Excess Soil Webinar Series

3. Vac Trucks and Liquid Soil Management

Date and Time: **March 1st 2022**

10:00am to 12:00pm

Ontario

2022 Excess Soil Webinar Series - Schedule

Topic Areas	Date and Time
1. Infrastructure Projects	Tue February 15th, 2022 10:00am to 12:00pm
2. Soil Depots and Storage Sites	Tue February 22nd, 2022 10:00am to 12:00pm
3. Vac Trucks and Liquid Soil Management	**Tue March 1st, 2022** **10:00am to 12:00pm**

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Presentation Overview

- Welcome to Webinar Series - Vac Trucks and Liquid Soil Management
- Overview of Regulatory Requirements
- Best Management Practices
- Frequently Asked Questions and Answers
- Health Break
- Question and Answer Period
- Additional Resources
- Appendices
    - Appendix A: Procedures for mixing substances for dewatering or solidification
    - Appendix B: Hauling record requirements

Your MECP Excess Soil Team

Some of our MECP team members include:

Policy
Chris Lompart
Laura Blease
Reema Kureishy

Legal
Hayley Valleau
Jamie Flagal

Approvals
Andrew Neill

Standards
Brigid Burke
Chi Hoang
Paul Welsh

RSC and Brownfields
Dean Therrien
Michelle Zehr

Operations
Lisa Tanaka

Environment, Conservation, and Parks

Overview of Regulatory Requirements Relevant to Vac Trucks and Liquid Soil Management

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 by 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.

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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 (Record of Site Condition Regulation), Reg. 347 and O. Reg. 351/12 (Waste Management Regulations)

Phased Regulatory Implementation	Timing
Reuse Rules and Waste Designation Clarification - Including excess soil reuse standards	January 1, 2021

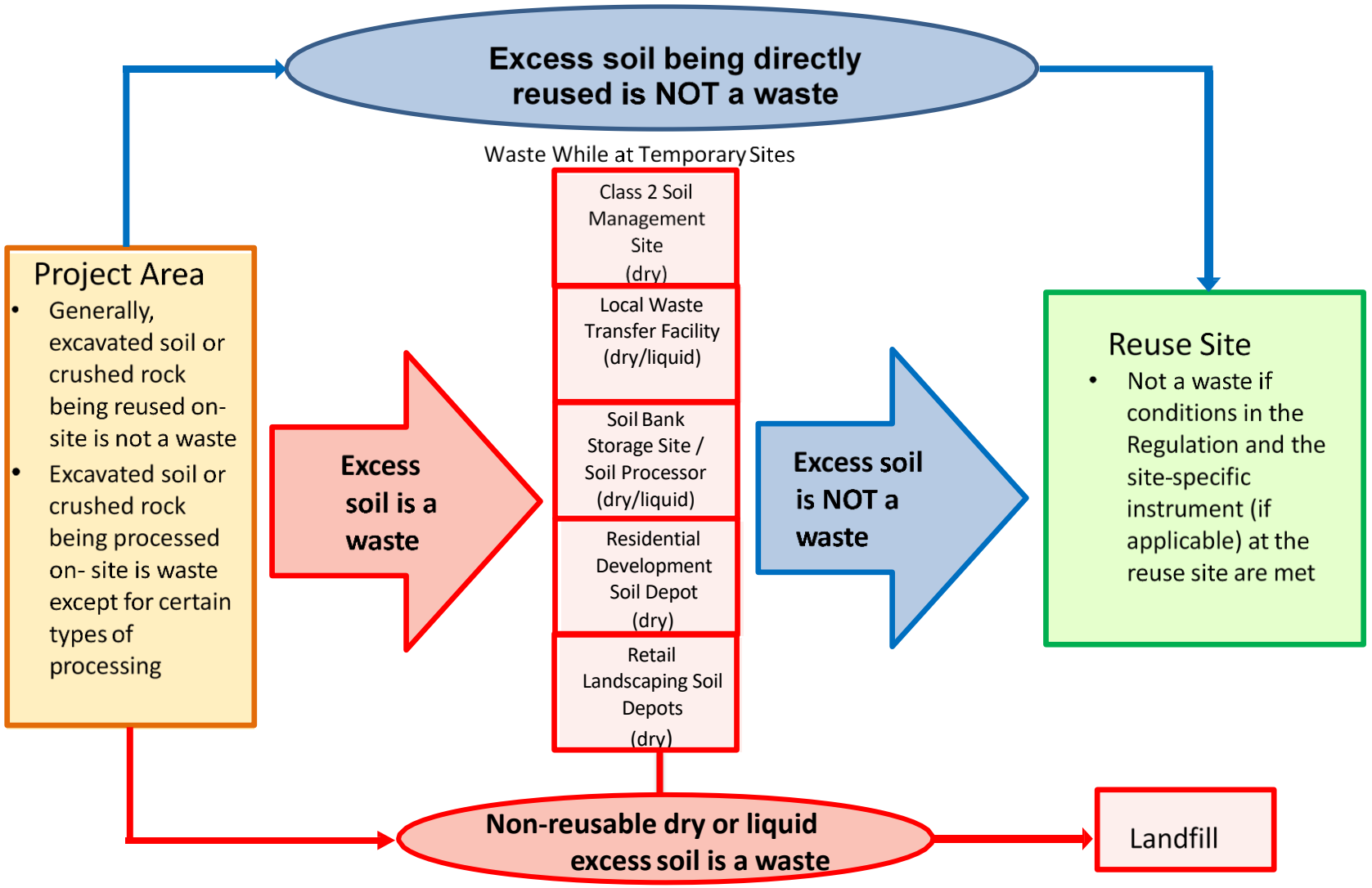
Excess Soil Reuse Planning Requirements
- For larger or riskier generating projects (some exemptions)
  - Assessment of past uses, and if required sampling and characterization
  - Destination assessment report
  - Tracking and registration
- Hauling record
- Larger reuse site registration
	January 1, 2022

Restriction on the deposit of clean soil at landfill sites	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 conditions ensure that the excess soil will be reused for a beneficial purpose and that the quality and quantity are appropriate for that purpose

Waste Designation Flowchart



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Overview of regulatory requirements for liquid soil

- **Reuse planning requirements:** depending on the quantity and quality of liquid and dry soil, the project leader may need to carry out certain planning requirements (such as filing a notice on the Excess Soil Registry)
- **Processing at project area**: excavated soil or crushed rock that is processed within the project area at which it was excavated, using a method specified in the regulation and in accordance with specified rules, is not designated as waste and does not require a waste ECA
- **Processing at storage sites**: limited processing of liquid soil is allowed at a local waste transfer facility
- **Deposit at reuse site**: liquid soil that is directly transported from a project area to a reuse site for a beneficial reuse is not designated a waste if an instrument governing the reuse site authorizes liquid soil to be deposited
- **Storage rules**: liquid soil must be stored in accordance with the Rules for Soil Management and Excess Soil Quality Standards document when at a project area or local waste transfer facility
- **Transportation**: transportation of liquid soil must follow specific requirements

Note: Materials such as wastewater, liquid industrial waste (LIW) other than liquid soil, or hauled sewage, would not be captured under this regulation and would continue to be managed under the waste or sewage regulatory regimes.

Reuse planning requirements

- The regulation includes reuse planning requirements for larger projects and projects with known or suspected contamination, as well as some exemptions where contaminant-related risk may be less for certain types of soil movements
- The excess soil reuse planning requirements include:
    1. **Filing 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**

- Depending on the quantity or quality of liquid and dry soil, the project leader may have to carry out these requirements, unless any exemptions apply

Reuse planning requirements

Types of projects subject to reuse planning requirements

- The excess soil reuse planning requirements apply to the following types of projects unless otherwise exempt:
  - **projects generating 2,000m^3 or more of excess soil** and that are in a settlement area (such as cities and towns); this quantity trigger does not apply to projects in non-settlement areas
  - 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); note that stormwater ponds are considered an industrial use
  - 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)

Reuse planning requirements

- If hydro excavation is undertaken as part of a broader project (for e.g., construction of a building), then the hydro excavation would be addressed as a component of the reuse planning for the broader project, including filing the notice, characterization of excess soil, and identification of destination sites
- Note that excavation sites that are not contiguous would often be distinct project areas, and the amount of excavated soil and crushed rock from the different areas should not be added together to determine if the 2000 m^3 threshold is met

Reuse planning requirements

Exemptions from reuse planning requirements

- There are several exemptions from reuse planning requirements outlined in Schedule 2 of the regulation
- These exemptions reflect a variety of scenarios including those where the risk is low, where responsibility for the soil is not changing, and to help encourage reuse in similar projects
- Some exemptions that may be relevant to liquid soil and hydro excavation operations include:
    - Projects that are related to maintaining infrastructure in a “fit state of repair” other than excavation of excess soil from a stormwater management pond
    - Amount of soil to be removed from the project area is less than 100 m^3 and the excess soil is directly transported to a waste disposal site
    - Excavation of soil for the purpose of spill clean up, as required under the *EPA*

Processing liquid soil at the project area

- Several types of processing of excavated soil or crushed rock can take place at the project area **without the need for 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
- Additional rules outlined in the regulation would need to be followed depending on method used
- 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 *Ontario Water Resources Act (OWRA)*

Processing liquid soil at the project area

Mixing substances for dewatering or solidification

- Mixing of a substance with excavated soil or crushed rock at the project area (or a local waste transfer facility if operated by a public body or project leader for an infrastructure undertaking) may be undertaken without a waste ECA, provided:
    - It is not for the purpose of encapsulating or otherwise reducing exposure to or mobility of contaminants
    - The soil or crushed rock that is being mixed for dewatering or solidification must originate from the project area
    - The material that is being mixed for dewatering or solidification is not a waste for which this processing would otherwise not be permitted (for example, hazardous waste)
    - The amount of material mixed with the soil or crushed rock is limited to that required to enable transportation to another site or to be reused within the project area site, and does not exceed the amount recommended for this purpose by the product manufacturer or distributor

Processing liquid soil at the project area

Mixing substances for dewatering or solidification - continued

If a natural or synthetic polymer is mixed for dewatering or solidification, a QP must be retained to carry out specified procedures, including:

- developing written procedures to ensure the safe use of the substance within the project area
- giving a copy of the written procedures to the project leader or a person designated by the project leader
- preparing a document for the reuse site outlining information on the substances (mixing rates, amount of liquid soil) as well as how to store and manage the dewatered/solidified excess soil to ensure it doesn't cause an adverse effect
- See Appendix A for more details

Processing liquid soil at the project area

Mixing substances for dewatering or solidification – continued

- If substances are being used for dewatering or solidification (whether non-polymer or polymer), and sampling and analysis is required, then:
  - the sampling must take place before mixing, if the QP is of the opinion that mixing will affect the characterization with respect to the applicable excess soil quality standards
  - the sampling can take place after mixing, if the QP is of the opinion that mixing will not change the outcome
- Whether a natural or synthetic substance, the mixing in of the substance should be stated in the characterization reports along with the QP's opinion regarding impact on sampling and analysis results.

Transportation requirements for liquid soil

- The transportation of excess soil is exempt from needing a waste ECA or registering on the Environmental Activity and Sector Registry (EASR), but regulatory rules apply to ensure it is safely and securely transported.
- This includes general requirements, such as the owner or operator of a vehicle ensuring that:
    - The excess soil is collected and transported in a vehicle that has been constructed to enable the excess soil to be transferred safely and without nuisance
    - Bodies of vehicles are constructed to withstand abrasion and corrosion from the excess soil (not including normal wear and tear)
    - Bodies of vehicles are leakproof and covered where necessary to prevent the emission of offensive odours, the falling or blowing of material from the vehicle or the release of dust or other airborne materials that may cause air pollution

Transportation requirements for liquid soil

- In addition, the owner and operator of a vehicle that is transporting liquid soil are also required to:
    - ensure that valves that are part of the vehicle have a locking system and are locked when the vehicle contains liquid soil
    - be present whenever liquid soil is being transferred into and out of the vehicle
- There are additional requirements under s. 16(1) of Regulation 347 that also apply to the transportation of excess soil and should be reviewed prior to transport.
    - For instance, if the vehicle is used for hauled sewage, the operator must ensure that the same vehicle is not used for the collection, handling, or transportation of any other materials (such as excess soil).

Transportation requirements for liquid soil

- As of January 1, 2022, there is a requirement for a hauler to always have certain information about the excess soil available during the transportation, in the form of a **hauling record** (either physical or electronic). Transporters of liquid soil, including hydrovac trucks, will be required to carry this record at all times during the transportation
- Much of the information in the hauling record will be provided by the project area, including the location of where the excess soil is to be deposited and contact information for the project area. See Appendix B for more details
- Procedures around transportation, including the hauling record and other tracking procedures, if applicable, must be developed by the project leader and understood by the hauler before hauling operations start
- Confirmation of receipt of the excess soil at the destination site must be obtained by the hauler and a copy of the final record must be retained by all parties for two years (destination site operator, hauler, project leader)

Storage of liquid soil

The following applies to liquid soil stored at 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 **10,000 cubic metres** 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

Storage and processing sites for liquid soil

- Various types of storage and processing sites are recognized by the regulation and may be available to project leaders to facilitate liquid soil management for reuse.
- Some sites enable temporary storage and limited processing and do not require an ECA under certain conditions.
- Other types of sites are more permanent and take responsibility for the excess soil, but typically require a waste ECA.
- These interim sites include:
    - Class 1 soil management sites
    - Local waste transfer facilities

Note: Residential development soil depots, retail landscaping soil depots and Class 2 soil management sites **cannot be used to manage liquid soil**. These sites are exempt from the requirements of a waste ECA, with one of the conditions for exemption being that they only accept dry excess soil

Storage and processing sites

Class 1 soil management sites:

- Class 1 sites are waste disposal sites, which include soil banks and soil processing sites, that take responsibility for liquid soil deposited at that site
- They can potentially accept soil from many project areas (a project leader may consider these a final destination)
- Generally, these sites require a waste ECA, and a project leader or contractor may consider establishing one to facilitate excess soil storage, processing and reuse across many projects and undertakings

Storage and processing sites

Local waste transfer facilities

- These sites are recognized under Regulation 347 as a storage location for an organization that is **not primarily a waste management operation**, and are described as a site:
  - at which waste from field operations is received, bulked, temporarily stored and transferred
  - that is owned or controlled by the person who undertakes the field operations or by a person on whose behalf those field operations are undertaken
  - at which no waste is received other than waste from field operations, and
  - that is used primarily for functions other than waste management (e.g., a site used primarily for equipment storage)
- **Field operations** include construction, maintenance of a highway, environmental testing, etc.

Storage and processing sites

Local waste transfer facilities - continued

- Local waste transfer facilities are exempt from section 27, 40 and 41 of the *Environmental Protection Act* (i.e., the requirement for waste ECAs) under Regulation 347, if the criteria for exemption are met
- Written notice may be required to be given to the Director one month before the facility is established. Notice would identify the facility and set out the facility's location and the quantities and types of wastes that are at or are anticipated to be at the facility
- Other applicable requirements from Regulation 347 related to local waste transfer facilities may also apply, such as:
  - availability of fire-fighting equipment and spill clean-up and containment equipment
  - access to the facility controlled by gates, fencing, attendants or other security measures

Storage and processing sites

Local waste transfer facilities - continued

- These sites may be applicable to some excess soil-related operations (e.g. excavation as part of construction) and have certain requirements under the excess soil regulation
- Local waste transfer facilities that are operated by a public body or by a project leader for an infrastructure undertaking, can process excess soil using the same methods as are allowed at the project area (retaining a QP will be required for specific methods)
- Municipalities, for example, could plan for their sites to accept liquid soil from their projects (even if their project is undertaken by a contractor) and ensure that the site operates in a manner that allows them to be exempt from needing a waste ECA, while following the requirements of the regulation
- Other approvals may still be required depending on the facility and the processes used

Liquid soil at a reuse site

- In order to be not designated as waste, excess soil must be dry when brought to a reuse site and remains dry until it is finally placed at the site or, **if liquid soil is brought to a reuse site, there must be a site-specific instrument in place that allows liquid soil to be deposited at the site**
- These site-specific instruments are listed under s. 3(4) of the regulation. They include:
    - a permit issued under a by-law, or provisions of a by-law, passed under s. 142 of the *Municipal Act, 2001* or s.105 of the *City of Toronto Act, 2006*
    - a licence or permit under the *Aggregate Resources Act*
    - an approval under the *Planning Act*
    - a certificate of property use issued under s. 168.6 of the *Environmental Protection Act* (EPA)
    - any other site-specific instrument under an Act of Ontario or Canada
- The site-specific instrument would have to explicitly permit the deposit of liquid soil, and may also stipulate the operational requirements to properly manage it, such as storage, processing, testing, and beneficial reuse

Liquid soil management from hydro excavation activities

- Liquid soil that is generated by hydro excavation activities and hauled using vac trucks is generally subject to this regulation, including any applicable requirements at a project area, for storage, and for transportation.
- Hydrovac trucks can generate excess soil when they are used in operations such as daylighting or exposing underground infrastructure, and installation of new infrastructure.
- Hydrovac trucks may also be used for liquid industrial waste or hazardous waste, or removing debris or sewage from a catch basin - in those cases, this regulation would **not** apply.

Liquid soil management from hydro excavation activities

For hydro excavation operations and other liquid soil generators, there are several types of sites that can accept and manage liquid soil under the regulation, including:

- **the project area**: if appropriate, liquid soil generated from hydro excavation can be dewatered or solidified at the project area at which it is excavated, using the prescribed methods in s. 6 of the regulation. It can then be reused or transported as dry excess soil
- **a local waste transfer facility**: within the regulated restrictions of Regulation 347, liquid soil from hydro excavation associated with fields operations may be taken to a local waste transfer facility for temporary storage and bulking, and if the field operations and facility are those of a municipality or infrastructure company then some limited processing (for example, dewatering) is also permitted at that site
- **a Class 1 soil management site**: a waste disposal site with an ECA can include permission and conditions within the ECA to manage liquid soil from hydro excavation operations at the site
- **a reuse site with a site-specific instrument**: instruments at reuse sites, such as a municipal fill by-law, can include conditions to accept and manage liquid soil

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

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: means any project that involves the excavation of soil and includes,

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

Reuse site: a site at which excess soil is used for a beneficial purpose and does not include a waste disposal site

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)

Key Definitions

Qualified Person (QP): 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 may also meet the requirements for a risk assessment (RA) QP as described in section 6 of the Record of Site Condition Regulation.

Best Management Practices




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Best Practices - Continued

Municipal by-laws

- Municipal by-laws and permits can provide site-specific controls for the management of liquid soil, including material from hydro excavation operations, to allow for greater beneficial reuse of local liquid soils.
- One way to do this can be by allowing permits under the by-law to stipulate any operational requirements for liquid soil deposit at a reuse site, often without needing to update the by-law itself each time.
- For more information on how by-laws can adopt the requirements of the regulation, refer to the Excess Soil By-Law Tool developed by the Canadian Urban Institute.

Best Practices - Continued

Collecting liquid soil from multiple project areas

- For hydro excavation operations (such as daylighting) that are conducting operations generally in the same location, such as along a small stretch of road, the multiple project areas can be listed in one hauling record if all the key regulatory requirements are addressed in the hauling record
- This includes a description of the locations of the project areas at which excess soil was loaded and the location where the excess soil is to be deposited, among other key details on the soil movement (for example, date, time and quantity of excess soil loaded)
- The use of a consolidated hauling record may be a more efficient process for collecting excess soil from multiple projects
- Hydrovac trucks may mix liquid soil from multiple project areas if they are of similar quality and intended for the same beneficial reuse; otherwise, they should be kept separated
- After the excess soil is deposited and a new load is started, a new hauling record should also be started

Environment, Conservation, and Parks

Frequently Asked Questions and Answers

Ontario

Frequently Asked Questions and Answers

Can a hydro excavation company bring liquid soils from their operations at various project areas back to their site without a waste ECA?

- Generally, if a hydro excavation company wants to bring liquid soil from various project areas back to their own storage and processing site, they would require a waste ECA, as this type of operation would be considered a Class 1 soil management site under the regulation
- If a company is contracted by a municipality, an alternative option can be for the municipality to identify local waste transfer facilities that they operate, for the storage and processing of liquid soil from various projects
- Under limited circumstances, based on restrictions in Regulation 347, hydro excavation companies may be able to use one of their sites as a local waste transfer facility for temporarily storing and bulking, but not processing/dewatering, liquid soil (for e.g., if excavation was part of field operations such as a construction project, and local waste transfer facility is not primarily used for waste management)
- Other types of approvals may regardless be required, depending on the operation of the site

Frequently Asked Questions and Answers

What considerations would hydro excavation operators need to think about if a waste ECA is needed for their site?

- Engaging with the local MECP district office and municipalities is recommended for hydro excavation companies looking to obtain a waste ECA for their sites for managing liquid soil. There may be several considerations to discuss, including but not limited to:
    - municipal zoning
    - permits from a conservation authority (CA), if applicable
    - considerations for how the site may operate
    - hydrogeological assessment and surface water assessment for the site and operations

Frequently Asked Questions and Answers

What considerations would hydro excavation operators need to think about if a waste ECA is needed for their site? (continued)

- The requirements in a waste ECA for processing liquid soil would be similar to the requirements for a general waste processing site, including:
    - Description of waste to be received, including source site details
    - Waste receiving and storage procedures
    - Details of any processing to be carried on site, including description of the dewatering process, any substances used for treatment, and how discharge will be managed
    - Details of sampling and analysis for incoming/outgoing wastes
    - Identification of nearby sensitive receptors, if any
    - Emergency/spill response
- If the liquid from dewatering the liquid soil is to be drained or be discharged directly or indirectly into a ditch, drain or storm sewer or to a well or to any surface water body including a stream or reservoir, an approval under s. 53 of the OWRA may also be required. A pre-submission meeting is recommended with the local MECP office and technical support staff, to determine if hydrogeological assessments or surface water assessments are required

Frequently Asked Questions and Answers

Would an approval for managing liquid from hydrovac operations be needed if:

- **liquid was discharged to a sanitary sewer?**
  - Liquid may be discharged into a sanitary sewer without requiring an OWRA approval, but municipalities may have rules around discharging to sanitary sewers which should be taken into consideration
- **a company reuses the liquid within their hydrovac operations?**
  - If liquid from the operations is being reused within the hydrovac trucks for excavation and not being discharged, then an approval under s. 53 of the OWRA would not be needed, as there is no discharge to the environment
- **a company plans to treat and then reuse the hydrovac liquid?**
  - If at a project site, they are treating and discharging wastewater in this process, an OWRA approval would be needed. There is also an option to get an approval for a mobile treatment/dewatering unit that treats and discharges wastewater from liquid soil processing.

Frequently Asked Questions and Answers

Would an approval for managing liquid from hydrovac operations be needed if:

- **a company plans to truck the liquid offsite and discharge to a ditch?**
  - If the liquid from dewatering the liquid soil is to be drained or be discharged directly or indirectly into a ditch, drain or storm sewer or to a well or to any surface water body including a stream or reservoir, an OWRA approval would be required. Trucking water and disposing off at an approved facility such as a municipal sewage treatment plant does not require an OWRA approval.
- **a company constructs a works to dewater liquid soil from hydrovac operations onsite?**
  - Projects that establish sewage works (such as an infiltration gallery for direct and more rapid infiltration to ground water) to manage the liquid would require an OWRA approval to control site runoff quantity and quality. However, if they are not constructing any sewage works and liquid soil is excavated from a project area and placed in the same area for passive dewatering or infiltration, it may be exempt from an OWRA approval. The project will likely be exempt from requiring a waste ECA, if dewatering is being carried out within the project area according to the requirements under section 6 of O. Reg. 406/19.

Frequently Asked Questions and Answers

How will liquid soil from stormwater management (SWM) ponds be managed under this regulation?

- Excavated sediment from stormwater management (SWM) ponds is subject to the regulation and the specific rules for how it can be managed. Note that material removed from stormwater catch basins and from within pipes is not excavated and not considered excess soil
- SWM systems are included in the definition of “infrastructure” under the regulation, which also captures them under any exemptions from the planning requirements (sections 8-16 of the regulation) for managing excess soil from infrastructure projects.
    - This includes the exemption for movement of excess soil between infrastructure projects
    - Note that SWM ponds are **not** included in the exemption for maintaining infrastructure in a fit state of repair.
- If excavating sediment from a SWM pond triggers the planning requirements, an assessment of past uses will **not** need to be conducted

Frequently Asked Questions and Answers

How will liquid soil from stormwater management (SWM) ponds be managed under this regulation? (continued)

- Planning requirements that are required for SWM pond sediments include undertaking sampling and analysis and developing a soil characterization report. Part I: Rules for Soil Management provides distinct requirements for SWM pond sediment sampling and characterization. A destination assessment report will also be required. These reports require QP oversight.
- Other planning requirements applicable to SWM pond sediments include filing a notice in the Registry which includes key reuse information, and to track sediment movements through a tracking system. These requirements do not require QP oversight.
- Liquid soil from a SWM pond may also be managed and processed at the project area as well, without the need for a waste ECA if using the processing methods in section 6(3) of the regulation

Environment, Conservation, and Parks

Bio Break - Health Break

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Open Discussion, Question and Answer Period

Additional Resources and Our Coordinates

Additional Resources

For additional information, including a variety of guidance and tools developed by internal and 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: rpra.ca/excess-soil-registry
- Ontario Environmental 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
- Ontario Society of Professional Engineers (OSPE) - Best Practices for Aggregate Pit and Quarry Rehabilitation: https://ospe.on.ca/excess-soil-reports/
- Canadian Urban Institutes (CUI) - Excess Soil By-Law Language Tool: https://canurb.org/initiatives/excess-soil-by-law-tool/
- OSSGA document on Excess Soil Best Management Practices for Pits/Quarries: https://www.ossga.com/rehabilitation_and_excess_soil/
- RSC Guide (*currently in draft and to be updated soon*): https://ero.ontario.ca/notice/019-2551

Our Coordinates

MECP Contacts:

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- **Brownfields** - Dean Therrien dean.therrien@ontario.ca

Appendices

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Appendix A: Procedures for mixing substances for dewatering or solidification

If a natural or synthetic polymer is mixed with excavated soil or crushed rock for dewatering or solidification, a QP must be retained to carry out specified procedures. This includes:

- developing written procedures to ensure the appropriate and safe use of the substance within the project area during the dewatering or solidification process, (including any information provided by the producer of the substance and any other information that the QP deems to be relevant to the use of the substance)
- giving a copy of the written procedures to the project leader or a person designated by the project leader
- if the excess soil will be finally placed at a reuse site, preparing a document that lists:
  - the substances, the mixing rates used and the amount of liquid soil that was dewatered or solidified
  - instructions on proper storage and final placement of the dewatered or solidified excess soil at the reuse site, to ensure that it does not cause an adverse effect
  - confirmation that if the above instructions are followed, the storage and final placement of the excess soil will not cause an adverse effect

Appendix B – Hauling Record Requirements

As of January 1, 2022, the information required to be available from a hauler during transportation must be in the form of an electronic or physical hauling record to be carried by the hauler at all times during transportation, the hauler must not leave a project area with excess soil without this record

The hauling record must contain the following information:

- The location where the excess soil was loaded for transportation
- The date and time at which the excess soil was loaded for transportation
- The quantity of excess soil in the load
- The name of an individual who may be contacted regarding inquiries about the Load, including the excess soil quality
- 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
- The location of where the load is to be deposited

If the excess soil is denied at a deposit location due to concerns regarding its quality, it should never be taken to an unplanned deposit site. Any alternate site at which excess soil is deposited must be directed by the project leader or the operator of a project area and must reflected on the hauling record.