

Ontario's Excess Soil Regulation

Considerations for the Construction Industry

RCCAO Webinar – January 11, 2022

Disclaimer: Not a legal opinion, nor confirmation from Ontario Ministry of Environment, Conservation and Parks



XCG Consulting Limited

D. Grant Walsom, B.A.Sc., P.Eng., QP
Partner/Senior Engineer

Agenda for Today

- **Who is Grant and XCG?**
- **Why?**
- **Regulation and Timing**
- **Responsibilities and Definitions**
- **Where can Excess Soil go?**
- **Infrastructure**
- **Possible Challenges**
- **What is coming?**
- **Questions/Comments**



Who is Grant and XCG?

- **D. Grant Walsom – Partner/Senior Engineer**
 - Professional and Consulting Engineer
 - Qualified Person in Ontario
 - Over 27 years experience in Consulting
 - Site Assessment, Remediation, Auditing
 - Industry Associations – ONEIA, OSPE, CBN, founder of QPCO
- **XCG Consulting Limited**
 - Established in 1990, Environmental Consulting Services from Kitchener, Kingston and Edmonton (Staff of 30)
 - Site Assessment, Remediation, Landfill Services, Compliance Auditing, Project Management ... And now Excess Soil Services

Why?

- Illegal Dumping
- High publicity
- Contamination to innocent parties
- Poor Quality
- Responsibility
- No method for Regulating or Enforcing



The objectives are:

- Reduce soil management costs (more on-site options, low risk processing)
- Reduce costs of transportation (greater options for reuse)
- Protect human health and the environment (known quality)
- Eliminate illegal dumping of excess soils (and be able to enforce ... waste)
- Reduce amount of clean soil going to landfills
- Reduce greenhouse gas emissions

Regulation and Timing

- **Regulation 406/19, and Associated Rules**
 - December 2019 – Regulation Released
 - Amended in July (COVID ext.) and Dec. 2020 (clarify)
 - First Phase in effect January 1, 2021
 - “Waste” Designation, Reuse Standards, Rules
 - Second Phase now in effect, January 1, 2022
 - Registry, Planning Activities, Tracking, Hauling Records
 - Contracts for “grandfathering” had to be signed – Jan.1, 2026
 - Landfill Ban effective January 1, 2025
 - No disposal of soil meeting Table 2.1 Residential Quality

Responsibilities and Definitions

- **Excess Soil:** excavated soil that cannot be reused on the site/project area and will be relocated to another site (when removed).
- **Waste:** excess soil is classified as a waste if the soil is not managed within the requirements of the Regulation and Rules document. Note: can be enforced as such.
- **Project Area:** site or sites where project excavation occurs.
- **Project Leader (88):** owner or designate who is ultimately responsible for making the decisions on the project.
- **Qualified Person (61):** professional engineer or geoscientist with appropriate experience (as defined in O.Reg 153/04)

Note: contractor/constructor (0), hauler (3)



Responsibilities and Definitions

- **On-Site Management** (for reuse on-site or better off-site use)
 - Low Risk Processing permitted without an ECA
 - Excavated soil or crushed rock not considered a “waste” if processed at the project area
 - Processing includes:
 - Passive aeration
 - Passive dewatering
 - Mechanical dewatering
 - Mixing (with soil of similar quality, not for purposes of contaminant dilution)
 - Soil Turning
 - Size-based sorting
 - Screening/sorting for removal of debris
 - Mixing with substance to dewater or solidify

Responsibilities and Definitions

- **When is excess soil “not a waste”?** (all satisfied)
 1. Taken directly from project area to:
 - Class 1 soil management site,
 - Class 2 soil management site, or
 - Local Waste Transfer Facility.
 2. Taken to a beneficial reuse site - owner gives written consent
 3. Must be “dry” soil (determined through a standard slump test), if not dry the deposit site must have an instrument for “liquid” soil.
 4. Reuse site governed by an instrument (e.g., municipal, ARA, CPU)
 5. If no instrument, beneficial reuse requirements to be met
 - Excess soil standards, must be for beneficial reuse, volume to match need, 2 years to be finally placed, Rules

Responsibilities and Definitions

- **Documentation – prepared by the QP on behalf of the Project Leader (before excavation)**
 - Assessment of Past Uses
 - Sampling and Analyses Plan (specified minimums)
 - Excess Soil Characterization Report (specified minimums)
 - Excess Soil Destination Assessment Report **

Documents must be completed for Sites required to be registered.

Note: Reuse and Disposal Sites will rely on the documentation – so exemptions don't always help. **Project Leader retain all records for 7 yrs.**

** Often this report is put in contracts for the contractor and their QP-C to prepare and submit to the Project Leader and their representatives (QP-PL, Administrator)



Where Can Excess Soil Go?

- **Beneficial Reuse Site**
 - Backfill; grading; grade adjustments for development, infrastructure or landscaping ... Written consent needed
- **Class 2 Soil Management Site – No ECA required**
 - Temporary Site owned by Project Leader or Public Body (e.g., municipality), has Specific Operation and Management Rules
- **Class 1 Soil Management Site – ECA required**
 - Soil processing sites (treatment), Soil banks
 - Sites with an Instrument
 - e.g., Site alteration permit from municipality, MNRF Ag. License, others

Where Can Excess Soil Go?

– Local Waste Transfer Facility (from Reg. 347)

- Limited applicability – generally for public bodies
- Waste from field operations are received, bulked, temporarily stored, transferred – owned/controlled by person who undertakes the field operations
- No waste is received other than from field operations and facility is used primarily for functions other than waste management

– Landfill

- Will end on Jan. 1, 2025, for some soils (Table 2.1 Residential quality or better)
- Can still use for operations, cover, berms, roads etc.

Where Can Excess Soil Go?

– Retail Landscaping Soil Depot or Residential Development Soil Depot

- Management Exemption - have their own rules (can't be both)
- Storage volume requirements, rules as with other temp. sites
- Ensuring the quality and meets the property use Standard
- Owner of site approved in writing
- Some limited on-site processing permitted
 - **Aeration, mixing, turning, size-based sorting, removal of debris**
- Procedures to be established for accounting of every load
- MECP Notification (Retail Landscaping) and Excess Soil Registry (Residential Development) requirements
 - **Notices also to be filed when Depot is closed**

Transportation

Two Specific Requirements (now required in 2022):

- a. Tracking Systems (if project registered or in contract)
 - Records when leaving site and when arriving at destination
 - Recognition at both ends, summaries to be available
 - no GPS requirement ... a “nice feature” – can be paper based
- b. Hauling Records (accompany every load)
 - Information from Project Leader to be supplied:
 - Location, date and time loaded
 - Quantity in load, contact for quality, hauler firm, driver name, plates
 - Location, date and time soil is deposited
 - Acknowledged with name, contact, declaration of receipt
 - Hauler to maintain the records for 2 years

Infrastructure

Structures, facilities and corridors related to:

- Public highways;
- Transit lines and railways;
- Gas and oil pipelines;
- Sewage collection systems and water distribution systems;
- Stormwater management systems;
- Electricity transmission and distribution systems;
- Telecommunications lines and facilities, including broadcast towers;
- Bridges, interchanges, stations and other structures, related to above;
- Rights-of-way required for existing or proposed infrastructure, as above.

Exempt from Registry and the planning studies if to be reused for infrastructure, but not exempt from the appropriate management and responsible relocation. Characterization?

Possible Challenges

- **Contracts are different, Q&A Period, get QP to review early**
- **Possible delays when sampling and analyses during project**
- **Varying tracking systems** – many coming out of the woodwork
- **Characterization catch-up** – inadequate reports
 - Inhibiting movement to good locations
- **Reuse Sites Availability** – **local to project (reduce costs/GHGs)**
 - Table 1 quality - lots of potential uses
 - Table 3.1 and higher – treatment and disposal as waste
 - What about Table 2.1 quality?
 - Pits and Quarries still lagging for updating quality use – in generally Table 1
- **Documents/Bids referencing Tables but not property uses**
 - (i.e., Table 2.1 – agricultural, residential, industrial/commercial)
 - There are subtle differences between Standards for property uses

What is coming?

- **Enforcement ... a “grace period” but is coming**
 - Educational period of learning for everyone
- **Complaint driven enforcement activities**
 - Mud/dust/noise? Hauling? Could be the opener.
- **Example will be made – reputation will be impacted, possible monetary fines, publicity**
- **Don't be the first**
- **Contracts and civil suits**
- **Get on board and early**
- **Educate the appropriate site managers and foremen**



Resources

- **ES&E Article (Al Durand; May/June 2014)**
 - http://soiil.com/news/files-news/Handling_excess_soil-how_we_got_to_where_we_are_and_where_things_are_going.pdf
- **MECP Made-in-Ontario Environment Plan**
 - <https://www.ontario.ca/page/made-in-ontario-environment-plan>
- **MECP web page – Handling Excess Soil**
 - <https://www.ontario.ca/page/handling-excess-soil>
- **Regulation 406/19 and Rules Document**
 - <https://www.ontario.ca/laws/regulation/190406>
 - <https://files.ontario.ca/mecp-soil-rules-en-2020-12-21.pdf>
- **MECP Best Practices Guide**
 - <https://www.ontario.ca/page/management-excess-soil-guide-best-management-practices>
- **RPRA Excess Soil Registry**
 - <https://rpra.ca/excess-soil-registry/>
- **ONEIA Excess Soil (Best Practices for Hauling, Temporary Sites, QPs) and MECP Slide Decks**
 - <https://www.oneia.ca/excess-soil>



Thank you!

Questions/Comments?

D. Grant Walsom, P.Eng., QP
Partner/Senior Engineer
XCG Consulting Limited

E: grant.walsom@xcg.com
T: 519-741-5774 ext. 7246

Disclaimer: Not a legal opinion, nor confirmation from Ontario Ministry of Environment, Conservation and Parks



XCG Consulting Limited

www.xcg.com

Registry Fees

2022 Excess Soil Registry Fees

Project Area Notices

Proponents of projects that generate excess soil that needs to be moved off-site are required to register their project, report on the quantity and quality of soil generated and moved and pay a fee.

Soil Volume (m3)	Fee
100 to 2000	\$0 flat fee
2001 to 10,000	\$75 flat fee
10,001 to 50,000	Variable fee - \$0.025¢ /m3
50,001 to 100,000	Variable fee - \$0.04¢/m3
100,001+	Variable fee - \$0.05¢/m3, up to a maximum fee of \$12,500

Reuse Site Notices

Owners of soil Reuse Sites (sites approved to accept certain quantities of Excess Soil, which will be beneficially reused) are required to register, report on the quantity of soil they anticipate accepting, and pay a fee.

Soil Volume (m3)	Fee
10,000 to 50,000	\$750 flat fee
50,001 to 1,000,000	\$3,000 flat fee
1,000,001 to 5,000,000	\$7,000 flat fee
5,000,001 +	\$10,000 flat fee

Residential Development Soil Depot Notices

Owners of Residential Development Soil Depot (RDSD) sites, defined as temporary stockpiles of Excess Soil up to 10,000 m3, are required to register and pay a fee.

Soil Volume (m3)	Fee
Up to 10,000	\$250 flat fee

Topsoil

- **As defined in Municipal Act, 2001**
- **Topsoil is not exempt from Regulation, but there are some conditions where it is not subject to Section 8 (Registry) – all apply:**
 - Excavated soil is topsoil,
 - Topsoil is transported directly to a reuse site from the project area for reuse as topsoil at the reuse site,
 - After all efforts to consider past uses, the Project Leader is not of the opinion that the Project Area is not an enhanced investigation project area (gas station/garage, dry-cleaner, industry, bulk liq.)
 - Primary purpose of the project is not for remediating contaminated land.