

# Excess Soil Webinar Series

## 1. Project Area - (Source Sites)

Date and Time: October 27<sup>th</sup>, 2021  
9:00am to 11:00am

# Excess Soil Webinar Series - Schedule

Topic Areas	Date and Time
<b>1. Project Area - Source Sites</b>	<b>Wed October 27<sup>th</sup>, 2021 9:00am to 11:00am</b>
2. Reuse Sites	Fri October 29 <sup>th</sup> , 2021 9:00am to 11:00am
3. Transportation of Excess Soil (Dry and Liquid)	Wed November 3 <sup>rd</sup> , 2021 9:00am to 11:00am
4. Infrastructure Projects	Fri November 5 <sup>th</sup> , 2021 9:00am to 11:00am
5. Excess Soil Registry - Regulatory Requirements	Fri November 12 <sup>th</sup> , 2021 9:00am to 11:00am
6. Vac Trucks and Liquid Soil Management	Fri November 19 <sup>th</sup> , 2021 9:00am to 11:00am
7. Qualified Persons (QP) and Excess Soil Planning	Wed November 24 <sup>th</sup> , 2021 9:00am to 11:00am
8. Soil Depots and Storage/Processing Sites	Fri November 26 <sup>th</sup> , 2021 9:00am to 11:00am

# Presentation Overview

- Welcome to Webinar Series - 1 - Project Area (Source Sites)
- Overview of Regulatory Requirements
- Best Practices
- Frequently Asked Questions and Answers
- Health Break
- Open Discussion, Additional Question and Answer Period
- Additional Resources and Opportunities
  
- Appendices
  - Appendix A: Soil Storage Rules
  - Appendix B: Tracking System Requirements

# Your MECP Excess Soil Team

Some of our MECP team members include:

## **Policy**

Chris Lompart  
Laura Blease  
Karan Jandoo  
Reema Kureishy

## **Legal**

Hayley Valteau  
Jamie Flagal

## **Approvals**

Andrew Neill

## **Standards**

Brigid Burke  
Chi Hoang  
Paul Welsh

## **RSCs and Brownfields**

Dean Therrien  
Michelle Zehr

## **Operations**

Lisa Tanaka

# Overview of Regulatory Requirements Relevant to Project Areas



Toronto Waterfront, Don River  
Project Filling - MECP, Jan. 2019

## DISCLAIMER

*This presentation is intended to be a brief summary of some of the requirements of Ontario Regulation 406/19 On-Site and Excess Soil Management (the regulation) made under the Environmental Protection Act and the Rules for Soil Management and Excess Soil Quality Standards - a document incorporated by reference in the regulation. This is for information purposes only and should not be construed as legal advice or substitute for seeking independent legal advice on any issues related to the regulation. Any person seeking to fully understand how the regulation may apply to any of the activities they are engaged in must refer to the regulation. In the event of any inconsistency between the regulation and this presentation, the regulation will always take precedence.*

# Overview of Regulatory Requirements

- Regulation titled **O. Reg. 406/19: On-Site and Excess Soil Management** under the Environmental Protection Act (EPA), was finalized in December 2019, supported by:
  - Rules for Soil Management and Excess Soil Quality Standards
  - Beneficial Reuse Assessment Tool (BRAT)
  - Complementary provisions in O. Reg. 153/04 (Brownfields Remediation Regulation), Reg. 347 and O. Reg. 351/12 (Waste Management Regulations)

Phased Regulatory Implementation	Timing
<b>Reuse Rules and Waste Designation Clarification</b> - Including excess soil reuse standards	January 1, 2021
<b>Excess Soil Reuse Planning Requirements</b> - For larger or riskier generating projects (some exemptions) <ul style="list-style-type: none"> <li>- Assessment of past uses, and if required sampling and characterization</li> <li>- Destination assessment report</li> <li>- Tracking and registration</li> </ul> - Hauling record - Larger reuse site registration	January 1, 2022
<b>Restriction on the deposit of clean soil at landfill sites</b>	January 1, 2025

# Rules for Excess Soil Reuse

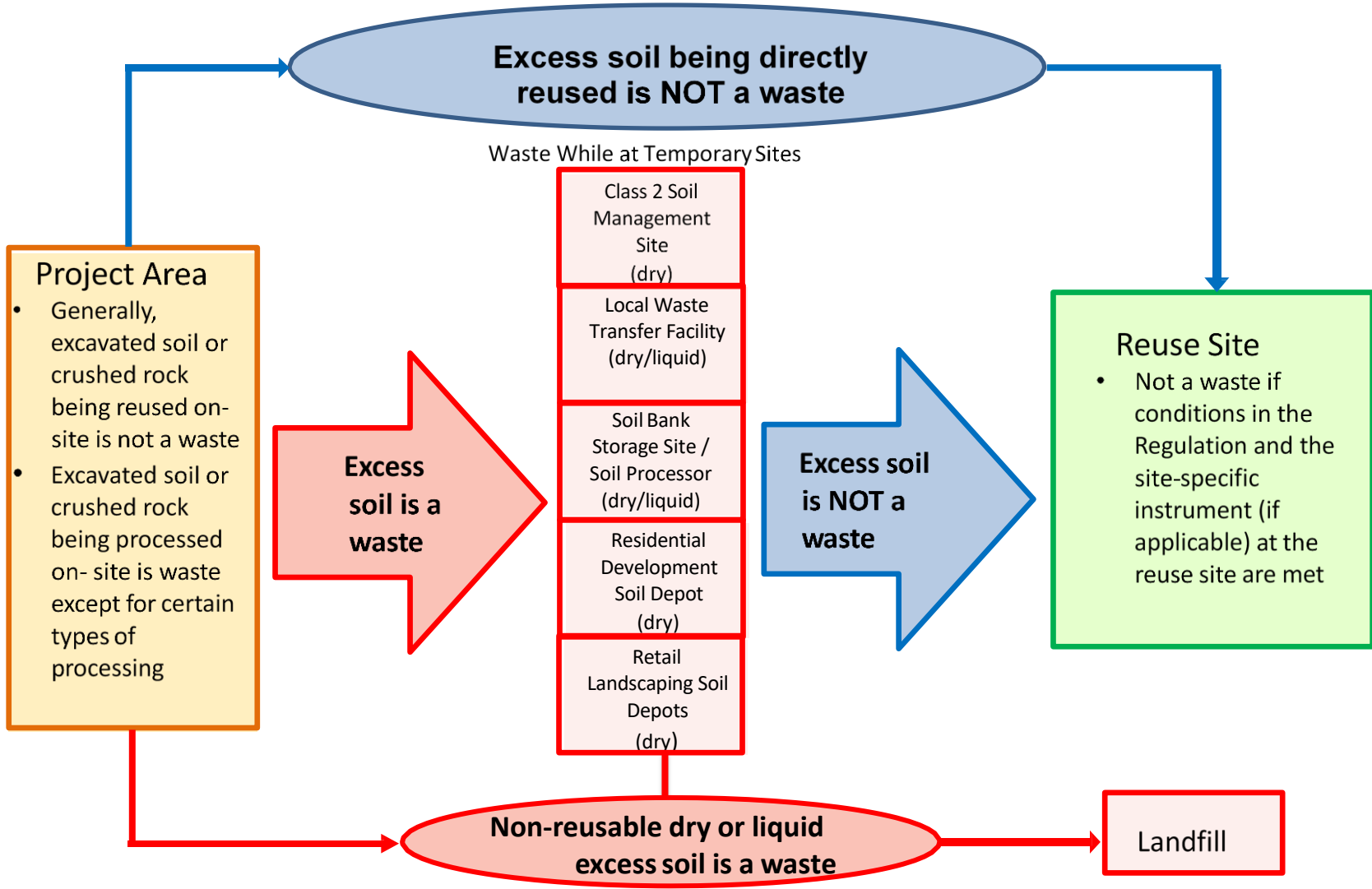
- Excavated soil or crushed rock becomes excess soil upon leaving a project area.
- Generally, soil and rock staying in the project area is not a waste and can be reused.
- The rules for reuse of excess soil are found in [sections 3, 4 and 5](#) of the regulation, which then refer to other key sections of the regulation and both parts of the [Rules for Soil Management and Excess Soil Quality Standards](#).
- In order to be reused and not designated as waste, excess soil being reused at another site must meet all of these conditions:
  1. The excess soil is directly transported to a reuse site from a project area, a Class 1 soil management site or Class 2 soil management site, or local waste transfer facility
  2. The owner or operator of the reuse site has agreed in writing to deposit the excess soil at the reuse site
  3. There is a beneficial use for that excess soil and the quality and quantity of excess soil being taken to that site are consistent with the beneficial use
  4. The excess soil is dry soil and remains dry soil until it is finally placed at the reuse site, or, if it is liquid soil, a site-specific instrument authorizes the excess soil to be deposited at the reuse site
- These criteria are intended to ensure that the excess soil will be reused at the reuse site for a beneficial purpose and that the quality and quantity of the excess soil to be deposited at the reuse site for final placement are appropriate for that purpose

# Rules for Excess Soil Reuse

- If direct reuse of the excess soil cannot be achieved, the project leader may consider the following approaches to managing the excess soil:
  - If soil quality is a factor, remediation either on-site or at a soil remediation facility, after which the excess soil may be able to be beneficially reused and no longer be considered a waste
  - If a reuse site is not ready to accept the excess soil, temporary storage on the project area or at another site (such as a Class 2 soil management site or a local waste transfer facility if applicable) until the reuse site becomes available
  - If a reuse site has not been identified, transportation of reusable excess soil to a soil bank, this soil then becomes the responsibility of the soil bank operator
  - Transportation to a landfill for use in landfill operations or disposal, with some restrictions as of January 1, 2025
  - If the excess soil is liquid soil, often generated through hydro-excavation, tunneling and removal of sediment from stormwater management ponds, de-watering or solidifying the excess soil so it could be reused as dry soil



# Waste Designation Flowchart



# Reuse Within the Project Area

- Excavated soil or crushed rock from the project area that is reused within the project area is not excess soil and is not designated waste. This allows these materials to be readily reused on-site and they are exempt from the excess soil reuse rules in the regulation, including the excess soil quality standards.
- While the excess soil reuse rules do not apply to excavated soil or crushed rock reused on-site, being familiar with them may prevent adverse effects.
- If a Record of Site Condition (RSC) will be filed for a project area, then any excavated soil or crushed rock that is to be reused within the RSC property must meet the applicable site condition standards of [Ontario Regulation 153/04](#), including approved standards in a risk assessment under that regulation if developed, so that the RSC can be filed.
- As well, if soil or crushed rock that is excavated within a project area is determined to be a hazardous waste within the meaning of [Regulation 347](#), the requirements of that regulation must be followed, and this regulation does not apply.
- Maximizing on-site reuse should be considered during the design of a project to avoid requirements that may apply to excess soil leaving a project area.
- If soil or crushed rock is excavated at the project area and temporarily stored at an interim site or in a vehicle off-site, then returned to the project area for reuse, it would not be subject to the requirements in [sections 3, 4 and 5](#) of the regulation (the reuse criteria).

# Project Area - Storage and Processing Rules

- The regulation and Soil Rules document specify certain low-risk activities related to soil storage and processing, that, if regulatory rules are satisfied, would not require a waste Environmental Compliance Approval (ECA)
- These rules help to prevent adverse effects (to avoid leaching, dust, noise, etc.) while retaining confidence in the storage and processing of soil that is taking place

## Soil Storage

- The regulation and Soil Rules document specify general storage rules which apply to all sites, including project areas:
  - Rules related to set-backs from water bodies and property lines (with some exceptions provided), maximum stockpile size 2,500m<sup>3</sup>, details around when soil needs to remain segregated, etc.
  - See Appendix A for further details on general soil storage rules that apply at all sites, including project areas

# Project Area - Storage and Processing Rules

## On-Site Processing

- [Subsection 6\(3\)](#) of the regulation lists types of **low-risk processing** of excavated soil or crushed rock that may take place at a project area without needing a waste-ECA:
  - Passive aeration,
  - Passive dewatering,
  - Mechanical dewatering,
  - Mixing (if of similar quality and not for the purpose of diluting contaminants),
  - Soil turning,
  - Size-based sorting and sorting for the purpose of removing debris, or
  - Mixing with another substance that is intended to dewater or solidify the soil or crushed rock
- Use of polymers for solidification also requires involvement of a QP and requires the project leader to provide appropriate documentation to the owner or operator of the reuse site
- Note that some of the types of processing that would not require a waste ECA may require other approvals, such as those under [subsection 9\(1\)](#) of the *EPA* or [subsection 53\(1\)](#) of the *OWRA*

# Project Area - Visual and Olfactory Observations

- Section 23 of the Regulation provides rules to follow if unexpected contamination is discovered during excavation
- The project leader or the operator of any project area is required to develop and apply procedures if any person working in the project area makes an observation, including any visual or olfactory observation, that suggests that the soil being excavated may be affected by the discharge of a contaminant
- At a minimum this shall include:
  1. All soil excavations in the project area must immediately cease upon the observation being made, until such time as the project leader directs that soil excavations may be resumed.
  2. The project leader or the operator of the project area must immediately be notified of the observation.

(Continued on next slide)

# Visual and Olfactory Observations - Continued

3. The project leader or the operator of the project area, upon being notified of the observation, must, before directing that soil excavations may be resumed, ensure that all necessary steps are taken to ensure that:
  - i. all excavated soil that is affected by the discharge of a contaminant is identified and is segregated from other excavated soil in the project area,
  - ii. the portion of the project area that is affected by the discharge of a contaminant is determined, and
  - iii. any excess soil from that portion of the project area is disposed of in accordance with this Regulation.
  
4. If a project leader was required to ensure that a QP prepared or oversaw the preparation of documents under this Regulation, the project leader shall, before authorizing any soil to be removed from the project area where the observation was made:
  - i. obtain the advice of a qualified person regarding what steps are necessary in order to ensure the outcomes mentioned in subparagraphs 3 i, ii and iii, and
  - ii. request that the qualified person advise on whether any of the documents required under this Regulation require revision as a result of the observation.

# Excess Soil Reuse Planning Requirements

- To help ensure reuse of excess soil from a project area is being planned and undertaken appropriately, the regulation includes requirements as of January 1, 2022, for some projects generating excess soil
- The excess soil reuse planning requirements include:
  1. Registration of a notice in the Excess Soil Registry for the project
  2. Completion of an assessment of past uses and, if necessary, a sampling and analysis plan and a soil characterization report
  3. Completion of an excess soil destination report
  4. Application of a tracking system
- To support compliance and transparency, key information from project area efforts must be included in the notice filed on the registry, such as the locations where soil is planned and then taken to for reuse, storage, processing and/or disposal
- These requirements apply in relation to a project and, generally, the regulation places the responsibility to ensure these requirements are met on the project leader. This does not prevent contractual arrangements resulting in other people completing these requirements on behalf of a project leader.
- The assessment of past uses, sampling and analysis plan, soil characterization report, and excess soil destination report must be undertaken by or under the supervision of a QP

# Excess Soil Reuse Planning Requirements

- The excess soil reuse planning requirements apply to the following types of projects which are, generally, larger in scale or more likely to generate excess soil with some contaminants:
  1. projects generating 2000m<sup>3</sup> or more of excess soil and that are in a settlement area (such as cities and towns); this trigger does not apply to projects in rural areas
  2. projects for which part of the project area has a past or present use that is a gas station, garage, used for the operation of dry-cleaning equipment, or industrial use (uses associated with an “enhanced investigation project area” as defined in the regulation)
  3. projects for which the primary purpose is to remediate contaminated lands (note that if a new property use cannot proceed without completion of soil remediation, such as soil removal, this should be considered a primary purpose)
- A number of exemptions from the planning requirements exist which are described on the next slide.



# Exemptions from Reuse Planning Requirements

- The regulation includes several exemptions from all or some of the planning requirements related to soil reuse planning.
- These exemptions reflect some low risk scenarios, some scenarios where responsibility for the soil is not changing, and some scenarios to help encourage reuse in similar projects:
  1. If 100 m<sup>3</sup> or less of excess soil is being removed from the project area and being directly transported to a waste disposal site, such as a landfill (this does not apply a Class 2 soil management site)
  2. The reason for removal of excess soil is to respond to an emergency, such as an existing danger to the health or safety of any person, a serious risk of injury or damage to any property or to any plant or animal life, or to respond to a spill
  3. Projects that are related to maintaining infrastructure in a “fit state of repair” other than excavation of excess soil from a stormwater management pond
  4. The excavation of topsoil which is transported directly for reuse as topsoil at a reuse site, and there is a low risk of contamination (the project area has never been an enhanced project investigation area, and the primary purpose of the project where the excess soil was removed from was not the remediation of contaminated land)
  5. The excess soil is excavated as a part of an infrastructure project and after removal from the project area, the excess soil is being reused (finally placed) as part of an undertaking related to another infrastructure project with the same project leader or a public body
  6. The excess soil is being deposited at a local waste transfer facility and the amount of excess soil to be deposited is 100 m<sup>3</sup> or less

# Additional Exemptions

## Existing Contract Exemption

- The regulation exempts soil management contracts entered into before January 1, 2022 from the reuse planning requirements (i.e., registration, assessment of past uses, sampling and analysis, tracking, etc.).
- If a contract has not been completed by January 1, 2026, it would be required to complete the excess soil reuse planning requirements in relation to excess soil movements from that date forward.
- Other regulatory rules would continue to apply, including provisions specifying excess soil reuse rules to avoid the waste designation.

## Completed Assessments Exemption

- The regulation also recognizes past use assessments, sampling and analysis plans and soil characterization reports completed for a specific project before January 1, 2022 as assessments, plans and reports under the regulation for that project.
- This ensures these studies do not have to be repeated for a project continuing based on those studies. This would not apply to a different project.
- Other aspects of reuse planning , e.g., registration, continue to apply.

# Filing a Notice on the Registry

- For projects that must complete the excess soil reuse planning requirements, section 8 of the regulation requires that the project leader file a notice in the Excess Soil Registry (Registry), typically before excess soil leaves the project area.
- The Registry is an online, public registry being developed and implemented by the [Resource Productivity and Recovery Authority](#) (RPRRA), must include key information:
  - A description of the project and the project area
  - The name and contact information for the project leader(s) and operator, and QP(s)
  - Quantity of soil being removed from the project area and its quality, by general category
  - The name and contact information for the person responsible for the transportation of Excess soil from the project area
  - The intended location and description of the reuse sites, landfills, dumps, Class 1 soil management sites (soil banks and soil processing sites), local waste transfer facilities and temporary sites (Class 2 soil management sites) where soil is to be deposited, including applicable excess soil quality standards and quantity of soil deposited at the site
  - Declarations by the project leader
- Once a notice is filed it must be updated:
  - To identify new planned deposit sites prior to their use
  - Within 30 days of completion of the project to reflect actual soil movements
  - Within 30 days of finding inaccurate or incomplete information in the notice

# Tracking System

- A project leader from the project area must also verify where the excess soil was finally placed through the development and application of a tracking system for projects required to file a notice on the Registry - to track excess soil during its transportation and deposit.
- The tracking system will include procedures to account for each load of excess soil moved from a project area, including its general quality, quantity and verification of the final site at which it was deposited.
- The hauling record, required to be available from a hauler of excess soil, can be an integral part of the tracking system. The tracking system would also inform the hauling record by ensuring that the appropriate quality of soil for a deposit site is loaded and reflected in the hauling record.

To read more about the key requirements associated with the tracking system, see Appendix B and Section B of [Part I: Rules for Soil Management](#).

# Assessments and Reports

Project leaders that are required to register their project must also complete specified assessments and reports. These requirements must be completed before filing the notice on the Registry. A QP must be used to complete these assessments and reports:

- **Assessment of Past Uses:** this study involves using such methods as records reviews, interviews, and site reconnaissance (field visits) to determine the likelihood that one or more contaminants have affected the soil, and to identify areas of potential environmental concern and the contaminants of potential concern. If a phase one environmental site assessment (ESA) under O. Reg. 153/04 of the EPA has been prepared for the same project, an assessment of past uses is not required.
- **Sampling and Analysis Plan:** this involves the planning, investigation (for example, sampling and testing) and analysis of area(s) from which excess soil will be excavated with known or suspected contaminants to understand the quality of the excess soil. This assessment and the soil characterization report may not be necessary depending on the results of the assessment of past uses and the type of site.

# Assessments and Reports - Continued

A QP must also be used to complete these assessments and reports:

- **Soil Characterization Report:** this report documents the results of sampling and analysis, if required, and provides a description of excavated soil or crushed rock which may be reused, with or without processing, at the project area, and which excess soil may be deposited at a Class 1 site or landfill. This report will also identify the type of potential reuse sites to which excess soil from the project area may be transported.
- **Excess Soil Destination Assessment Report:** this report documents information on the reuse sites or other sites (such as landfills, dumps, Class 1 soil management sites, and Class 2 soil management sites) at which excess soil will be deposited. The information helps to verify that intended reuse sites are willing to accept excess soil from the project area and that the excess soil is of appropriate quality and quantity for the intended beneficial reuse. Contingency measures must be identified in the report in the event that excess soil cannot be deposited at an intended site, including the location of an alternate deposit site (which may include returning the excess soil to the project area where it originated).

The certifications related to these reports must be completed by a QP, not a supervisee.

# Other Project Area and Project Leader Responsibilities

- Even if the planning requirements are not triggered, there are still a number of regulatory requirements and responsibilities at the project area site
- For example, regardless of the volume of excess soil being moved, or if the planning requirements are triggered or not, excess soil quality must be determined to be appropriate for the planned reuse site(s) of interest
- A reuse site owner or operator must agree in writing to accept soil from a project area. It is necessary for a project leader or QP to confirm with the reuse site owner or operator which excess soil quality standard, site-specific standard or instrument-specific standard applies to that reuse site.
  - A reuse site owner or operator has the discretion to set more stringent standards than the regulation requires and to ask for additional information to demonstrate that the excess soil meets those standards.
  - If there is a site-specific instrument, such as a municipal fill permit, that recognizes a need for fill to complete an undertaking, and it includes conditions related to the quality of excess soil that may be deposited, then the conditions in that site-specific instrument apply.

# Other Project Area and Project Leader Responsibilities

- The project area must also ensure the appropriate hauling records are provided to drivers with key details on the soil that is loaded for transport, drivers will be responsible for recording and providing key information about the deposit of soil to the reuse site owner or operator
- Each project is unique, in some soil movements e.g., salt-impacted soil, key information about the salt-impacted soil needs to be provided by the project leader to the reuse site owner or operator:
  - Notification that the soil may be impacted
  - Any sampling and characterization reports prepared
  - Any identified potential risks to surface and/or groundwater
- Project leaders for sites generating excess soil are required to keep copies of most documents they create or receive per the requirements of the regulation for seven years. This would include the written consent obtained from reuse sites to move excess soil to those locations, and any reports to fulfill excess soil reuse planning requirements (if applicable).



# Key Definitions

**Excess Soil:** soil, crushed rock, or soil mixed with rock or crushed rock, that has been excavated as part of a project and removed from the project area for the project

**Crushed Rock:** a naturally occurring aggregation of one or more naturally occurring minerals that is mechanically broken down into particles that are smaller than 2 millimeters in size or that pass the US #10 sieve

**Liquid Soil:** soil that has a slump of more than 150 millimetres using the Test Method for the Determination of “Liquid Waste” (slump test) set out in Schedule 9 to [Regulation 347](#)

**Project:** any project that involves the excavation of soil and includes:

- (a) any form of development or site alteration
- (b) the construction, reconstruction, erecting or placing of a building or structure of any kind
- (c) the establishment, replacement, alteration or extension of infrastructure, or
- (d) any removal of liquid soil or sediment from a surface water body

**Beneficial Purpose:** the use of excess soil in an undertaking that requires additional soil in order to complete that undertaking. Examples of beneficial purposes include backfill or raising the grade for a planned development. Simple disposal or stockpiling of excess soil is not a beneficial reuse. Often a site-specific instrument would relate to the beneficial purpose, giving permission for soil management for a specified undertaking.

# Key Definitions

**Infrastructure:** all physical structures, facilities and corridors relating to:

- (a) public highways
- (b) transit lines and railways
- (c) gas and oil pipelines
- (d) sewage collection systems and water distribution systems
- (e) stormwater management systems
- (f) electricity transmission and distribution systems
- (g) telecommunications lines and facilities, including broadcasting towers
- (h) bridges, interchanges, stations and other structures, above and below ground, that are required for the construction, operation or use of the items listed in clauses (a) to (g), or
- (i) rights of way required in respect of existing or proposed infrastructure listed in clauses (a) to (h)

# Who is a Project Leader

- A project leader means, in respect of a project, the person or persons who are ultimately responsible for making decisions relating to the planning and implementation of the project
- They are the person or person(s) who is the proponent for a project
- Under the regulation, contractors and/or QPs would **not** become the project leader, as the responsibility for key decisions and compliance ultimately rests with the project leader
- Examples of project leaders for a project:
  - A municipality or public body responsible for an infrastructure project
  - The owner of a property or a developer of a property that may own or lease the property for the purposes of development
  - An employee of a corporation that has the responsibility and authority to bind the corporation

# Who Qualifies as “Qualified Person”

- A Qualified Person or QP is a professional engineer or professional geoscientist for the purpose of completing or supervising excess soil planning requirements under the regulation, consistent with section 5 of the Record of Site Condition Regulation
- If the Beneficial Reuse Assessment Tool (BRAT) is used to develop site-specific excess soil quality standards, a QP as described in section 6 of the Record of Site Condition Regulation may be utilized. If a Risk Assessment (RA) is done, it must be a QP as described in section 6.
- Outside of the regulatory requirements, QPs may be retained by a project leader to provide additional oversight on excess soil management activities:
  - Sampling and management at temporary soil storage and/or processing sites
  - Project area due diligence sampling where the regulation does not trigger the sampling rules for the project area
- For larger soil management projects, QPs may also be hired by other parties involved and responsible for soil management activities, beyond the project leader of the project area e.g., for additional oversight at the reuse site or at a temporary soil storage and/or processing facility not managed by the project area owner / project leader

# How to Define Your Project Area

The project area is a single property or adjoining properties on which the project is carried out

- Properties are adjoining if the boundary of one property touches or, were it not for an intervening highway, road allowance, railway line, railway allowance or utility corridor, would touch the boundary of the other property

Project areas are determined on a case-by-case basis. Some key factors include:

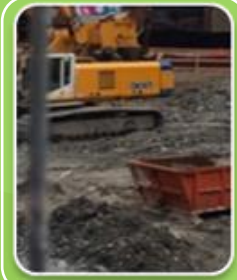
- The project area relates to the complete project, not only the area of excavation; it includes areas of soil storage, processing or loading, and other areas of construction, material storage or operations related to the project (off-site storage locations like Class 2 soil management sites are **not** included)
- If a project is being undertaken on one or more distinct properties, the project area includes that entire property
- The project area may span more than one property provided they are being used as part of the project and are contiguous, they would also have either common ownership or control by the project leaders
- For projects being undertaken in locations without distinct property boundaries on all sides, such as a road corridor, the area of continuous operations defines a project area, however, multiple separated work locations throughout a corridor or in different corridors would be distinct separate project areas

# How to Define Your Project Area - Continued

Key factors for determining project area, continued:

- Multiple projects under one contract do not become a single project or project area, unless they are contiguous
- One project or project area could relate to multiple types of infrastructure or other works; for example, one project could be installing water sewer and storm water infrastructure in a contiguous area
- Off-site, temporary storage areas such as Class 2 soil management sites and local waste transfer facilities would not be part of the project area
- As stated above, the regulation does not set project areas based on contracts. One contract may apply to a portion of a project, a complete project, or multiple projects. Areas that are not contiguous, even under one contract, are their own project areas. These areas should also not get combined for determining the total amount of excess soil leaving a project area as it applies to this regulation.

# Best Practices



# Best Practices

## Early Planning and Onsite/Local Reuse

- **Maximize the onsite reuse of excess soils or crushed rock** at the project area through use of innovative design (e.g., berms, new paths or roads) to reduce the regulatory rules while achieving a number of economic and environmental benefits e.g., reduced hauling and reuse/disposal needs
- Reusing excavated soil or crushed rock within the project area also limits the need to import excess soil from other project areas
- If onsite reuse is limited, **seek local reuse opportunities** through liaison with your soil community and by checking out the new online registry once launched, reuses **between local infrastructure projects** are also promoted within the regulation
- **Early planning at the design stage of the project** (e.g., integrate soil reuse into project design, sub-division or site planning, or site alteration permits) to maximize reuse potential
  - Large scale planning initiatives, like district or secondary plans, should be able to plan for a **balance of cut and fill and soil reuse** across the planning area
- Under the oversight of a QP, develop an **excess soil management plan** for your project to lay out the key roles, responsibilities and details for delivery of your project, see BMP on excess soil management plans (slide 35)



# Best Practices - Continued

## Contracts

- Establish **clear and concise contractual arrangements** for any tasks that will be delivered by other parties

## Project Area

- Clearly **define your project area**, ensure your project area includes the areas used for storage, processing, loading and potential reuse onsite

## Soil Sampling and Tracking

- Sampling requirements are in place for larger and riskier project areas; however, all sites are recommended to **consider hiring a QP to undertake sampling of your soil**, particularly if the soil is going to a reuse site; assessing past and current uses may be sufficient in lower risk sites
- Maximize efficiencies of tracking systems in all aspects of soil management, significant cost to be harnessed through **utilization of live real time platforms** which can be used to meet hauling record and tracking system requirements of the regulation, to monitor and make improvements in operational efficiencies and provides immediate notification of activities and any issues that may arise

# Best Practices - Continued

## Interacting with Reuse Site Operators and Soil Haulers

- For the regulation to be efficiently implemented, information sharing between some parties is necessary. Some examples include:
  - With reuse sites, sharing excess soil assessment information to help confirm that they are willing to accept excess soil from a particular project, written confirmation from reuse sites confirming that they agree to take excess soil from that project area, and coordination of tracking procedures to confirm receipt of excess soil
  - Information provided to haulers transporting excess soil by the project leaders, that confirms where the excess soil is to be deposited, contact information and contingency sites if that deposit site is not available

# Best Practices - Continued

## Excess Soil Management Plan

- The project leader of a project generating excess soil should consider retaining a QP to develop an excess soil management plan to integrate all regulatory requirements, and to ensure soil is properly managed and tracked.
- These items should be included in the excess soil management plan:
  - All reports completed related to the excess soil management activities: assessment of past uses report (or phase one ESA), sampling and analysis plan, excess soil characterization
  - A site plan that identifies all areas to be excavated, with the estimated volume and soil type and quality of each area, as well as areas for reuse, storage and processing
  - Procedures for on-site excavated soil or crushed rock management, including any intended on-site processing and segregation of excavated soil or crushed rock of various qualities
  - The estimated volume of excess soil to be taken off-site from the project area
  - A list of potential receiving sites for various soil qualities, including an excess soil destination assessment report, if completed
  - Procedures for tracking of excess soil to reuse sites or other destinations
  - Record keeping procedures
  - Identification of relevant site-specific instruments or regulatory requirements that may apply to the project area and soil-related activities, such as the intent to file a record of site condition
  - Requirements and procedures respecting cultural heritage and natural heritage assessments and associated soil management considerations

# Frequently Asked Questions and Answers

# Frequently Asked Questions and Answers

## 1. What is out of scope of the Regulation?

There are certain circumstances and materials for which the regulation does not apply, and for which other regulatory regimes may apply, including:

- Reuse of rock unless mixed with excavated soil
- Excavated soil or crushed rock that meets the definition of hazardous waste
- Asbestos waste
- The operation of a pit or quarry from which aggregate as defined in the *Aggregate Resources Act* is excavated (including the use of material from these operations and use or production of recycled aggregate at these sites), except the deposit and final placement of excess soil at a pit or quarry for reuse at the pit or quarry, including for the purpose of rehabilitation
- The excavation of topsoil based on a permit under the *Aggregate Resources Act*
- Peat production from a peat excavation operation
- The final placement of excess soil on the bed of surface water body

# Frequently Asked Questions and Answers

## 2. What constitutes maintenance in a fit state of repair for an infrastructure project?

- Maintaining infrastructure in a fit state of repair is an exemption from the excess soil planning requirements under Schedule 2 to the regulation; this exemption does not, however, apply to excess soil excavated from a stormwater management pond for the purpose of maintaining the facility
- In general, maintaining in a fit state of repair would include cleaning out infrastructure, repairing infrastructure or replacing existing infrastructure with similar infrastructure; it would not result in increased capacity or a different alignment
- In scope examples may include culvert replacement, roadbed repair or pipe replacement, including temporary infrastructure that is part of the maintenance process, such as a by-pass pipe or a minor road diversion or replacing a pipe by laying a new parallel pipe to allow the old one to stay in service until the new one is finished
- Out of scope examples include new construction such as building a road, or a transit right of way, digging a tunnel for a new subway or digging a new sewage/watermain, tunnel, re-aligning (vertically or horizontally), twinning, or adding capacity or widening of a pipe or road

# Frequently Asked Questions and Answers

## 3. Can sampling take place offsite from the project area?

- In general, the regulation requires sampling to take place at the project area, before excess soil is moved offsite
- However, it is recognized that sometimes it is not practical or feasible to sample at the project area, as such the regulation provides flexibility for sampling to occur “promptly” upon arrival at a temporary site (either a class 2 soil management site or a local waste transfer facility are permitted)
- The requirements on who must conduct this sampling is the same regardless of where the sampling takes place, this must be undertaken by or under the supervisions of a QP

# Frequently Asked Questions and Answers

## 4. What is considered a beneficial purpose for reuse of excess soil?

- In order to avoid the waste designation when excess soil is being reused, there must be a beneficial purpose for the excess soil at the reuse site
- Generally, a beneficial purpose for the reuse of excess soil is use of excess soil in an undertaking that requires additional soil in order to complete that undertaking
- The regulation gives a list of potential beneficial purposes, including backfill or raising the grade for a planned development, but it is not an exhaustive list and other beneficial purposes can be identified
- Often a site-specific instrument would relate to the beneficial purpose, giving permission for soil management for a specified undertaking or including plans that would require excess soil for the project at the reuse site to be achieved
- Simple disposal or stockpiling of excess soil is not a beneficial reuse



# Frequently Asked Questions and Answers

## 5. What requirements apply to smaller source sites?

- The criteria specified in section 3 of the regulation for reuse of excess soil that is not designated a waste, applies to all excess soil from a project, regardless of the amount of excess soil leaving a project area.
- The excess soil reuse quality standards apply to that excess soil, and if there is any concern that the excess soil may contain contaminants, then some sampling and analysis may be required.
- Excess soil reuse planning requirements (such as filing a notice and mandatory sampling and analysis), would often not apply to sites removing less than 2000 m<sup>3</sup> of excess soil from the project area. However, these planning requirements may apply to smaller projects if the excess soil is from an enhanced investigation site, like an industrial location or gas station, or another site that is a soil remediation project.

# Frequently Asked Questions and Answers

## 6. What are the excess soil restrictions for landfills?

- Excess soil that is suitable for reuse should be viewed as a resource and not disposed of as a waste.
- The regulation restricts cleaner quality excess soil from filling up valuable landfill space, as of January 1, 2025.
- More specifically, excess soil may not be deposited at a landfill or dump if that excess soil meets Table 2.1 (full depth potable) of the generic excess soil quality standards for residential, parkland or institutional uses.
- However, it is recognized that excess soil that meets this level of quality may be required by a landfill for daily or final cover, or for other beneficial uses to support their operational needs, which will continue to be permitted.

# Frequently Asked Questions and Answers

## 7. How is the Ministry outreaching on the new Regulatory requirements?

Building on a number of years of engagement in development of the regulation, the ministry continues to outreach to those involved in excess soil management through:

- Delivery of 8 topic focused webinars in October and November 2021, with a focus on the new regulatory requirements coming into force January 1, 2022
- Release of a number of topic specific fact sheets to provide guidance on the regulatory requirements along with sharing of best practices (release is forthcoming)
- Working with RPRA to deliver outreach and awareness of the new public Registry
- Continuing to respond to questions from the stakeholder community
- Responding to invitations to speak at conferences, workshops and events
- Ongoing engagement of the Excess Soil Engagement Group, a multi-stakeholder group representing a variety of key organizations from all sectors of excess soil management
- Visit MECPs excess soil webpage for current regulations, tools and guidance: <https://www.ontario.ca/page/handling-excess-soil>

# Bio Break - Health Break

# Open Discussion, Additional Question and Answer Period

# Additional Resources

# Additional Resources and Our Coordinates

Resources may also be found at:

- [ontario.ca/page/handling-excess-soil](https://ontario.ca/page/handling-excess-soil)
- [rpra.ca/excess-soil-registry](https://rpra.ca/excess-soil-registry)

**For Further Contact:**

- **Policy** - Laura Blease [laura.blease@ontario.ca](mailto:laura.blease@ontario.ca), Karan Jandoo [Karan.Jandoo@ontario.ca](mailto:Karan.Jandoo@ontario.ca) and Reema Kureishy [Reema.Kureishy@ontario.ca](mailto:Reema.Kureishy@ontario.ca)
- **Regional Operations** - Lisa Tanaka [lisa.tanaka@ontario.ca](mailto:lisa.tanaka@ontario.ca)
- **Standards** - Paul Welsh [paul.g.welsh@ontario.ca](mailto:paul.g.welsh@ontario.ca)
- **Approvals** - Andrew Neill [andrew.neill@ontario.ca](mailto:andrew.neill@ontario.ca)
- **Brownfields** - Dean Therrien [dean.therrien@ontario.ca](mailto:dean.therrien@ontario.ca)

# THANK YOU!

# Appendices



# Appendix A - Soil Storage Rules

The following applies to **dry soil** stored at any site, including a project area:

- Soil to be stored and managed to prevent any adverse effects associated with its receiving, processing, storage and movement - to manage noise, dust, mud tracking, leaching, run-off and erosion as well as any potential air or odour impacts
- Soil must be stored in stockpiles and the maximum size of each stockpile shall not exceed 2,500m<sup>3</sup>
- Any soil that is sampled and analysed must be kept segregated from other soil and soil of different qualities intended for different beneficial uses
- The soil must not be stored within 30 metres of a waterbody and within 10 metres of the property line (boundary), unless any of the following apply:
  - 500m<sup>3</sup> or less of excess soil will be stored at any one time at the project area
  - Excess soil storage at the project area for a week or less
  - The storage location has a physical barrier (e.g., concrete wall) between the excess soil and the property boundary
  - The storage is taking place in a public road right-of-way
- Soil shall be stored in a manner that prevents any contaminants from the soil from leaching into the ground water

# Appendix A - Soil Storage Rules

The following applies to **liquid soil** stored at either a project area or a local waste transfer facility:

- All storage and processing locations of liquid soil, processed or dewatered or solidified soil and process residues shall be readily accessible for inspection by a provincial officer
- No more than 10,000m<sup>3</sup> of liquid soil, processed or dewatered or solidified soil and process residues may be present at the site at any one time
- All liquid soil, processed or dewatered or solidified soil and process residues that are liquid shall be stored in a leakproof container on an impermeable surface in a manner sufficient to contain and prevent the material from escaping into the natural environment

# Appendix B - Tracking System Requirements

- The tracking system must capture the total number of vehicles and total volume of excess soil that has left a project area and be able to produce reports upon request to respond to any inquiries with respect to the information of each load of excess soil to be tracked
- The tracking system must also include procedures or other methods to verify the accuracy of the information required to be tracked in respect of each load and to prevent any form of fraud or other wrongdoing in the excess soil management
- A tracking system must be capable of tracking the following information in respect of each load of excess soil that is removed from the project area:
  1. The locations of the project area where the soil was excavated and stockpiled, if applicable, and the quality of the soil associated with those locations and stockpiles.
  2. The quality of the load of excess soil being removed from the project area, unless the excess soil is to be sampled at a Class 2 soil management site or a local waste transfer facility.
  3. The quantity of the load of excess soil being removed from the project area.
  4. The location of the site at which the excess soil is to be deposited as communicated to the driver of the vehicle.
  5. The date and time the excess soil left the project area.
  6. The person from the project area responsible for overseeing the loading of the excess soil for transportation.

# Appendix B - Tracking System Requirements Continued

7. The name of the corporation, partnership or firm transporting the excess soil, the name of the driver of the vehicle and the number plates issued for the vehicle under the Highway Traffic Act.
8. The date and time the excess soil was received at the site where the excess soil has been deposited.
9. The contact information of the person who acknowledged receipt of the load of excess soil on behalf of the site where the excess soil was deposited.
10. Confirmation that the vehicle that deposited the excess soil and the volume of soil received at the site where the excess soil was deposited is the same as that which left the project area.