

# Excess Soil Management for Low-Risk Sites

This resource sheet provides key information to help manage excavated soil and crushed rock (referred to as soil in this document) in accordance with requirements under [O. Reg. 406/19: On-Site and Excess Soil Management](#) (the “Excess Soil Regulation”) and the [Rules for Soil Management and Excess Soil Quality Standards](#) (“Soil Rules”) document.

**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

## Why is excess soil regulated?

The Excess Soil Regulation and associated Soil Rules establish rules for the on-site management, transportation and off-site reuse and disposal of excess soil. These rules clarify when excess soil can be reused for a beneficial purpose at a reuse site and when it must be disposed of as a waste at an approved waste disposal site such as at a landfill. Most excess soil can be reused safely, and the Excess Soil Regulation and Soil Rules ensure soil deposited at a reuse site is appropriate for use at that site and will not impact human health or the environment.

## What are low-risk sites?

Under the Regulation, a site at which soil is excavated as part of a project and then sent for off-site disposal is called a “project area”. The term “low-risk sites” is used in this document to refer to project areas on properties that are generally considered to be at a lower risk of having historic soil contamination. They include properties that are or were last used for:

- A residential use
- A parkland use
- An institutional use (such as a school)
- An agricultural or other use, and
- Other types of properties (e.g., commercial or community use sites) that are outside of an area of settlement (i.e., in rural areas)

Low-risk sites do not include the following:

- A property currently or formerly used for an industrial use, a gas station or other bulk liquid storage site, a garage or for dry cleaning (these are called “enhanced investigation project areas”)
- A project that is remediating soil with known contaminants, including soil excavation to enable the filing of a record of site condition (RSC)

While some requirements under the Excess Soil Regulation apply to all sites, requirements such as filing a notice in an online [Excess Soil Registry](#) or mandatory sampling and analysis, which are referred to as “reuse planning requirements”, do not apply to these low-risk sites.

## **Summary: how does the regulation apply to a project at a low-risk site?**

This section summarizes the requirements and rules that do, and do not, apply to a project at a low-risk site. Additional details on the requirements are provided below this summary. The flow chart provided at the end of this document can also help you assess how or whether certain requirements apply to your project.

### **1. Soil excavated from your project that is being stored, processed or reused within the project area**

- Planning to maximize reuse of soil in a project area is encouraged, and the Excess Soil Regulation does not restrict reuse of soil within a project area unless the soil is a hazardous waste, in which case the waste must be disposed of in accordance with Regulation 347
- Soil reused in the project area is not excess soil, and as a result the **criteria for reusing excess soil do not apply** that would typically apply if the soil was taken to a reuse site, including that the excess soil meet the applicable excess soil quality standards
- **Soil storage rules** apply to ensure there is no adverse effect to the environment or other properties
- **Soil processing rules** apply (low-risk methods are exempt from approvals but subject to specified rules)
- Visual or olfactory (i.e., smell) **observations of contamination on-site** would trigger the application of a procedure for the proper management and disposal of excavated contaminated soil to prevent any potential adverse impacts

## 2. Excavated soil that is leaving a low-risk project area (for storage, processing, reuse, or disposal):

- This soil is considered excess soil
- Haulers of excess soil are required to have a **hauling record**, including information obtained from the operator of the project area
- **Off-site temporary soil storage sites** may be operated by the project leader to manage their soil, subject to some rules and limitations
- **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 subject to an approval
- **Criteria for reuse of excess soil** apply, e.g., the need for a reuse site owner or operator to consent in writing to the deposit of the excess soil at the reuse site
- Additional **excess soil reuse planning requirements**, such as filing a notice in the [Excess Soil Registry](#) and sampling and analysis, typically do not apply to projects on low-risk sites.

## Additional information on key requirements

### Soil storage rules 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 500m<sup>3</sup>, if the duration is less than one week, there is a physical barrier between the soil and property boundary (e.g., concrete wall), 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
- Liquid soil must be stored: in a location that is accessible for inspection; stores no more than 10,000 m<sup>3</sup> of liquid soil at any one time; and is stored in a leakproof container on an impermeable surface

For further information, please refer to the Soil Rules. Note that through instruments such as a municipal fill permit or conservation authority permit, alternate storage rules may apply.

### **Soil processing rules 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 types:
  - i. passive aeration
  - ii. passive dewatering
  - iii. mechanical dewatering
  - iv. mixing, except to dilute contaminants
  - v. soil turning
  - vi. size-based sorting
  - vii. sorting to remove debris
  - viii. mixing it with a substance or other material that is intended to dewater or solidify
- The Soil Rules include some rules when mixing soil with a substance to dewater or solidify the soil, and a qualified person (QP) may be required
- Other types of soil processing may be undertaken with a waste ECA, and other types of approvals (e.g., ECA for a sewage works) may be required for some forms of processing

### **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, the project leader must also request the advice of the qualified person on steps to

manage the excess soil and on whether any assessments need to be updated to reflect this information

### Criteria for reuse of excess soil at a reuse site

Reuse of excess soil is encouraged. For excess soil leaving the project area and being directly transported to a reuse site to be used for a beneficial purpose, the excess soil would not be considered a waste if certain criteria are met, including:

**Reuse sites** are sites at which excess soil is needed for reuse in an undertaking for a beneficial purpose, such as site grading or filling an excavation.

- 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 the beneficial purpose (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 entitled "[Bringing Soil to a Reuse Site](#)".

### Off-site temporary soil storage sites (operated by the project leader to manage their soil)

If temporary off-site management of excess soil is necessary, perhaps to store soil until a reuse site becomes available, two types of sites are recognized that may be operated by a project leader to manage their soil without a waste approval (ECA), but subject to some rules, including storage rules.

A **Class 2 soil management site** is operated by the project leader and may be located on a property owned by a public body or by the project leader. These sites are intended for use where a reuse site is known. The 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 m<sup>3</sup> of dry soil and low-risk processing may be undertaken at these sites. Additional details are in the Excess Soil Regulation and Soil Rules.

A **local waste transfer facility** is 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), and to appropriately manage the soil 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. A municipal works yard may be a type of local waste transfer facility.

### **Sites receiving excess soil for storage, processing or disposal (not typically operated by a project leader)**

Although excess soil is generally a resource, sometimes a project leader is unable to find a reuse site or have their own space for storage or processing, in which case some other types of sites may be available that can accept and take responsibility for excess soil. These sites can accept excess soil from multiple projects and multiple project leaders, and typically require a waste ECA, but some exceptions may apply.

**Soil bank storage sites** and **soil processing sites** are types of **Class 1 soil management sites** under the Excess Soil Regulation. These are sites that accept and manage excess soil on a temporary basis before the excess soil is taken to a reuse site or a landfill, if necessary. These sites are a type of waste disposal site and typically must obtain an ECA to operate. Given these sites would seek an ECA, the rules and permitted activities, including types of processing and storage rules, should be outlined through the conditions of the ECA.

The Excess Soil Regulation also sets out two types of Class 1 soil management sites which do not require an ECA to operate and manage soil, as long as certain conditions are met.

**Residential development soil depots** are sites that can accept up to 10,000 m<sup>3</sup> of excess soil from residential and other sensitive use properties, that is appropriate for reuse at a residential property. The soil leaving these depots can be reused at a residential property or other less sensitive sites (e.g., commercial use). **Retail landscaping soil depots** are sites, such as a garden centre, that can also accept up to 10,000 m<sup>3</sup> of excess soil, such as topsoil, to make it available for retail sale as a landscaping product. These sites can also only accept soil of appropriate quality for use at a residential property. Additional details on the relevant conditions and applicable requirements are in the Excess Soil Regulation and Soil Rules.

Some excess soil may have contaminant levels or other properties that make the soil unsuitable for reuse. In such a situation the only option for disposing the soil may be at a **landfill** or another type of waste disposal site that can deal with this type of waste excess soil.

## Reuse planning requirements, including mandatory soil sampling

The Excess Soil Regulation requires that, for higher risk projects, such as at a site that has been used for an industrial purpose or for a gas station, certain excess soil **reuse planning requirements** must be completed. This would include filing a notice in the Excess Soil Registry, implementing a tracking system, and retaining a qualified person to complete an assessment of past uses, possibly prepare a sampling and analysis plan and a soil characterization report, and an excess soil destination assessment report.

Reuse planning requirements of **soil testing, registration and tracking** do not apply to low-risk projects

As stated earlier, these reuse planning requirements do not apply to projects that are on low-risk sites.

For more information on when excess soil reuse planning requirements are triggered and what they involve, the fact sheet entitled "[Excess soil management and reuse requirements for project areas](#)".

Regardless of whether projects are exempt from the reuse planning requirements or not, reuse site owners or operators may need some assurance that they are receiving excess soil that would be of appropriate quality for the reuse site, and would not be considered a waste. A project leader that is not required by the regulation to undertake sampling and analysis should consider this potential need for information early in the project planning phase, particularly for projects generating large amounts of excess soil. Evidence may 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
- any assessments looking for potentially contaminating activities completed for verification or other purposes
- any soil sampling and analysis completed for verification or other purposes

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, random verification sampling), which should also be known and considered as early as possible.

## Hauling records

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 quantity of soil
- The destination site where the excess soil will be deposited

Once deposited at the reuse site, the hauling record is finalized with additional information and confirmation of receipt of the excess soil. A copy of the final hauling record must be given to the operator of the site receiving the excess soil. As a best practice, a copy of the final hauling record should also be provided back to the operator of the project area where the soil originated. Some industry-developed templates for a hauling record can be found [here](#). For more information on transportation requirements, please see the fact sheet entitled "[Excess soil transportation](#)".

Some larger projects or reuse sites may prefer use of an electronic tracking system, of which the hauling record can be a part.

## 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. This would include any person who hires a contractor to undertake a project that involves the excavation, management and disposal of excess soil, the contractor, any person involved in the transportation of the excess soil and the person who owns or operates the site where the excess soil was deposited. It is important that each person involved in excess soil management do their part to ensure excess soil is appropriately managed.



## Recordkeeping requirements

Records created or acquired under the Excess Soil Regulation related to the above requirements must be kept for seven years. Hauling records, however, are to be kept for two years from the day the excess soil was loaded for transportation.

### **Disclaimer:**

*This document 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 document, the regulation will always take precedence.*

### **For more information:**

- Visit the Handling Excess Soil webpage: [Handling excess soil | ontario.ca](https://www.ontario.ca/handling-excess-soil)
- Contact your local MECP district office: [Ministry of the Environment, Conservation and Parks district locator | ontario.ca](https://www.ontario.ca/ministry-of-the-environment-conservation-and-parks-district-locator)