Excess Soil Webinar

Project Area Requirements

March 23rd, 2023



Presentation Overview

- Overview of Regulatory Requirements
- Best Practices
- Frequently Asked Questions and Answers
- Health Break
- Open Discussion, Additional Question and Answer Period
- Additional Resources



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 the regulation

- Regulation titled <u>O. Reg. 406/19: On-Site and Excess Soil Management</u> (Excess Soil Regulation) under the *Environmental Protection Act* (EPA), was finalized in December 2019, supported by:
 - Rules for Soil Management and Excess Soil Quality Standards (Soil Rules)
 - Beneficial Reuse Assessment Tool (BRAT)

| Phased Regulatory Implementation | Timing |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Reuse Rules and Waste Designation Clarification Rules for reusing excess soil at a reuse site, and excess soil reuse standards Low-risk soil processing without an approval Soil storage rules Verbal hauling requirements | January 1, 2021 |
| Excess Soil Reuse Planning Requirements For projects with greater risk of generating excess soil with contaminants (some exceptions may apply) Assessment of past uses, and if required sampling and characterization Destination assessment report Tracking and registration Larger reuse site registration and procedures Hard copy or electronic hauling record | January 1, 2023 |
| Restriction on the deposit of clean soil at landfill sites | January 1, 2025 |

What is excess soil and why is it regulated?

Excess soil is defined as soil, crushed rock, or soil/crushed rock mixed with rock, that has been excavated as part of a project and removed from the project area

- To ensure excess soil is not illegally dumped at properties
- To allow for greater local beneficial reuse of excess soil
- To ensure that excess soil is of appropriate quality when it is being reused and will not impact human health or the environment
- To ensure that excess soil has been relocated to proper reuse or disposal sites



Overview: options for management of excavated soil

Project leaders or operators of a project excavating soil may:

- Reuse, store or process soil in their project area
- 2. Take excess soil to a reuse site to be used for a beneficial purpose
- 3. Utilize other sites they operate to temporarily store and process soil
- 4. Deposit excess soil at a storage or processing site at which the owner or operator of that site takes responsibility for the soil, if one is available
- 5. If other options are not available, dispose the excess soil at a landfill



Overview: application of the regulation

Soil managed within the project area

- Planning to maximize reuse of soil in a project is encouraged and the Excess Soil
 Regulation does not restrict reuse of soil within a project area (other regulations may
 apply, e.g., if managing hazardous waste)
- Soil reused in the project area is not considered "excess soil" and the criteria for reusing excess soil do not apply (e.g., meeting applicable quality standards); although consideration of some rules may help to prevent adverse effects
- Soil storage rules apply to ensure that there is no adverse effect to the environment or other properties
- Soil processing rules apply (low-risk methods such as passive dewatering or sizebased sorting are exempt from waste approvals, but subject to specified rules)
- Observations of contamination on-site, such as visual or olfactory (i.e., smell) signs, would trigger the cease of excavation, identification of contaminated soils, the proper management and disposal of excavated contaminated soil to prevent any potential adverse impacts



Overview: application of the regulation

Excavated soil leaving a project area (for storage/processing, reuse, or disposal)

- This soil is considered excess soil
- Criteria for reuse of excess soil apply when soil is taken to a reuse site, e.g., the need for a reuse site owner or operator to consent in writing to the deposit of the excess soil
- Off-site temporary soil storage sites operated by the project leader to manage their excess soil, may be used subject to some rules and limitations but are typically exempt from needing approvals
- Soil processing sites, soil bank storage sites and landfills may accept and take responsibility for excess soil from many projects and project leaders; these would usually be operated subject to an approval
- Haulers of excess soil are required to have a hauling record, including information obtained from the operator of the project area
- Some project areas may be required to complete excess soil reuse planning actions to facilitate appropriate reuse (e.g., registration, soil assessments and tracking).

For more information on these requirements, refer to the fact sheet "<u>Excess soil</u> management and reuse requirements for project areas".



Additional Details – Onsite Management



Storing soil at a project area

- Ensure the on-site management and storage of soil does not cause an adverse effect (this would include controlling noise, dust, mud tracking, leaching, run-off and erosion and potential outdoor air impacts such as odour)
- Storage must be set back 30m from a water body (e.g., stream)
- Storage must be set back 10m from property lines unless: the volume is less than 500m³; the duration is less than one week; the storage location has a physical barrier (e.g., concrete wall) between the excess soil and the property boundary; or if the soil is stored in a road right of way
- Soil must be stored in a manner that prevents any contaminants from the soil from leaching into the ground water
- Unsampled soil must remain segregated from sampled soil, and soil of different qualities intended for different beneficial uses must also be segregated
- Dry soil must be stored in stockpiles; NOTE: a previous rule specifying a stockpile size limit of 2,500 cubic metres has been removed
- Liquid soil must also be stored: in a location that is accessible for inspection; no more than 10,000 cubic metres of liquid at any one time; and in a leakproof container on an impermeable surface.

These can be found in Part I of the Soil Rules. Note that through a municipal fill permit or conservation authority permit, alternate storage rules may apply.

Processing soil at a project area

- Processing of soil excavated at the project area is permitted without a waste
 Environmental Compliance Approval (ECA) if it is one of the following processing types:
 - passive aeration
 - passive dewatering
 - mechanical dewatering
 - mixing, except to dilute contaminants
 - size-based sorting
 - sorting to remove debris
 - soil turning
 - mixing it with a substance or other material that is intended to dewater or solidify
- The Soil Rules include some rules applicable to certain types of processing, and a qualified person (QP) is required if soil is being mixed with a polymer additive for solidification
- Other types of soil processing may be undertaken with a waste ECA, and other types of approvals may apply (e.g., under subsection 9(1) of the EPA or subsection 53(1) of the Ontario Water Resources Act) to some forms of processing (e.g., for a sewage works)

Observations of contamination on-site

The project leader or the operator of a project area must ensure that a procedure is developed and applied if, during excavation, an observation is made that the soil being excavated has been affected by a contaminant (based on smell or visual clues, for example). Under this procedure:

- Work must stop and the project leader or operator must be notified of the observation
- Potentially contaminated soil that is already excavated must be segregated, and the portion of the project area to be excavated that is affected by the contaminant must be determined
- Excavated soil that may be contaminated must be disposed of in accordance with the regulation (e.g., at a waste disposal facility)
- If a qualified person has been involved in assessing and managing the excess soil, they must also update the assessments and management decisions to reflect this information.



Additional Details – Excess Soil Management



Excess soil reuse, storage, processing and disposal sites

- Excavated soil or crushed rock becomes excess soil upon leaving a project area
- There are several options of sites at which excess soil may be deposited after it leaves a project area
- Other than on-site reuse, depositing soil at a reuse site is most preferred.
- Some other sites may be available that will take responsibility for the soil, to temporary store
 or process it before reuse or disposal; in general these require a waste Environmental
 Compliance Approval (ECA), but some exceptions are provided
- Landfilling is the least encouraged option for soil that could be reused
- A project leader or operator also has options to temporarily management their soil off-site before taking it for reuse or disposal

| Type of site | Project leader typically operates the site and retains responsibility of the soil? | Waste ECA required? |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------|
| Reuse Site | No | No |
| Soil storage bank or processing site (Class 1 soil management site) | No | Yes |
| Residential development soil depot | No | No |
| Retail landscaping soil depot | No | No |
| Off-site temporary storage before reuse (Class 2 soil management site) | Yes | No |
| Project leader's temporary management site (local waste transfer facility) | Yes | No |
| Landfill | No | Yes |



Taking soil to a reuse site

- Reuse sites are sites at which excess soil is needed for a beneficial purpose, such as site grading or filling an excavation, in an undertaking
- Reuse of excess soil is encouraged. For excess soil leaving the project area and being deposited at a reuse site for use in an undertaking, criteria apply to determine that the deposit is appropriate and that the excess soil would not be considered a waste:
 - written consent has been obtained from the operator of the reuse site for the deposit of the excess soil
 - there is a beneficial use for the excess soil (i.e., it is not only being stockpiled)
 - the quality and quantity of the excess soil aligns with that required by the reuse site for their beneficial use (based on the Excess Soil Regulation or an applicable permit)
 - if the soil is liquid soil, a permit must allow its deposit

For more information on these requirements, refer to the fact sheet "Bringing Soil to a Reuse Site".



Sites that will take responsibility for excess soil storage, processing or disposal

If a project leader is unable to find a reuse site or do not have their own site for storage or processing, some other types of sites may be available that can accept and take responsibility for excess soil.

- Soil bank storage sites and soil processing sites
 - Types of Class 1 soil management sites under the Excess Soil Regulation; a type of waste disposal site and typically must obtain an ECA to operate
 - Accepts, manages and processes excess soil on a temporary basis before the excess soil is taken to a reuse site or a landfill, if necessary
 - The conditions of the ECA would set out the permitted types of processing, storage rules, types of soil that could be accepted, etc.; a project leader should ensure their soil meets the conditions and can be accepted at a particular site



Sites that will take responsibility for excess soil storage, processing or disposal- continued

Residential development soil depots

- Exempt from obtaining an ECA if conditions are met
- Intended for temporary management of soil that is appropriate for reuse at a residential property; from these sites soil can then be reused at a property of similar or less sensitivity (e.g., residential, parkland, commercial use)
- Can accept up to 10,000 m³ of excess soil

Retail landscaping soil depots

- Exempt from obtaining an ECA if conditions are met
- Are sites, such as a garden centre, that accept soil, such as topsoil, to make it available for retail sale as a landscaping product
- Can only accept soil of appropriate quality for use at a residential property
- Can accept up to 10,000 m³ of excess soil
- Landfills or another type of similar waste disposal site
 - may be the only option for disposing excess soil that is deemed unsuitable for reuse (e.g., due to contaminant levels)
 - Typically requires an ECA; project leaders should confirm that their soil is appropriate for a particular site



Project leader operated temporary sites

If necessary, a project leader can manage excess soil off-site (away from the project area) without a waste ECA, although subject to some rules

- Off-site temporary storage before reuse (Class 2 soil management site)
 - Intended for use to store soil from the project leader's projects in advance of a known reuse site being able to accept excess soil
 - Operated by the project leader and may be located on a property owned by a public body or by the project leader
 - Excess soil can be stored for two years, which can be extended by five years with Director's authorization
 - These sites may store up to 10,000 m³ of dry soil and low-risk processing may be undertaken at these sites, among other rules
- Project leader's temporary management site (local waste transfer facility)
 - Operated by a project leader, or another person on their behalf, to compile, assess and temporarily store excess soil from a project leader's projects (field operations); e.g., a municipal works yard
 - Excess soil is then appropriately managed from that site for reuse or disposal
 - Excess soil at these sites may be dry or liquid, and some low-risk processing may be undertaken at these sites



Excess Soil Reuse Planning Requirements

- As of January 1, 2023, some projects that are more likely to have soil with contaminants (such as a site that has been used for an industrial purpose or a gas station) are required to complete additional soil reuse planning requirements.
- The excess soil reuse planning requirements include:
 - 1. Registration of a **notice in the Excess Soil Registry** for the project
 - Completion of an assessment of past uses and, if necessary,
 a sampling and analysis plan and a soil characterization report
- must be undertaken by or under the supervision of a QP.
- 3. Completion of an excess soil destination assessment report
- 4. Application of a tracking system
- 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.



Excess Soil Reuse Planning Requirements

- The excess soil reuse planning requirements apply to the following types of projects:
 - Projects for which part of the project area has a past or present use that is an "enhanced investigation project area"
 - These are project areas used for an industrial use, as a garage, as a bulk liquid dispensing facility, including a gasoline outlet, or for the operation of dry cleaning equipment
 - This does not apply if an RSC has been filed (provided there was no risk assessment completed, and no part of the project area has been used since as an enhanced investigation project area)
 - 2. Project areas that are **being remediated by excavating and removing excess soil** in order to reduce the concentration of contaminants, including for the purposes of filing an RSC
 - 3. Projects **generating 2000m³ or more** of excess soil and that are **in a settlement area** (such as cities and towns)
 - this does not apply if the project area is currently, or was most recently used for a residential, parkland, institutional, or agricultural or other use (as described in Ontario Regulation 153/04)
 - this does not apply to projects in rural areas
 - projects on these types of properties would only be subject to the requirements based on the other two triggers

If these triggers do not apply to a project, then the reuse planning requirements are not required. They may be followed as a best practice.



Reuse Planning Requirements - Exemptions

- Some projects triggered to complete excess soil reuse planning requirements may be exempt;
 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
- These exemptions include (see Schedule 2 for full list or the Factsheet for Project Areas developed by MECP):
 - 1. If **100** m³ or less of excess soil is being directly transported to a waste disposal site, such as a landfill (this does not apply a Class 2 soil management site)
 - 2. The excess soil is excavated as a part of an infrastructure project and is being reused (finally placed) as part of an undertaking related to another infrastructure project with the same project leader or a public body
 - 3. **Projects related to maintaining infrastructure in a "fit state of repair"** other than excavation of excess soil from a stormwater management pond
 - 4. 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
- Soil management contracts entered into before **January 1, 2022** are exempt from the reuse planning requirements (i.e., registration, assessment of past uses, sampling and analysis, tracking, etc.), until **January 1, 2026**; other rules apply
- Past use assessments, sampling and analysis plans and soil characterization reports completed for a specific project before January 1, 2023 are recognized for that project.



Reuse Planning Requirements - Filing a Notice

- To support compliance and transparency, for projects that must complete the excess soil reuse planning requirements, key information must be filed in a notice on the Excess Soil Registry (Registry).
- The project leader must file a notice in the Registry, typically, before excess soil leaves the project area.
- The Registry is an online, public registry that is developed and implemented by the Resource Productivity and Recovery Authority (RPRA).
- The notice must include key information such as:
 - 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 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
 - The name and contact information for the person responsible for the transportation of Excess soil from the project area
 - Declarations by the project leader
- A notice 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



Reuse Planning Requirements - Assessments

Project leaders that are required to register their project must also have specified assessments and reports completed. These must be completed by a Qualified Person (QP) before filing the notice on the Registry.

Assessment of Past Uses:

- this study determines the likelihood that one or more contaminants have affected the soil, the areas of potential environmental concern and the contaminants of potential concern
- it involves using such methods as records reviews, interviews, and field visits

Sampling and Analysis Plan:

- this confirms the quality of the excess soil
- it involves the planning, investigation and analysis of sampling of area(s) from which excess soil will be excavated with known or suspected contaminants
- minimum sampling frequencies and parameters are specified but only apply in respect of an area of potential environmental concern, QP judgement applies elsewhere
- note: A sampling and analysis plan and the soil characterization report <u>may</u> not be necessary depending on the results of the assessment of past uses, the type of site it is, or where the soil is taken (e.g., it may not be required if soil is going to a Class 1 soil management site)



Reuse Planning Requirements - Assessments Cont.

A QP must also be used to complete:

Soil Characterization Report:

- this report documents the results of sampling and analysis
- it also provides a description of:
 - excavated soil or crushed rock that may be reused at the project area
 - excess soil that may be deposited at a Class 1 site or landfill.
 - excess soil that may be reused, by describing the type reuse sites for which it may be applicable

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
- 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

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



Reuse Planning Requirements - Tracking

- The project leader must also ensure the development and application of a tracking system to track excess soil during its transportation and deposit, and verify where the excess soil was finally placed
- The tracking system includes procedures to account for each load of excess soil moved from a project area, including tracking the total number of vehicles and total volume of excess soil leaving to and being received at each deposit site
- It includes information verifying the quality of soil sent to and deposited at each site.
- The tracking system must be able to produce reports
- The hauling record, required for all hauling 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,
 Section B of Part I: Rules for Soil Management.



Transporting excess soil

- A physical or electronic hauling record is required for all movements of excess soil. When
 excess soil is being transported, the person who is operating the vehicle (i.e., hauler) must
 ensure that the hauling record is available at all times during transportation.
- The hauler needs information from the project operator where excess soil originates before they can leave to relocate the soil, including:
 - The location where the excess soil was loaded for transportation
 - Contacts for the project, in the event there are inquiries on the load
 - The date and time the soil is loaded and the approximate quantity of soil
 - The destination site where the excess soil will be deposited



Providing evidence of soil quality to reuse sites

- Reuse site owners may need some assurance that they are receiving excess soil that would not be considered waste (i.e., it's of appropriate quality)
- Project leaders for projects exempt from mandatory assessments may consider it prudent to plan for some evidence to be available indicating that the soil from that project is of appropriate quality for a reuse site; this may be information they already have
- Some reuse sites, especially larger ones, may also have procedures in place to assess soil before or upon receipt (e.g., review of available information, looking for visual and olfactory clues, random verification sampling), which should be considered
- Evidence may, for example, include:
 - For small projects, e.g., landscaping or pool projects, a simple description of the current use of the project area to verify it is low risk
 - Phase one environmental site assessments (ESAs) or property use assessments looking for potentially contaminating activities completed for other or verification purposes
 - Phase two ESAs or soil sampling and analysis completed for other or verification purposes
- Note that assessments completed for other purposes or verification, are not required to be completed to the same standard as an assessment required under the Excess Soil Regulation



Improper management of excess soil

- Where waste excess soil is illegally dumped, any person who caused, permitted, or arranged for the dumping of the excess soil can be ordered to remove the excess soil and ensure its proper disposal.
- It is important that each person involved in this chain do their part to ensure excess soil is appropriately managed.

Recordkeeping

 Records that are required to be created under the Excess Soil Regulation related to the regulatory requirements must be kept for seven years. Hauling records, however, are to be kept for two years.



Best Practices











Best Practices

Early Planning and Onsite/Local Reuse

- Maximize the onsite reuse of soil or crushed rock at the project area through use
 of innovative design (e.g., berms, new paths or roads) to reduce hauling and
 reuse/disposal needs
- If onsite reuse is limited, seek local reuse opportunities through liaison with your soil community and by checking out the online registry. Reuse between local infrastructure projects is also promoted within the regulation
- Integrate soil reuse into the design stage of the project, and use larger scale
 planning to balance excavation and fill across the project area e.g., sub-division or
 district plans to maximize reuse across the planning area



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

With reuse sites:

- sharing excess soil assessment information can help when seeking their willingness to accept excess soil from a particular project
- for sites receiving larger amounts of soil, written agreement on the amount and type of soil that can be received and that will be provided may avoid questions later
- confirm tracking procedures and procedures to confirm receipt of excess soil at the reuse site

With haulers:

- confirm where the excess soil is to be deposited, and contingency sites if that deposit site is not available
- confirm all site information, contact information and other information for the hauling record



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.
- Examples of items should be included in the excess soil management plan (see Project Area Factsheet for the full list):
 - 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
 - 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



How to Define Your Project Area



How to Define Your Project Area

A project area is the **site where excess soil originates**, before it is relocated to another site for processing, reuse, storage and/or disposal. It is often referred to as a source site.

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 entire area where the project will be undertaken, 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 temporary soil storage sites are not included)
- The project area may span two or more properties with multiple owners provided they are being used as part of the same project and are contiguous; the project would also have common control by the project leader(s)
- Separated properties are considered to be distinct project areas



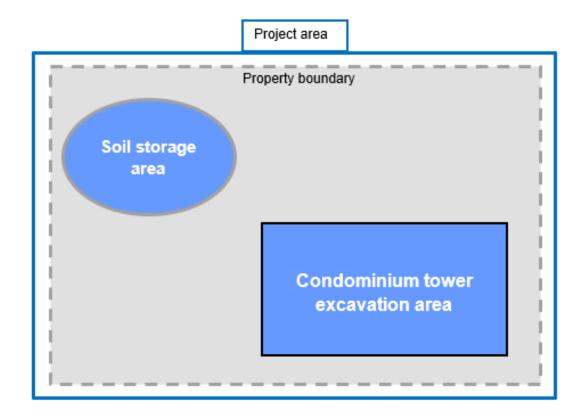
How to Define Your Project Area - Continued

Key factors for determining project area, continued:

- For linear infrastructure 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, and the entire road corridor would not be treated as one project area; as such, multiple separated work locations throughout a corridor or in different corridors would be distinct project areas
- The regulation does not set project areas based on contracts. Multiple projects under one contract do not necessarily become a single project or project area, unless the project areas 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 as an integrated project in a contiguous area, and in this case, these do not have to be treated as separate projects under the Excess Soil Regulation even if they are under separate contracts



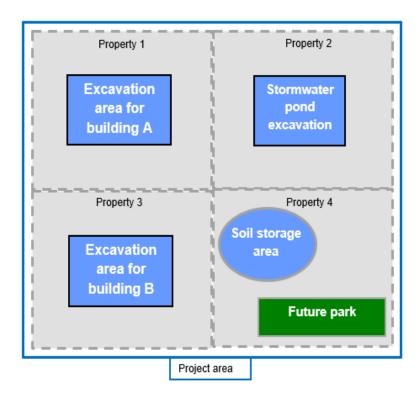
Scenario 1: Condominium development project



In this situation, the **full property** (including storage area) will be considered **one project area**



Scenario 2: Residential subdivision project

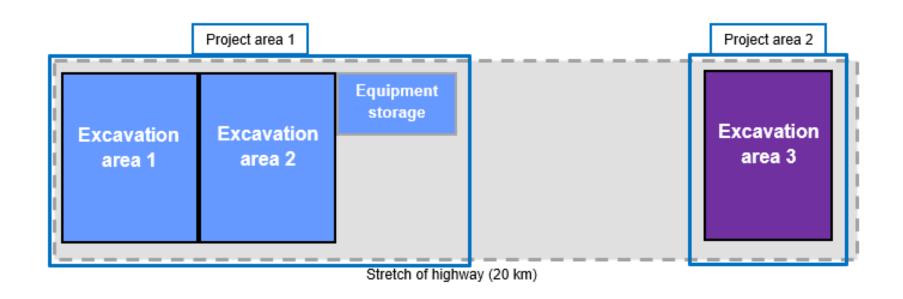


In this situation, all **four properties** can be considered **one project area** since:

- The same project is being carried out on all properties (common control)
- The properties are all adjoining



Scenario 3: Linear infrastructure project – highway maintenance

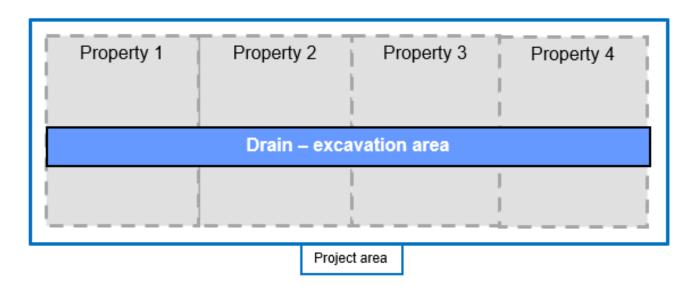


In this scenario, there may be **two project areas**:

- Excavation area 1 and 2, as well as the equipment storage area, will be considered
 one project area, as they are contiguous and have an area of continuous operations
- Excavation area 3 may be considered a separate project and project area, even if it is under the same contract, as this is a separate work location



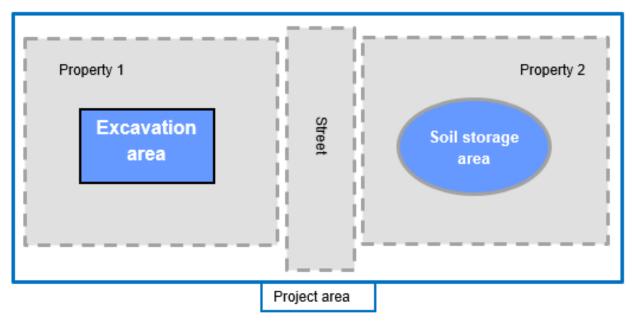
Scenario 4: Drainage work across multiple properties



In this scenario, there is **one project area** as the same project is taking place across four adjoining properties, and the project area would include the entirety of each property



Scenario 5: Utilities project separated by a street



In this scenario, there is **one project area** as:

- The excavation area and the storage area are contiguous (i.e., adjoining if not for the intervening street)
- They are part of one project (common control)



Definitions and Frequently Asked Questions



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.



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 also be utilized. If a Risk Assessment (RA) is done, it must be a QP as described in section 6 (these QPs are defined by a combination of relevant education and experience).
- Outside of the regulatory requirements, QPs may be retained 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
 - Oversight of soil management at large reuse sites
 - Development of reasonable assessments and procedures supporting reuse of excess soil between sites



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
- A project leader could be a firm, corporation or partnership, municipality or other public body
- Under the Excess Soil Regulation, contractors and/or QPs would <u>not</u> become the project leader, as the responsibility for key decisions and compliance ultimately rests with the project leader
- Individuals (e.g., an employee) may be authorized on behalf of a firm, corporation or partnership, municipality or other public body, to complete certain requirements that apply to a project leader



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 or crushed rock
- 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
- The final placement of excess soil on the bed of surface water body



- 2. For projects that began in 2022, do they need to complete the reuse planning requirements if they are ongoing in 2023?
- If a project is continuing into 2023, and it meets the triggers to complete the planning requirements, they will apply to the project and will need to be completed as of January 1, 2023
- These requirements apply on a go-forward basis, in respect of excess soil moving on or after January 1, 2023
- If all excess soil was moved off the project area to its intended final destination before January 1, 2023, while other construction activities continue at the project site, that may not require planning requirements to be completed in respect of the project
- It is recommended that project leaders or operators reach out to the local MECP district office to ensure they are in compliance with the requirements that would apply to them.
 - District office locator: https://www.ontario.ca/page/ministry-environment-conservation-and-parks-district-locator.



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

- In general, maintaining in a fit state of repair would involve repairing infrastructure or replacing existing infrastructure with similar infrastructure; it would not result in increased capacity or a different alignment, although some minor widening or realigning may be appropriate (for e.g., to meet updated standards)
- 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 pipe, re-aligning (vertically or horizontally), twinning, or adding capacity or widening of a pipe or road.



4. 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 supervision of a QP



5. What are other project leader responsibilities beyond the reuse planning requirements?

- 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 instrumentspecific 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.

5. What are other project leader responsibilities beyond the reuse planning requirements? (continued)

- The project leader must also ensure the appropriate hauling records are provided to drivers with key details on the soil that is loaded for transport
- 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).
 - Hauling records are to be kept for two years.



Additional Resources



Additional Resources

For additional information, including guidance and tools developed by external partners:

- Ontario Government Excess Soil Page: ontario.ca/page/handling-excess-soil
- Excess Soil Fact Sheets: https://www.ontario.ca/document/excess-soil-fact-sheets
- Ontario Provincial Standard Specification (OPSS) 180 General Specification for the Management of Excess Materials: currently being updated by MTO
- RPRA's Excess Soil Registry: <u>rpra.ca/excess-soil-registry</u>
- Ontario Environment Industry Association (ONEIA) Best Practices and Templates:
 - Hauling Best Practices and Template: https://www.oneia.ca/excess-soils/hauling-best-practices
 - Temporary Sites Best Practices: https://www.oneia.ca/Temporary-Sites-Best-Practices
 - Qualified Persons Best Practices: https://www.oneia.ca/qp-best-practices
- Qualified Person Community of Ontario (QPCO): <u>QPCO Qualified Persons Community of Ontario</u>
- Ontario Society of Professional Engineers (OSPE) Best Practices for Aggregate Pit and Quarry Rehabilitation: https://ospe.on.ca/excess-soil-reports/
- OSSGA document on Excess Soil Best Management Practices for Pits/Quarries: https://www.ossga.com/rehabilitation and excess soil/
- Canadian Urban Institutes (CUI) Excess Soil By-Law Language Tool: https://canurb.org/initiatives/excess-soil-by-law-tool/
- RSC Guide (currently in draft): https://ero.ontario.ca/notice/019-2551



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THANK YOU!

