities and assets.

The MEA is involved in over 40 committees regarding various engineering issues in Ontario. One of our committees – the MEA Excess Soil Working Group, was tasked to provide comments to ERO No. 019-7636. MEA appreciates MECP's continual effort to ensure the regulation stays practical and effective, and to achieve greater reuse of usable excess soils as part of a circular economy.

We are providing an attachment to this letter outlining the MEA comments as assembled by our Committee.

Thank you for the opportunity to comment on the proposed amendments. Furthermore, we look forward to participating in future discussion opportunities when the draft wording of the regulation and the soil rule for the proposed amendments is available.

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Should you have any questions regarding the submission, please contact the Chair of the MEA's Excess Solis Working Group. Mr. Jeffrey Lee, P. Eng. At: jeffrey.lee@oakville.ca .

Sincerely,

D.M. (Dan) Cozzi, P. Eng.
Executive Director
Municipal Engineers Association

cc Jeffrey Lee, P,. Eng, EP, Environmental Engineer – Town of Oakville

Attachment:

- MEA Excess Soils Working Group Comments to ERO No. 019-7636 re: amending Reg. 406/19

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MEA Excess Soils Working Group
Comments to ERO No. 019-7636 re: amending Reg. 406/19

1. **Exemption of Environmental Compliance Approval (ECA) for Specified Excess Soil Management Operations:**

   In general, MEA is supportive of these proposed amendments. Even though these types of facilities may not be directly applicable to all municipalities, the proposed amendments may lead to the creation of additional commercial facilities which will benefit municipalities.

   - Based on discussions with the MECP, the proposed sites would be exempt from a waste ECA and would operate similar to Class 1 Soil Management Sites. It would be beneficial to explicitly clarify that the Project Leader's requirements and responsibilities (exporting) under O. Reg. 406/19 would be fulfilled upon acceptance of excess soil at one of the new proposed facilities (i.e., topsoil and landscaping reuse depots, aggregate reuse depots, small liquid soil depots). Similarly, please clarify the requirements and responsibilities (importing) when receiving/reusing/accepting excess soil as a reuse site and/or as commercial products of recycled materials.

   - As these soil management sites/depots will be exempted from waste ECA, please ensure, and confirm the MECP will be the responsible body for the oversight, monitoring and compliance of these proposed operations and this responsibility would not be downloaded to municipalities.

   A. <u>Topsoil and Landscaping Reuse Depots</u>

      - Topsoil is typically exempt from most of the requirements of the Regulation for Residential, Institutional, Parkland, and Agricultural (RIPA) land uses that are deemed low risks (i.e., no formal soil sampling and analysis); however, it is stated that the excess soil and topsoil, that are proposed to be part of wholesale landscape depot, would have to meet Table 2.1 Excess Soil Quality Standards (ESQS) or cleaner (i.e., Table 1 ESQS). Does this imply that irrespective of low-risk sites that the soils would have to be sampled and analyzed for mandatory parameters or that sampling and analysis would have to be based on the findings of an Assessment of Past Uses (APU)?

      - Please clarify the requirement: "Procedures would be required to be implemented to account for the source, type, and likely quality of received soil":
        - Considering the sampling requirement noted above, would the Ministry consider allowing excess soil from a project area used for community/commercial/industrial property use to be deposited, stored, and processed at a retail landscaping soil depot (which is currently prohibited), provided that it meets Table 2.1 RPI ESQS? It seems arbitrary to prohibit the retail sale of topsoil that can be shown to meet Table 2.1 RPI standards, simply based on origination at community/commercial/industrial properties.

        - The MECP should consider that the soil purchased from a retail landscape soil depot may be used for personal or community vegetable or fruit gardens for human consumption. Under the definition of O.Reg.153/04 Agricultural Use Table 1 includes the land use for field crops, fruit farming and market gardening. Under the proposed amendments, soil from a landscaping soil depot may exceed ESQS Table 1, despite meeting Table 2.1 RPI ESQS.

- It is stated that "Packaged topsoil and landscaping products being distributed for retail sale, and any sale of up to 25 m3 to a reuse site from a retail outlet (this is an expansion of the current provision) would not be designated a waste". It is requested that the MECP use clearer language to describe the exemption indicating its intent to exempt "unpackaged" and "packaged" topsoil from the waste designation.

B. Aggregate Reuse Depots

- The term "aggregate" used within this amendment is confusing as it is not defined within O.Reg.406/19. However, under O.Reg.153/04 subsurface soil is defined as:

  "means soil that is more than 1.5 metres beneath the soil surface, including the bottom .5 metres of any non-soil surface treatment such as asphalt, concrete or aggregate above the soil surface, but excluding the thickness of any such non-soil surface treatment that is greater than .5 metres;"

  Furthermore, the definition of 'aggregate' under the Aggregate Resources Act R.S.O.1990 is:

  "means gravel, sand, clay, earth, shale, stone, limestone, dolostone, sandstone, marble, granite or other material;"

  The current amendment implies that excess soil excavated from roadways may be reused as aggregate for infrastructure projects. However, there are different interpretations of the word 'aggregate' in different regulations as well as an engineering term. Please provide a definition within O. Reg. 406/19 to reduce this confusion, this definition should also clarify the engineering use of this term (if any).

- "These facilities would only accept excess soil that can be reused (recycled aggregate) to meet a realistic market demand as an aggregate product in an infrastructure or building project (not general fill or soil amendment) and does not include glass, concrete, asphalt, etc.; any material found to be unusable for these purposes must be promptly disposed of."

  Prohibiting excess soil that contains glass, concrete, and/or asphalt from use in the proposed aggregate depot seems to be at odds with existing practices. The Ministry of Natural Resources (MNR) policy A.R. 5.00.15 issued April 5, 2007, states that "Through recent changes to the Ontario Provincial Standard Specification (OPSS), MTO now allows recycled asphalt (RAP), crushed concrete, and 15% crushed glass and ceramics in granular base applications. This change should encourage municipalities to consider substituting recycled aggregate materials for natural aggregate materials when building new roads, reducing the need for virgin aggregate."

  The most recent version of OPSS.MUNI 1010 issued November 2013 allows for recycled asphalt (30% by mass), recycled concrete (100% by mass) and recycled glass or ceramics (15% by mass) in both Granular 'A' and Granular 'B'.

We recommend that the Ministry revise this requirement and have the Excess Soil policy align with MNR policy A.R. 5.00.15 and allow recycled asphalt (RAP), crushed concrete, and crushed glass and ceramics in granular base and subbase applications.

- A significant portion of the excess soil generated from municipal projects is derived from excavation and removal/replacement of existing roadway granulars (Granular 'A', Granular 'B') that is no longer geotechnically suitable for use as engineered fill. Since the introduction of O. Reg. 406/19, the excavation and removal of granular material from site has become more costly and opportunities to reuse this material have significantly reduced. As roadway granulars typically include recycled asphalt and/or recycled concrete (as permitted per OPSS 1010) which will contain naturally occurring metals from quarried aggregates at various concentrations, and likely contains leachates from overlying asphalt and sealants as well as gas/oils/brake dust etc. from vehicular traffic, it is common to encounter elevated levels of PHCs, PAHs, VOCs, metals etc. Because the tolerances for these parameters in areas of potable water are more restrictive under O. Reg. 406/19 than under O. Reg. 153/04, it is common for existing roadway granulars to exceed Table 2.1 ICC under O. Reg. 406/19, even if they meet Table 2 under O. Reg. 153/04. As a result, it is common on roadway projects to have no local reuse sites capable of accepting this material and the existing roadway granulars therefore end up at Licensed Treatment Facilities or Landfills.

  Having the ability to recycle this material and restore its mechanical properties (e.g., removal of fines through sorting, low-risk processing) would promote reuse of these materials and would significantly reduce the volume of soil generated from our municipal road right-of-way projects that is going to landfill. However, this will only happen if the procedure to classify, separate, remove, haul, store, sort, process and reuse granular material is less onerous and less costly than removing it as excess soil and replacing it with newly sourced aggregate.

- "The aggregate must be known to be of a quality that it can be reused in an infrastructure project (e.g., meets community quality standards if for road use) or if not tested, there are no indications (visual, olfactory, known history) of contaminants."

  This is ambiguous, please clarify if testing to community ESQS will be required for aggregate to be accepted at the proposed depots. Would the operators of these sites be expected to segregate aggregates for use in either potable or non-potable community use environments?

- Would the decision to accept untested aggregates be at the facilities discretion? If not, what conditions would be acceptable for testing to not be required (e.g., sites that aren't part of an Enhanced Project Investigation Area)? If past acceptance practices at reuse sites are any indication, aggregate receiver sites are likely to default to the minimum testing parameters in the Planning Documents as specified in the Soil Rules for Sites that required registration, unless expressly exempted.

- If a "similar use" exemption were to be implemented for excess soil used expressly as aggregate (the engineering term) similar to how the current salt-impacted soils

exemption works, this could function as a mechanism to allow soil transfer without sampling. This exemption would in theory prevent excess soil used as aggregate from being considered "fill of unknown quality" and therefore not be considered a PCA. This would not prevent the identification of other PCA's (I.e., gas stations, dry cleaners, etc.). If implemented, an exemption as described above would greatly improve the ability to re-use excess soil as an aggregate.

- Limiting the volume to 25,000 m3 and reuse to 1 year for these depots could limit the commercial viability of these sites, and they are not interim sites. The limits should be determined to facilitate their economic feasibility and promote reuse rather than assigning the limits arbitrarily. If material can be mixed and sorted, how does one determine whether it has been stored for a period exceeding one year?

- Aggregates were previously accepted at existing quarries, to facilitate backhaul with new granulars (reducing trucking and thus lowering greenhouse gas emissions) and to take advantage of existing equipment at pits and quarries. Is the intention that these aggregate reuse depots be operated at sites that already have an instrument under the Aggregate Resource Act?

- Will these new proposed sites affect the current sites operating under an Aggregate Resources Act (ARA) permit, specifically if a site operating under an ARA permit can also operate as one of the proposed new sites. (e.g., can a site operating under an ARA permit be allowed to concurrently operate as a small liquid soil depot or aggregate reuse depot?)

C. Small Liquid Soil Depots

- Allowing for active dewatering with appropriate disposal of effluent to sewage works (with appropriate approvals) or disposal off-site will reduce the volume of disposal of liquid soils as waste and will allow for subsequent testing, and hopefully reuse, of dried soils. The Ministry should consider expanding the ability to actively dewater liquid soils to these small liquid soil depots and other sites exempt from Waste ECAs, including Local Waste Transfer Facilities.

- The proposed volumetric limits of 200 m3 of liquid soil and 2,000 m3 of dewatered soil at the small liquid soil depot are not necessarily viable to these sites. The limits should be determined to facilitate their economic feasibility and promote reuse rather than assigning the limits arbitrarily.

2. Enhanced Reuse Opportunities for Salt-Impacted Soil:

MEA is supportive of these proposed amendments by expanding the locations of placement where the salt-impacted soil is anticipated to have minimal impact.

- This amendment indicates that salt-impacted soil would be permitted for undertakings based on a landscape or site plan prepared and certified by an expert with a licensed landscape architect being provided as the only example. It would be helpful if the Ministry could clarify and expand the list of experts it considers acceptable to make reuse-based decisions related to salt-

impacted soil. Suggested certifications could be a Certified Ecological Restoration Practitioner (CERP) or an Ecological Restoration expert with at least 10 years of experience.

- It is also recommended that this landscape plan be prepared in collaboration with a QP or Environmental Professional (EP) to inform the chemical adverse effects of salt-impacts on plant growth and soil invertebrates and provide information on depth and spatial distribution of the salt impacts in soils. From Toronto and Region Conservation Authority's experience, planting in salt-impacted soils can promote growth of invasive species, such as, phragmites and could eventually result in impacts to deeply rooted trees that may be planted within range of salt-impacted soil.

- Requiring a landscape or site plan to be prepared by an expert such as a landscape architect may not be a barrier for larger residential or commercial development reuse sites; however, this requirement may act as a barrier for smaller reuse sites such as individual homeowners/farmers, etc. Rather than leaving it to the discretion of an expert to review on a case-by-case basis, we request that the Ministry consider reviewing the impacts of salt impacted soil reuse in non-agricultural land and provide typical reuse settings for both RPI and ICC properties in which salt-impacted soils can be reused at surface to promote reuse. Examples could include permitting reuse of salt-impacted soils within non-potable Settlement Areas but limiting the use of salt-impacted soils in rural areas or within a specified distance from agricultural fields or any potential impacts to drinking water source within the municipalities that use groundwater as drinking water.

- For municipalities, instead having one landscape or site plan certified by an expert for such placement of salt-impacted soil at each site or project, would the Ministry consider for a general plan certified by an expert with sets of conditions that can be applied for different situations/areas/locations?

- Confirm that the information about the salt-impacted soil and the potential risk to surface and groundwater and plant growth provided in writing by the source site would be general rather than specific to the reuse site and would not be used as a guarantee by the reuse site.

- Confirm that the information contained in the Soil Characterization Report (SCR) and language and forms in OPS 180 related to salt-impacted soils is acceptable as the information in writing to inform the reuse site owner and can also serve as the reuse site owner consent

- The language in the first bullet point can be interpreted that salt-impacted soils can be placed at an industrial or commercial site where non-potable standards are applicable will be replaced by the subsequent sub-bullet points. It is understood that this was not the MECP's intention and rather the MECP intended to expand the current rules. It is requested that the MECP retain the current salt-impacted excess soil rules and expand them with the sub-bullet points.

- Similarly, confirm that placing salt impacted soil at least 1.5 m below the surface of the soil, regardless of property use, is still allowable under the Regulation, and that the proposed amendment would be in addition to the current rules related to salt-impacted soils.

- It is also noted that the current restriction allows for placement of salt-impacted soils within 30 m of a surface water body, not 100 m as stated in the proposed regulation update document.

3. **Enable Greater Soil Management at Class 2 Soil Management Sites and Create Greater Alignment at Local Waste Transfer Facilities and Depots:**
MEA is generally supportive of the proposed enhancements for the Class 2 soil management sites; however, we have a number of concerns with the proposed changes to the Local Waste Transfer facilities (LWTF).

- The regulatory amendment proposes to modify clause (a) of the definition of Class 2 soil management sites to include a property owned or controlled by a public body, enabling public bodies to lease properties for the purpose of operating a Class 2 site is supported; however, for some municipalities, purchasing property or leasing property from a private landowner is not desirable from either a cost or risk-based perspective. It would be helpful if the Ministry can expand options for municipalities allowing them to exercise contractual control (through a binding tender or contract Special Provision) and/or under an instrument over a Class 2 site, operated by a third party for public bodies, but not just for Class 2 sites by the project leader alone. This could include provisions that standard operating procedures (SOP) for the area under contractual control are prepared by a QP and overseen by the municipality on a regular basis.

- As many municipalities utilize LWTFs to help their operation, deliver capital projects and maintain their infrastructure, facilities, and assets, these LWTFs are essential facilities to municipalities for the general management of their excess soils. Currently, there is no total soil volume limit at LWTFs. Therefore, by limiting the soil storage volume to 25,000 m3, some of the larger municipalities may be significantly impacted to their daily operation and created unnecessary barriers to manage and reuse their excess soil.

- With the nature of the LWTFs, excess soil is being collected from field operations, capital projects and other maintenance activities and shipped out for reuse, and disposal all year long, it does not make sense to determine and comply with a two-year storage period and is impractical to frequently register the facility. Therefore, it is requested that the Ministry confirms whether registry filing for municipally owned and operated local waste transfer facilities is a one-time process for the lifetime of the facility operation.

- For both Class 2 soil management sites and LTWFs, we ask that any volumetric based registration fees be deemed not to be appliable.

- Confirm that planning requirements will continue to be exempt under the circumstance whereby, during municipal operations, soil is generated during emergency works/repairs and/or maintaining infrastructure in a fit state of repair. Under these scenarios soils may be transported and temporarily stockpiled in a Class 2 Soil Management Site or Local Waste Transfer Facility owned by the municipality, where soils are consolidated across several emergency works/repairs and/or maintenance of infrastructure in a fit state of repair sites, until future testing may be completed to arrange off site soil disposal or reuse.

- As the current practice of the Director notification (no fee) and in light of the significant increase of the 2024 registration fees proposed by the Resource Productivity & Recovery Authority (RPRA), we ask that any registration fee for the LTWFs should be waived for municipalities and conservation authorities.

4. **Hauling Record Exemptions and Clarifications"**
   MEA is supportive of exempting specified small projects from physical or electronic hauling records and adding clarifications to the hauling record requirements. However further clarification on the following points is requested:

   - Subsection a. under section B requires the owner or operator of the source site to confirm the accuracy of the information provided in the hauling records before soil is removed from the source site. Maintaining accurate haul records is a requirement of the transporter of the soil, which is a requirement of the regulation and enforced though appropriate contractual language, through the incorporation of a soil tracking system and through routine checks of aggregated data during the course of the project. As a municipality, it is impractical for us as owners/project leaders to confirm the information contained in each haul record is accurate before the soil is moved off-site and this would create significant added administrative burden and additional cost to Project Leaders to oversee and approve on a truck-by-truck basis the only activity that is outside of our responsibility in the Regulation. As such, we recommend that this requirement be one imposed on the operator of the site rather than the owner. Similarly, it should also be applied to subsection d. under section B.

     It should also be noted that only partial information is available on the hauling records prior to soil removal from the source site (i.e., information related to soil deposition at the receiving site is not available at that time). This means that before the soil is removed from the source site, only the information available at that time can be verified. Therefore, it is requested that the MECP clarify that only the hauling information available at the time the soil leaves the source site is required to be verified.

   - For soil excavated from multiple areas and transported in the same truck, listing out each of the locations that the soil was excavated from, as well as any other associated information, can be impractical, especially for municipal field operation, before transporting the soil back to the LWTF. It is recommended that area information should also be recognized in addition to listing out each pickup location.

5. **Exempt Landscaping Projects at Enhanced Investigation Project Areas from the Reuse Planning Requirements:**
   MEA is generally supportive of the proposed amendments by exempting the reuse planning requirements for landscaping projects excavating soil at a low-risk part of an enhanced investigation project area.

   - It is unclear how a low-risk area (i.e., not known to have potentially contaminating activities) could be determined without completing an Assessment of Past Uses (APU) at a minimum, which would not be required if this activity was exempt.

- Has the MECP consulted with professional associations such as the Professional Geoscientists of Ontario (PGO) or Professional Engineers of Ontario (PEO) to confirm whether a QP would agree to define a site as low risk?

- Can the MECP clarify who confirms what is deemed a low-risk project area if neither a QP will be involved, or an APU prepared?

6. **Clarify the Responsibility of a Qualified Person (QP) when Dewatering or Solidifying Liquid Soil:**
MEA is supportive of the proposed clarifications regarding the responsibility of a QP when substances are used for dewatering or solidification of liquid soil.

- Please clarify if sediment amended with polymers can be reused on or off site, if the QP determines it does not pose adverse effect.

7. **Clarifying Sampling and Analysis Requirements**
MEA is supportive of the clarifications made to the current requirements related to the mandatory sampling and analysis plans.

8. **Greater Flexibility for Storage of Soil Adjacent to Waterbodies:**
We are supportive of the proposed amendment to enable storage of sediment and soil near waterbodies for projects excavating in or adjacent to that waterbody.

- It is requested the Ministry to confirm “other soil” does not include the soil imported that will be reused for the projects.

- It would also be beneficial to clarify “soil storage” and “soil temporarily stored before reused at the project area”.

9. **Other Clarifications and Corrections:**
MEA is supportive of the additional clarifications and corrections proposed to assist with better understanding of the requirements of the Regulation.

- The last bullet points under both the Regulation section and the Soil Rules section indicate other minor corrections or clarifications will be made. It is requested that the MECP provide an updated draft of the Regulation and Soil Rules document that highlights these changes for review.

10. **General Comments to the Regulation:**

- Similar to Amendment (5) by exempting the reuse planning requirements for landscaping projects excavating soil at a low-risk part of an enhanced investigation project area, we recommend that the Ministry extend the same exemptions to other projects generating less than 100 m3 of excess soil from an Enhanced Investigation Project Areas (e.g. installation of benches or play structures in parks underlain by a former landfill, provided that the underlying landfill waste is not breached; installing speed humps or making other shallow changes to the road structure (widening curb lane, adding bike lane and trials) in an area underlain by a former railway or within a pipeline corridor, provided the underlying APEC is not uncovered).

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- Amendment (7) in the proposed amendment document, suggests clarifying that soil does not need to be tested for all required minimum parameters if the only reason an area of potential environmental concern (APEC) is identified is due to salt application. Some sampling must still be completed to understand the extent of salt impacts but can be limited based on QP judgement. Can the Ministry consider applying the same type of logical argument if the only APEC identified in the APU is "fill of unknow quality" to infrastructure projects undertaken by a Public Body? Currently, identifying fill of unknown quality is used as a blanket APEC across the entire Project Area for municipal projects and does not fulfil the ultimate objective of the APU in terms of identifying higher risk soils based on PCAs/APECs, and targeting the sampling of those soils by location. As a result, sampling for fill of unknown quality tends to be distributed either evenly or randomly throughout the project area. From the City of London's experience that very little variation in soil analytical results are observed in shallow granular material which would be subject to this APEC, resulting in over-sampling with diminishing analytical value.

- Municipalities are responsible for many stormwater management (SWM) ponds and as such the current stormwater management pond sampling and analysis requirements (e.g., sampling methodology and frequency) outlined in the Soil Rules are challenging to practically implement. The current rules do not allow for in-situ sampling of stormwater management ponds unless an Environmental Compliance Approval (ECA) is obtained for each pond. The current sampling and analysis requirements under the regulation are established based on ex-situ or stockpile sampling after the pond sediment is removed and dewatered. This approach has significant implications on the space requirement for drying and stockpiling the sediment and financial costs of the operations of dredging, hauling to offsite for drying, and sampling. From a scientific perspective, industry experts have completed studies to conclude that the results of samples obtained in-situ are comparable to the results of samples obtained ex-situ (i.e., sediment removed, dewatered, and stockpiled). Therefore, it is requested that the MECP consider expanding the sampling requirements associated with stormwater management pond to allow for an in-situ sampling approach or a hybrid sampling approach.

- As some of the proposed amendments would impact our projects and operations and the way municipalities manage excess soil. Therefore, it will take time to modify and implement these changes to our existing arrangements and contracts. Therefore, it is requested that a transition period before certain amendments to be fully implemented.