

EXCESS SOIL MANAGEMENT POLICY FRAMEWORK



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1.0 INTRODUCTION

1.1 CONTEXT

Excess soil is a result of intensive land development across the province. While cities continue to grow, proper *excess soil management* is necessary to protect human health and the environment.

Managing excess soil in a responsible way is integral to building sustainable communities. Improper management can result in impacts to ground or surface water quality and/or quantity, natural areas and agricultural lands, and cause a number of local issues including concerns regarding noise, dust, truck traffic, road damage, erosion, drainage and other social, health and environmental concerns. Proper management of excess soil can result in a number of benefits to the environment and economy.

The Growth Plan for the Greater Golden Horseshoe, under the Places to Grow Act, 2005, and the Provincial Policy Statement, 2014 under the Planning Act encourages the redevelopment of brownfield sites and intensification of urban areas. Redevelopment of brownfield sites (those with former industrial or commercial activities) can also generate *excess soil*, potentially with elevated levels of contaminants. As urban areas intensify, opportunities to reuse soil on-site become limited which results in *excess soils* needing to be transported from the development sites. Development of infrastructure, such as transit systems, may also generate *excess soil*.

What is *excess soil*?

Excess soil is soil that is excess to requirements at a construction or development site or project (“source site”); it is not needed on the source site after it is excavated and must be moved to a new, off-site, location. Soil remaining within a project site is not considered *excess soil* (see glossary – **Section 7.4** - for more detailed definitions of *italicized*

Management of *excess soil* is a growing concern in the Greater Toronto Area (GTA) and rural municipalities surrounding the GTA. The issue has received media attention with a focus on illegal dumping of soil, site alteration by-laws, commercial *fill* operations, tracking *excess soil*, concern over the quality of *excess soil*, and protection of the environment, water, and agriculture.

The manner in which *excess soil* is managed and disposed of also has implications for greenhouse gas emissions. Annually, thousands of trucks move *excess soil* around the province emitting greenhouse gases which contribute to climate change. Local reuse of

excess soil can reduce these greenhouse gas emissions by reducing the distance *excess soil* is required to be transported for reuse or disposal.

While existing legislation, regulation, control documents, by-laws and policies address different aspects of *excess soil management* such as environmental compliance approvals (ECAs) for *soil processing sites*, records of site condition for brownfields redevelopment sites, and municipal permits under site alteration by-laws (see **Appendix 7.1** for more information), there is no overall policy framework for the management of *excess soil*.

In January 2014, the Ministry of the Environment and Climate Change (MOECC) released a guide titled “*Management of Excess soil – A Guide for Best Management Practices*” (BMP). This BMP sets out the province’s expectations for all those managing soil and encourages the *beneficial reuse* of *excess soil* in a manner that promotes sustainability and the protection of the environment. It assists those managing *excess soil*, particularly when the *excess soil* may be impacted by contamination, and in preventing and mitigating the potential for adverse effects. The BMP encourages reuse of soil and provides guidance on managing *excess soil* at the site where it is excavated, during its transportation and where it is received.

Many organizations in Ontario are working to improve the management of *excess soil* through their own activities (including industry best management practices, conservation authority guidelines, municipal pilot projects, qualified person guidance and soil matching programs). The province developed the proposed Excess Soil Policy Framework to protect human health and the environment from inappropriate relocation of *excess soil* and to enhance opportunities for the beneficial reuse of *excess soil*.

1.2 ENVIRONMENTAL BILL OF RIGHTS REVIEW

In January 2014, the Ministry of the Environment and Climate Change agreed to undertake a review of *excess soil management* in response to an application for review submitted under the Environmental Bill of Rights, 1993 (EBR) in November 2013.

The application for review requested “a review of the need to establish a new comprehensive, province-wide policy to address the problem of compromised soil”. The applicants stated that they were concerned about the impacts of what they termed “compromised soil” from urban development to health and safety and the environment. They also stated that current rules related to *excess soil* were a “patchwork” with a lack of oversight and called for leadership to ensure “compromised soil is disposed of properly.” They also asked for a multi-ministry approach, including involvement from the Ministry of Municipal Affairs.

The EBR review supports a provincial commitment made in Ontario’s Great Lakes Strategy to “develop a policy framework for soil management, including encouragement

of best management practices to support the reuse of excess soil for beneficial uses, as long as it can be done in a way that protects human health and the environment.”

Further, this issue was recognized in the Ontario legislature. In December, 2014, a motion received all party support for the government to “...consider the development of a strategy for disposing of [excess soil] in a sustainable and environmentally conscious fashion”.



The EBR review also assessed whether certain aspects of MOECC’s BMP required additional policy to support its implementation and address any policy gaps.

As part of undertaking the review, the MOECC convened a multi-ministry working group, consisting of Ministries of Municipal Affairs; Natural Resources and Forestry; Agriculture, Food and Rural Affairs; Transportation; Infrastructure; and Tourism, Culture and Sport. This group helped inform the findings of the review and will continue to work together to develop the solutions needed to implement the recommendations of the review.

Listening sessions on the application for review were held in the fall 2014, including:

- Two sessions with a wide range of municipalities
- Agricultural and rural community sectors
- Select conservation authorities and Conservation Ontario
- Ontario Environment Industry Association
- Residential and Civil Construction Alliance of Ontario
- Ontario Sand, Stone and Gravel Association
- Municipal Engineers Association
- Association of Professional Geoscientists / Professional Engineers Ontario
- Ontario Waste Management Association
- Brownfield stakeholders, the development sector, and government agencies including Infrastructure Ontario and Metrolinx
- Local community and environmental groups

First Nations communities and organizations were informed about the review and a meeting was held with those that expressed interest.

The MOECC and other ministries re-engaged select representatives in fall 2015 to validate and discuss preliminary findings and outline the general elements of the

framework (see **Appendix 7.3** for a list of what was heard in these sessions). The conclusion from these sessions was that there is wide support for the approach.

2.0 NEED FOR A REVISED POLICY FRAMEWORK

The province consistently heard that the current system for oversight and management of *excess soil* requires stronger direction and clear and enforceable rules which clearly identify the roles and responsibilities as *excess soil* is generated and then moved from a *source site* to a final *receiving site*.

2.1 SUMMARY OF FINDINGS FROM ENGAGEMENT

Through engagement undertaken, it was assessed that *excess soil management* policy should be clarified and improved, and that some new policies may be warranted, including a need for:

- **greater responsibility by owners of *source sites*** that generate *excess soil* to ensure that their *excess soil* reaches appropriate *receiving sites*
- **clearer roles and responsibilities** amongst all who manage or provide an oversight role in the management of *excess soil*
- **filling specific gaps in receiving site oversight and new guidance to promote better oversight at *receiving sites***, including to inform municipal by-laws
- **greater clarity of existing regulations** such as brownfields-related requirements and inert fill provisions clarifying when *excess soil* must be managed as a waste
- **enhanced enforcement mechanisms and tools** to address illegal activities
- **clearer technical guidance and direction** with respect to *excess soil* reuse standards and testing procedures, to assist technical professionals, to integrate into oversight policies, and to help ensure *excess soil management* is protective of human health and the environment
- **better tracking and record keeping** of *excess soil* movements to confirm that *excess soil* reaches intended *receiving sites* and to facilitate oversight
- **protection of sensitive areas of provincial and local interest**, including natural heritage and hydrologic features and functions, farmland, archaeological resources and areas of archaeological potential, significant built heritage resources and significant cultural heritage landscapes
- **greater consideration of *excess soil management* when planning** for development and infrastructure projects, to better plan for appropriate *excess soil* reuse and to identify and promote local reuse opportunities for *excess soil*

By improving these areas, the province would further strengthen environmental protection and provide greater confidence in the proper management of *excess soil*.

2.2 SUMMARY OF FINDINGS FROM RESEARCH

Further reviews and assessments have informed the need for policy. Key research findings indicate:

- **Ontario could learn from approaches in other leading jurisdictions:** Other jurisdictions including the United Kingdom (CL:AIRE), Quebec, the Netherlands and some US states, such as Massachusetts, employ a range of approaches and a variety of tools to provide oversight to the management of *excess soil*. These approaches range from extensive government oversight through regulation, tracking, and planning for reuse to more flexible and voluntary approaches allowing industry to self-regulate and agreed upon codes of practice (see **Appendix 7.2**, page 35 for more information).

Key lessons learned from these jurisdictions include the need for:

- Clearly articulated goals and principles to guide governments, local authorities and industry
 - Rules around tracking of *excess soil* to improve compliance, garner public confidence and allow for transparency
 - Clear roles and responsibilities for those who manage *excess soil*, whether it be industry, government or qualified persons
 - Standards to allow for the *beneficial reuse* of *excess soil* as a resource, while protecting sensitive areas and clearly articulating when *excess soil* is a waste
 - Greater *source site* responsibility, including better planning early on in the development planning process to encourage *excess soil* reuse and minimize the need to move *excess soil*.
- **Existing policy tools do not provide adequate oversight over the life cycle of *excess soil*:** The current oversight for managing *excess soil* focuses on *receiving sites*. Municipalities and conservation authorities are the main permitting bodies for these *receiving sites* through site alteration by-laws under section 142 of the Municipal Act and regulations made under section 28 of the Conservation Authorities Act. *Excess soil* may also be received at sites overseen by other legislation such as pits and quarries regulated under the Aggregates Resources Act or waste disposal sites regulated under Part V of the Environmental Protection Act. Generally, the MOECC may respond to incidents of mismanagement of *excess soil* if there are complaints of illegal dumping of waste or of potential adverse effects under the Environmental Protection Act.

Existing policy tools are not clear regarding *source site* responsibility, and the policy tools providing authority for oversight of receiving sites leave some gaps in authority.

- **Excess soil from “brownfield” sites could be better tracked:** Under the Environmental Protection Act and O. Reg. 153/04, made under that Act, a Record of Site Condition is required to be filed on the Environmental Site Registry before a property use changes to a more sensitive use (such as a change from commercial or industrial use to residential). In its analysis of previously filed Records of Site Condition, the MOECC found that many Record of Site Condition properties generate *excess soil* that is disposed of off-site. While the O. Reg. 153/04 Record of Site Condition framework requires information on soil moving on to these properties, it does not regulate the transport and disposal of *excess soil* material that leaves these properties. Since this *excess soil* may be leaving properties which once had industrial or commercial uses, it is important for it to be managed properly and tracked.
- **Municipal site alteration by-laws could benefit from additional guidance to promote better oversight:** Many municipalities have recently updated their by-laws to assist in the management of *excess soil*. These by-laws often vary in scope based on local challenges, with some adopting strong municipal control and restrictions and others allowing for *fill* placement under differing degrees of oversight. Some of these by-laws incorporate MOECC soil quality standards for Records of Site Condition and others do not. Similarly, some allow for recovery of costs of oversight through revenue and others do not. They also incorporate a variety of rules to provide oversight to other matters associated with the management of *excess soil*, including noise, truck traffic and dust. The varying approaches have resulted in the movement of *excess soil* to those jurisdictions with limited capacity to deal with the issue and/or less stringent requirements.



- **There is confusion about what standards should apply to the movement of *excess soil* and when *excess soil* is “inert fill”:** In the absence of provincial

direction on standards for *excess soil* movement, brownfields standards are being applied. However, these standards were not developed to be used in relation to *excess soil* movement. The models used to develop these standards are based on potential spill scenarios that may have occurred at a property where a Record of Site Condition is to be filed and were not designed to deal with large amounts of fill from many locations being deposited at a particular property.

“Inert fill” is defined as “earth or rock fill or waste of a similar nature that contains no putrescible materials or soluble or decomposable chemical substances” in Regulation 347 (General - Waste Management) under the Environmental Protection Act. “Inert fill” is designated as a waste in the regulation and it is exempted from the waste management requirements under Part V of the Environmental Protection Act and Regulation 347. Currently there is uncertainty whether or not *excess soil* is a designated waste under Part V of the Environmental Protection Act, as such generators of *excess soil* must decide whether their *excess soil* can meet the definition of inert fill but there are no clear means to make this determination.

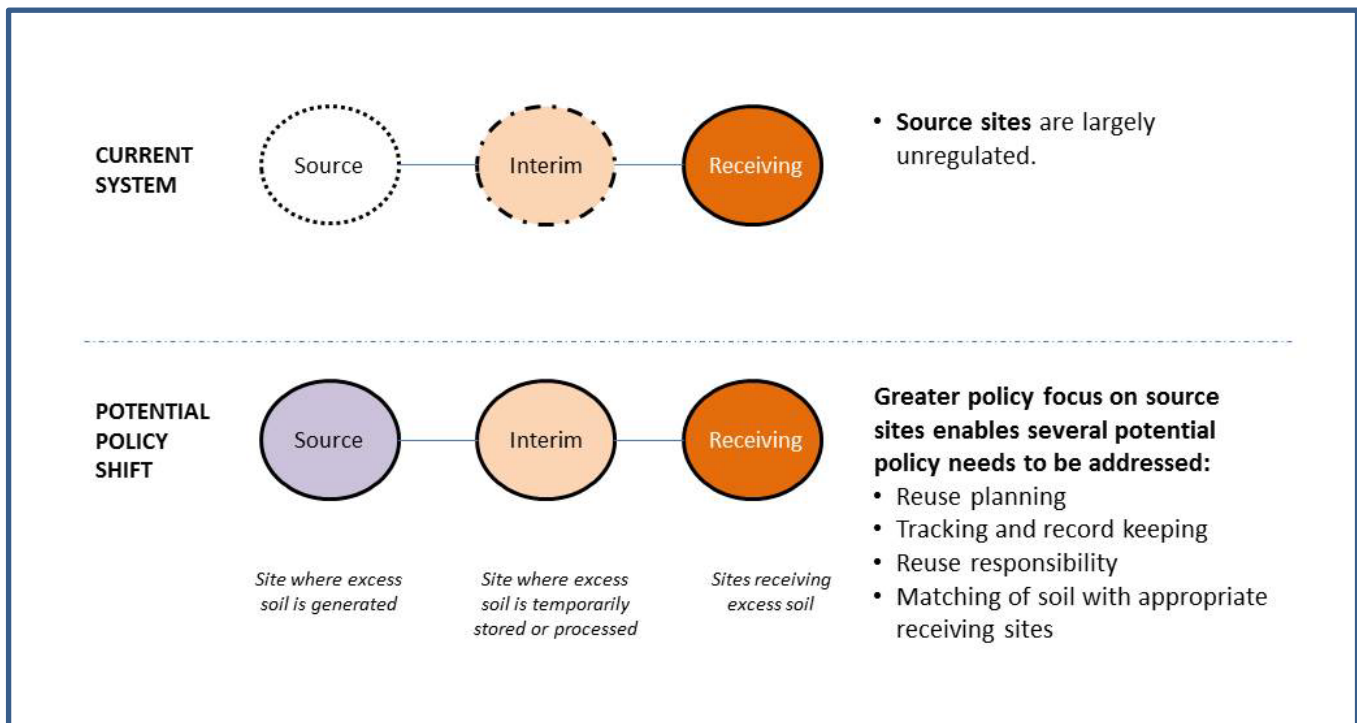
- **Approvals for processing sites could be clarified:** The MOECC reviewed environmental compliance approvals for soil processing sites and mobile soil processors and found that since 1993 approximately eight applications for soil processing sites and over a hundred applications for mobile soil processors have been approved to date. The MOECC found that older approvals had differing approaches related to the management of *excess soil*, with newer ones being more consistent and taking into account the MOECC’s January 2014 BMP.
- **There is a general lack of information about the amount and quality of *excess soil* being managed in Ontario:** The Residential and Civil Construction Alliance of Ontario (RCCAO) estimates that approximately 20 million cubic metres of *excess soil* is excavated annually from construction sites from 2008 to 2010. However these figures are based on broad assumptions and the actual movement of *excess soil* is largely unknown. Similarly the quality of the *excess soil* moving in Ontario is largely unknown.

3.0 POLICY FRAMEWORK APPROACH

This document outlines the policy framework that will guide policy development and actions under this framework.

The policy framework embraces an approach that puts materials, like *excess soil*, back into the system so that they can be reused, when safe to do so. To achieve this, it is necessary to move toward a system that better provides for life-cycle management, with greater responsibility placed on the *source sites* of *excess soil*. This approach

recognizes that the generators of *excess soil* are in the best position to support its reuse.



The current oversight for managing *excess soil* focuses on *receiving sites*. The province heard about the need for generators of *excess soil* to be more responsible for proper management, including ensuring that soil reaches an appropriate receiving site. Greater source site responsibility may also enable proper planning for reuse of *excess soil*; better tracking, reporting and record keeping of *excess soil* movements; and matching of *excess soil* with appropriate *receiving sites*.

Under the framework *source sites* would be responsible for characterizing their *excess soil*, tracking it, and verifying that their *excess soil* reaches an appropriate destination. This provides greater certainty for those who manage soil at receiving sites. They would also be encouraged to reuse *excess soil* wherever appropriate, minimizing the need to move *excess soil* in the first place. Together, these requirements would help enhance due-diligence at both *source sites* and *receiving sites*.

Building on and Enhancing Existing Tools

Under the framework, *excess soil management* and oversight will continue to be provided at *receiving sites* through existing permitting authorities, including municipalities and conservation authorities. This approach recognizes the local knowledge of public bodies, the value of these tools and bodies to address local concerns and the efforts they have put in to date to deal with the issue. Under this

framework, the province will provide technical guidance to help municipalities and others impose appropriate conditions on sites that receive *excess soil*.

The approach will include a combination of a few critical new policy tools; consider potential amendments to enhance and clarify existing policy tools; and provide guidance to clarify application of existing tools under the framework.

Key enforceable policy tools that are part of the framework are noted in the table below:

SOURCE SITES	INTERIM SITES	RECEIVING SITES
<ul style="list-style-type: none"> • NEW proposed regulation on excess soil management • Regulation 347, if subject to the waste requirements 	<ul style="list-style-type: none"> • Municipal Act (by-laws) • Environmental compliance approvals for soil processing sites and temporary storage sites 	<ul style="list-style-type: none"> • Municipal Act (by-laws) • Conservation Authorities Act (Section 28 Regulations) • O. Reg. 153/04 (records of site condition) • Aggregate Resources Act licenses and permits • Environmental compliance approvals for waste disposal sites • Environmental Protection Act – general prohibitions

Other potential requirements would be set out in other regulatory tools, such as the Building Code (applicable law) or promoted through application requirements under the Planning Act where relevant.

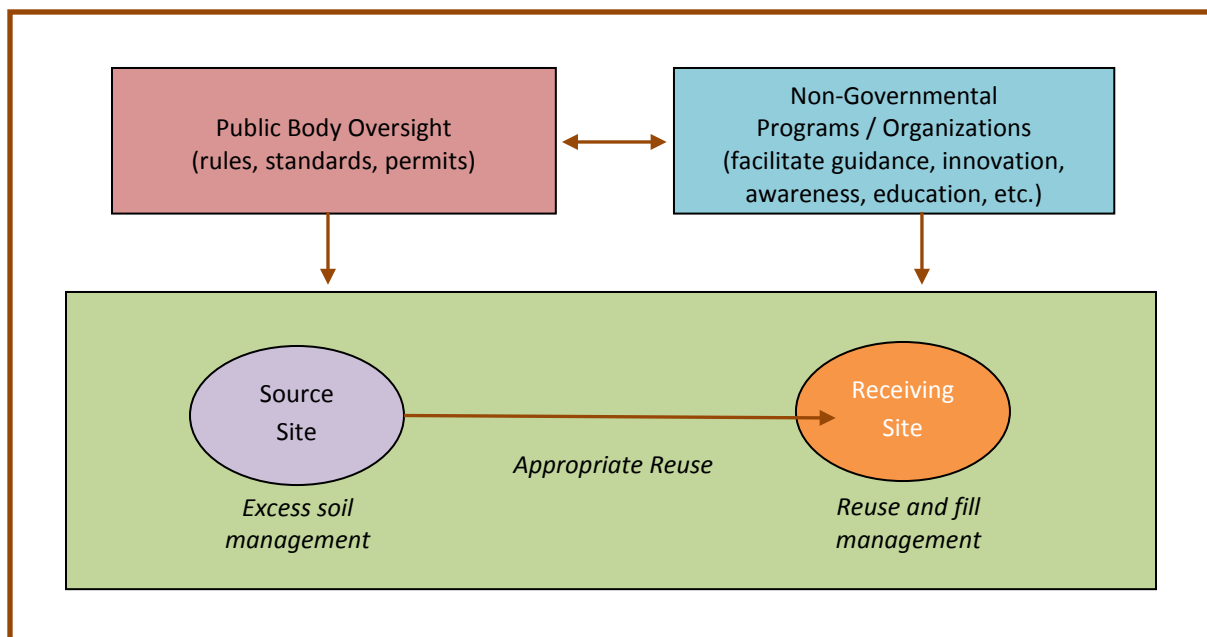
Many existing guidance documents will be updated to ensure they are aligned with the Excess Soil Management Policy Framework, in order to help inform use of these regulatory tools, such as Ontario provincial standards (OPSS180 / 1010) and other guidance documents, as required.

Clarifying Roles and Responsibilities

This framework clarifies roles and responsibilities. The provincial role will be established through a multi-ministry approach. Ministries will enable and facilitate, and in some cases provide oversight and implement, sustainable excess soil management. All ministries will facilitate engagement with interested parties, including First Nation and Métis communities in relation to their mandate. Many public agencies own properties or serve as proponents for development projects that either generate significant amounts of excess soil that require disposal off-site or that receive excess soil materials from other properties for final disposal.

The province recognizes that municipalities, conservation authorities and other public bodies may have multiple responsibilities with roles in oversight, planning for reuse and implementation.

Industry and non-governmental organizations will help in the development of programs to facilitate innovative approaches to soil reuse, use of best practices, compliance and raising awareness, as illustrated in the diagram below:



Key roles are described below:

Ministry of the Environment and Climate Change

- regulatory requirements for generators of excess soil
- clarification of existing provisions as appropriate, e.g. “inert fill” in Regulation 347, alignment with O. Reg. 153/04
- technical guidance to facilitate consistency in oversight, management and reuse, and general excess soil best practices
- enforcement of Environmental Protection Act and associated regulations, including source site enforcement
- integration of excess soil management requirements into relevant approvals, as appropriate, e.g. processing sites

Ministry of Municipal Affairs

- guidance and educational materials to support municipalities, e.g. use of municipal by-laws, land use planning and development approvals
- authority for municipal by-laws; provide for integration with other planning and development regulatory tools, as appropriate

Ministry of Natural Resources and Forestry

- legislative authority for conservation authorities and associated regulations
- integration of excess soil management requirements into relevant approvals, as appropriate, e.g. aggregate resource licenses and permits

Ministry of Transportation

- implement best practices for highway construction

Ministry of Agriculture, Food and Rural Affairs

- promotion of best practices for farmers

Ministry of Infrastructure

- promotion of best practices for infrastructure development and standards and fostering innovation

Municipalities

- oversight, review, assessment and permitting of *receiving sites*, and integrating provincial guidance into municipal by-laws, as appropriate; coordinate with conservation authority permissions where applicable
- integrate sustainable excess soil management as appropriate into planning and development decisions and infrastructure decisions and contracts

Conservation Authorities

- oversight, review, assessment and permitting of *receiving sites* with conservation authority permissions, as appropriate; coordinate with municipal permits where applicable
- integrate sustainable excess soil management as appropriate into infrastructure decisions and contracts (e.g., flood and erosion control infrastructure)

Qualified Persons

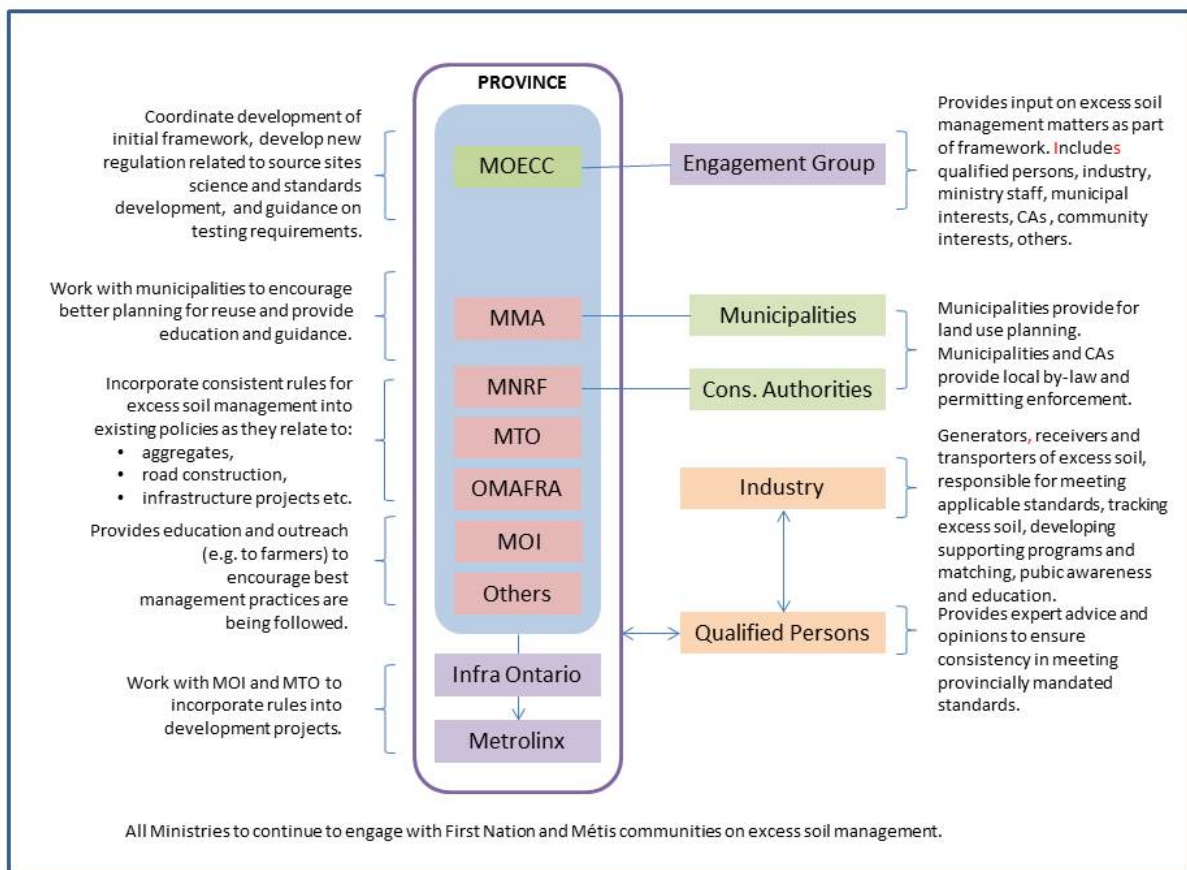
- provide accountability and credible advice consistent with provincial direction and professional practice on technical matters
- provide quality assurance and consistency in advice

Industry, Property Owners and Non-Governmental Organizations

- owners of *source sites* are responsible for the management of *excess soil* from their properties, including development of *excess soil management* plans, identification of appropriate receiving sites and appropriate contractual arrangements, registration and tracking of excess soil to the receiving sites
- owners of *receiving sites* are responsible for the management of *excess soil* at their properties, including development of fill management plans

- transporters of excess soil are responsible for using identified haul routes and receiving sites and to ensure adequate records are kept for excess soil movements offsite
- support implementation through development of programs to facilitate due diligence (e.g. best practices, matching and tracking programs which could include a registry, professional standards, education) potentially through non-governmental organizations
- education of the industry community, public awareness and education

The figure below provides an illustration of roles and responsibilities:



4.0 GOALS AND PRINCIPLES

The following goals will guide the implementation of a provincial framework:

GOALS

1. **Protect human health and the environment from inappropriate relocation of *excess soil***
2. **Enhance opportunities for the *beneficial reuse of excess soil* and reduce greenhouse gas emissions associated with the movement of *excess soil***

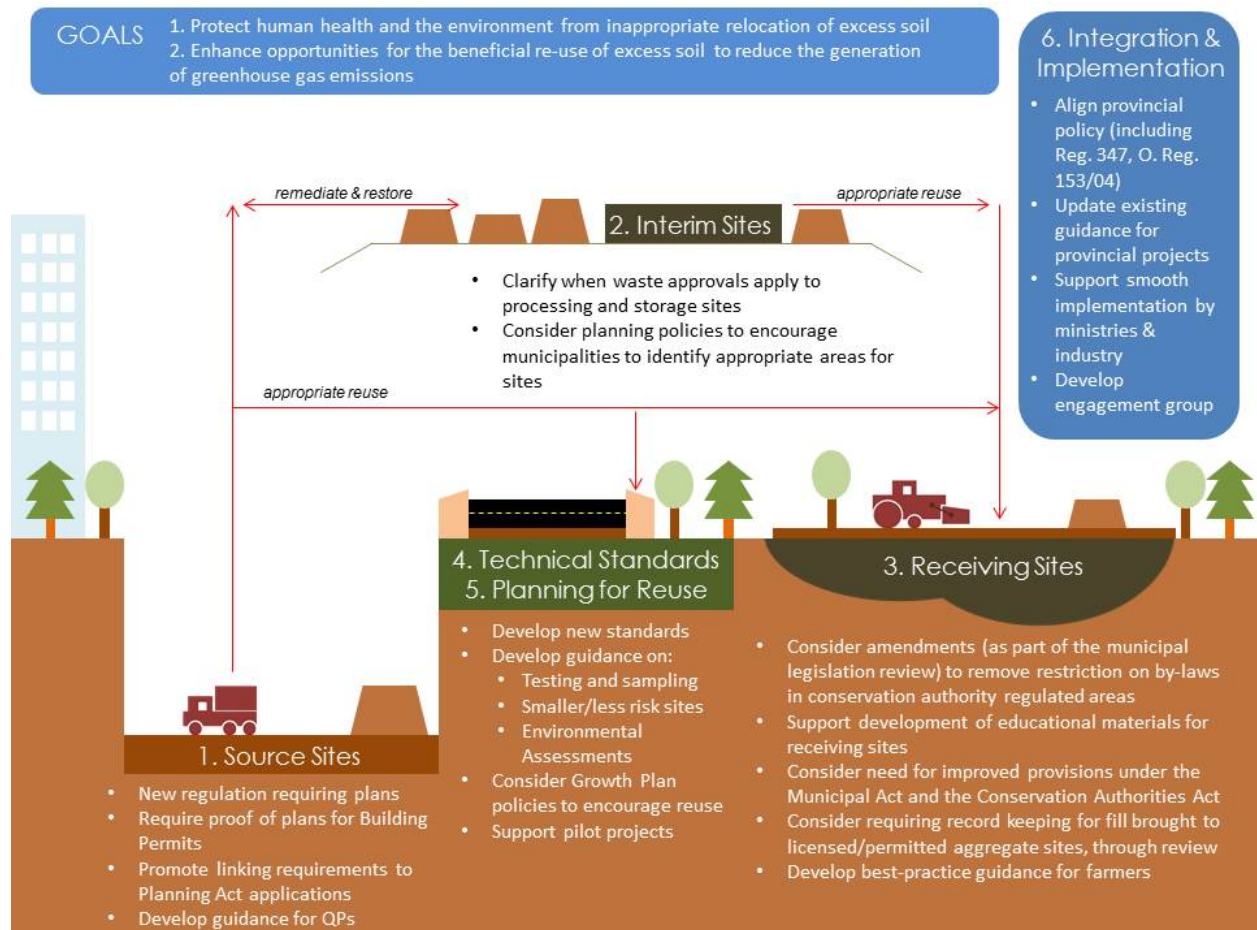
The following **principles** will further guide decision making with respect to the provincial *excess soil* framework:

1. The public should have confidence in the management of *excess soil*.
2. Generally, generators of *excess soil* should be responsible for appropriate management of *excess soil* until it is accepted at appropriate receiving site(s).
3. Greenhouse gas emissions should be reduced through beneficial local reuse.
4. *Excess soil management* should ensure that farmland, environmentally sensitive areas and ecological and hydrological functions are protected, and that the future uses of land are considered.
5. *Excess soil* should be treated as a resource, where it can be appropriately reused, disposal as a waste should be avoided, where possible.
6. Clear and concise rules for the management of excess soil should be established.
7. Generation of excess soil should be minimized first through onsite reuse, remaining excess soil should then be reused locally if possible, and planning for reuse should be undertaken early to maximize opportunities for reuse.
8. Movement of *excess soil* should be traceable to provide for transparency, accountability and support for compliance.
9. Approaches should be consistent, flexible, fair and enforceable, using modern regulatory and compliance approaches.
10. Approaches should consider and integrate with existing business practices of the public and private sectors, and should support development of industry-led programs for sustainable reuse of *excess soil*.
11. Approaches should be science and evidence-based.

The principles of the [Ministry of the Environment and Climate Change's Statement of Environmental Values](#) will also be considered (e.g. precautionary principle, polluter pays, etc.).

5.0 POLICY NEEDS AND ACTIONS

The figure below is an illustration of the provincial framework – including its overarching goals and actions to strengthen oversight of *excess soil management*. Actions are described in greater detail in the next sections of the document.



1. SOURCE SITES

1.1 Policy Needs

- Clear responsibility on the owner of the *source site* to provide better planning, tracking, and management from “source to reuse” to increase due diligence.
- Ensure early characterization of *excess soil* and planning for *beneficial reuse*, where feasible.
- Verify that *excess soil* is received at an appropriate location for reuse.
- Ensure relevant information is recorded and registered on *excess soil* movement (e.g. quality, quantity, *source site*, hauler, *interim site*, *receiving site*).

1.2 Actions to be Taken

The province proposes the following policy actions related to *source sites*:

1. **MOECC to work with partner ministries to develop a new regulation under the Environmental Protection Act requiring larger and riskier *source sites* to develop and implement *excess soil management* plans certified by a *Qualified Person* and made available to MOECC and local authorities.**

The proposed regulation could apply to the following:

- **Larger sites**, defined by a volume threshold to capture larger infrastructure projects and larger developments (e.g., buildings with underground parking, larger sub-divisions). They would not include smaller projects and *excess soil* from development of small residential properties.



- **Risk-based sites**, including industrial or commercial properties, or other properties that have had a potentially contaminating activity or sites with greater chance of having impacted *excess soil*.

The proposed new regulation would require the owner of the *source site* to hire a qualified person and ensure that an *excess soil management* plan is prepared and certified. The regulation and requirement for a plan would not apply to soil remaining at a site. The plan would be required, at a minimum, to include the following:

- characterization of *excess soil* in-situ (including quality, type and volume)
- sampling and testing of *excess soil* based on past land use and potential contamination
- identification of *receiving sites* and confirmation that they are authorized to accept *excess soil* (e.g. site is regulated by municipal permit and authorized to accept specific quality of *excess soil*)
- confirmation that the quality of *excess soil* is appropriate for the *receiving site* and that testing results are made available to prospective *receiving sites*
- development of tracking plan to ensure and verify the *excess soil* arrives at the *receiving site*
- registration of soil movements from source to receiving site(s) through an online registry to ensure transparency and to support accountability
- standard record keeping requirements
- consideration of archaeological resources and areas of archaeological potential, significant built heritage resources, significant cultural heritage landscapes, and areas with known invasive and endangered species at source and receiving sites

The proposed new regulation would require the owner of the *source site* and any person with whom the owner contracts to manage *excess soil* from that property to implement the *excess soil management* plan. The owner would also be required to retain a copy of the *excess soil management* plan at the property for inspection on request of the MOECC. If there is a failure to develop an *excess soil management* plan or a failure to comply with a provision of the plan by any person, and *excess soil* from a *source site* is deposited at another property unlawfully, in addition to any enforcement action under the Environmental Protection Act that can be taken to deal with such non-compliance and subsequent prosecutions for high level offenses, the owner of the *source site* may be required to remove the *excess soil* material from the site where it has been deposited and transport it to an appropriate receiving site.

The proposed new regulation would define who is and the role of a Qualified Person and may build upon on the definition of Qualified Person in O. Reg. 153/04.

Some ministries, such as the Ministry of Transportation (MTO) have developed best practices for the management of *excess soil* and related materials that are generated from infrastructure projects such as highways. MOECC will seek to ensure that the requirements developed for soil management plans take into account these best management practices, where applicable, and may consider methods to recognize equivalencies of practices. To achieve this, it may be appropriate in certain instances for the regulation to adopt by reference a government document such as a best management practice guideline, thus ensuring the enforceability of that guideline.

Consideration will be given to a phased-in approach for implementing the proposed regulation, as well as for projects that are already underway and for those projects that are classified as emergencies.

2. MMA and MOECC, could require the preparation of an *Excess Soil Management Plan* for issuance of certain building permits.

Explore the potential of including the preparation of an *excess soil management plan* as a matter to be listed as applicable law in the Building Code when a permit is issued before excavation. The requirement could be met by showing the building official a letter issued from a Qualified Person certifying an *excess soil management plan* has been developed or through reference of the proposed registry. This would help to ensure that those who manage excess soil consider implications early in a project, including the need to minimize *excess soil* and maximize *excess soil* reuse, where appropriate. It would also help to ensure that *excess soil* is characterized and appropriate *receiving sites* are located before excavation of the soil.

3. MMA, MOECC and partner ministries to promote through policy, guidance and information sharing linking requirements for *excess soil management* to applicable Planning Act approvals including development applications, planning for interim storage sites and long-term beneficial reuse when planning for growth.

As a best practice, the province would promote linking planning for *excess soil management* under any new regulatory requirements, such as the new regulatory requirements outlined above, to applicable Planning Act approvals and develop appropriate guidance to support implementation.

4. MOECC to work with Qualified Persons on excess soil management guidance.

Guidance will be developed in partnership with professional bodies to help achieve consistency and enhance public confidence in Qualified Persons work and opinions. The guidance will assist in bringing together information to help inform the opinions of Qualified Persons on such matters as implementation of regulatory requirements; approaches to and direction on the use of standards; testing and sampling frequency; direction on storage, remediation and other *receiving sites*; best practices for record keeping; and other related matters. It could also serve as a repository linking information from other sources of guidance.

2. INTERIM SITES

2.1 Policy Needs

- Encourage and allow for temporary *excess soil* storage where it supports *beneficial reuse* at an appropriate location.
- Define and encourage appropriate temporary storage sites for *excess soil* and encourage storage close to *source/receiving site* to reduce transportation and environmental impacts (i.e., to reduce greenhouse gas emissions).
- Clarify requirements for *excess soil* storage and *soil processing sites*.
- Distinguish between interim storage and processing sites governed by waste approvals.
- Promote widespread remediation of contaminated soils to enable reuse and to help minimize the quantity sent to waste disposal sites for ultimate disposal.

2.2 Actions to be Taken

The province proposes the following policy actions related to *interim sites*:

5. MOECC to clarify when waste approvals apply to excess soil processing sites and for temporary storage sites.

MOECC will continue to issue environmental compliance approvals for *excess soil processing sites* to promote remediation while helping to ensure the environment and human health are protected.

The proposed new regulation would clarify when approvals are required to permit the temporary storage of *excess soil*. The regulation would establish the permissible duration for temporary storage and specify minimum controls to

ensure the temporary storage does not become permanent and does not result in unacceptable impacts.

6. MMA with MOECC to consider approaches that would encourage municipalities to identify appropriate areas (e.g. industrial) for excess soil storage and processing to encourage local reuse.

MMA working with MOECC will encourage municipalities to allow for off-site *excess soil* storage and *soil processing sites* where appropriate. This is to be considered through updates to the provincial land use planning framework, through the coordinated review of provincial plans and the development of the municipal by-law language tool.

3. RECEIVING SITES

3.1 Policy Needs

- Improve rules for *receiving sites*, including improved oversight with specified minimum environmental and technical requirements, and record keeping related to received soil.
- Provide guidance to support local (e.g. municipal or conservation authority) oversight for *receiving site* management.
- Help address “nuisance effects” related to *excess soil* movement and placement on the *receiving site*, such as noise, dust, odour, and truck traffic as well as wear and tear of roads.
- Help address impacts related to climate change, including greenhouse gas emissions from transporting *excess soil* over long distances.

3.2 Actions to be Taken

The province proposes the following policy actions related to receiving sites:

7. MMA and MNRF to consider bringing forward proposed amendments to legislation to enable section 142 of the Municipal Act regarding site alteration by-laws, to apply in conservation authority regulated areas.

Changes would consider whether municipalities and conservation authorities have the appropriate tools to address issues related to the management of *excess soil* within their authority and that those tools work together effectively and reflect policy developed under this framework.

Municipalities currently have little control over the establishment and operations of commercial *fill* operations within municipal boundaries if it is located in an area regulated by the conservation authority. Under the Conservation Authorities Act, conservation authorities consider specific matters appropriate to that Act which do not include many matters that could be considered under a municipal by-law. Section 142 of the Municipal Act, 2001, provides municipalities with specific powers to prohibit or regulate the placing or dumping of *fill*, removal of topsoil, and the alteration of the grade of the land, subject to certain limits, such as subsection 142(8).

Subsection 142(8) provides that municipal site alteration by-laws have no effect in areas that are regulated by the conservation authority under the Conservation Authorities Act (Section 28 regulations: Development, Interference with Wetlands and Alterations to Shorelines and Watercourses).

Changes would allow municipalities to regulate site alteration and placement of *fill* within their municipality, and enable conservation authorities to continue to fulfill their mandate. This would also allow both conservation authorities and municipalities to continue to work collaboratively to regulate the placement of *fill*.



- 8. MMA to coordinate development of a by-law language tool to support municipalities in developing or updating fill and site alteration by-laws. MMA, MOECC, and other ministries to consider ways to promote the municipal role in effective and consistent management of excess soil at receiving sites, including larger (commercial) sites.**

A by-law language tool is under development with an initial version expected in the fall of 2016. This tool could be used by municipalities to inform development of by-laws and fill management plans. MMA, MOECC and other ministries will consider tool updates and additional ways to promote the municipal role in effective and consistent management of excess soil to reflect policy developed under this framework.

The by-law language tool and potential future educational materials could include information about:

- Guidance on *fill* quality standards;
- Use of Qualified Persons;
- Testing requirements (audit sampling, frequency);
- Record keeping and documentation (e.g. *source sites*, volumes and quality);
- Verification of source site;
- Contents of *Fill Management Plans*;
- Considerations for:
 - filling in relation to natural features and maintenance of ecological processes (e.g. infiltration);
 - consultation, notification;
 - traffic, transportation (trucking and haul routes);
 - invasive and endangered species;
 - odour, noise and dust; (during transport and during *fill* placement at the *receiving site*)
 - site security and signage;
 - stormwater considerations and erosion controls;
 - complaint receipt and handling;
 - maintenance and protection of hydrological features/processes including groundwater protection considerations; and
 - protecting archaeological resources and areas of archaeological potential, significant built heritage resources and significant cultural heritage landscapes.
- Requirements for management of interim sites.

9. MMA and MNRF to explore, with partners, legislative and non-legislative ways to improve compliance and enforcement with Municipal Act and Conservation Authorities Act requirements.

Consider whether there is a need for changes to legislation, procedures or consequences to provide better management and oversight of excess soil matters. As required, update relevant guidance documents to align with any changes made to these legislative frameworks.

10. MNRF to consider requiring record keeping for *fill* being brought to licensed and permitted aggregate sites, through the current review of the Aggregate Resources Act.



The importation of *fill* for the rehabilitation of aggregate sites has been a growing concern over the past few years. To ensure that all sites that are authorized to import *fill* for rehabilitation are maintaining minimum records, changes are being considered to the Aggregate Resources Act that would require existing sites to keep records of *fill* (e.g., source, shipper, deposit location) where it is brought onto a site for rehabilitation purposes. These changes would address requirements related to *fill* now and will provide power to improve record keeping and reporting on activities that could impact the environment in the future. As necessary, update relevant requirements to align with any changes made to this legislative framework.

11. OMAFRA and MOECC, to develop best-practice guidance for farmers to limit impacts of the importation of soil onto farmland.

Guidance will help clarify the issues that farmers should consider when making decisions on importing *excess soil* onto their properties for use in their agricultural operations. The intent will be to limit negative impacts on farmland.

This guidance will include information on:

- beneficial uses of imported *excess soil*;
- potential issues associated with bringing *excess soil* onto an agricultural property (such as environmental impacts, drainage alteration, stockpile runoff/dust, impacts on neighbouring properties, municipal considerations, insurance coverage, legal considerations); and
- the regulatory provisions, requirements and approvals that may apply (provincial legislation, municipal by-laws, Farming and Food Production Protection Act, Conservation Authorities Act).

The intended outcome is for farmers to be better informed of the benefits and risks of accepting *excess soil*. Farmers will become more aware of regulatory requirements and approvals for importing *excess soil* onto their agricultural operations and will become familiar with best management practices for handling and using *excess soil* in their agricultural operations.

4. TECHNICAL STANDARDS

4.1 Policy Needs

- Provide direction on technical matters such as standards for reuse and testing requirements that:
 - Ensures the protection of human and ecological health
 - Reflects quality of *excess soil* appropriate for *beneficial reuse* at a variety of *receiving sites*

- Support characterization, and support tracking, matching, and reuse, including remediation
- Can be used to support a variety of policy tools (e.g. provincial regulations, municipal by-laws) in a consistent and transparent way
- Are science and evidence based
- Are flexible and practical, but also provide for consistency in application
- Help identify when *excess soil* is subject to the waste requirements, including potential use following treatment at a processing site

4.2 Actions to be Taken

The province proposes the following policy actions related to technical matters:

12. MOECC to develop approaches and standards for reuse of *excess soil* that provide for environmental protection and sustainable reuse of *excess soil*.

MOECC will work with stakeholders to develop approaches which could consider the following:

- **Protection of Sensitive Sites** – There could be recognition that certain types of areas have particular features, resources or sensitivities and should not be areas where *excess soil* is deposited (e.g. natural areas such as wetlands) unless for a specific *beneficial reuse* (e.g. restoration). *Excess soil* brought to such sites could be required to meet certain stringent standards.
- **Use of local background conditions** – For some sites, the use of *excess soil* that meets background levels may be preferred. We have also heard the need to better enable use of local background conditions rather than current provincial background levels (i.e. Table 1 in O. Reg. 153/04). Feasible approaches to enable this could be considered.
- **Use of generic risk based approaches** – It is proposed that generic risk based standards based on land use could be used for the deposit of *excess soil* in some circumstances. This could allow for the reuse of marginally impacted soils in specific circumstances, particularly in areas already impacted and areas where future uses will be less sensitive.
- **Specific risk based approaches** – Risk-based standards could also be developed in relation to specific uses or circumstances. It may also be possible to incorporate predictable risk management measures into these standards. Examples of these specific uses may include infrastructure projects, sound and sight berms, flood control structures, certain former aggregate sites undergoing rehabilitation, certain brownfields sites, or mines. Specific circumstances with specific rules could also be considered, for example specific rules associated with salt-impacted *excess soil*. Site specific risk assessments and risk management approaches requiring technical

review and ongoing requirements or restrictions would generally be limited to circumstances involving an appropriate site specific legal instrument, e.g. where a record of site condition is required by regulations.

13. MOECC to develop clear guidance to inform requirements on sampling and analyses of excess soil.

MOECC will work with industry, consultants and experts to develop clear rules and guidance for testing and sampling *excess soils* in a variety of circumstances to support regulatory requirements and guidance for by-laws and other policy.

These requirements will be pragmatic and will consider the costs of testing and risks to human and ecological health. They would be developed in close collaboration with experts including the Qualified Persons who would be expected to use them.

14. MOECC to develop guidance for smaller, lower risk source or receiving projects or sites.



The province will work with industry to develop guidance to support management of materials from projects that do not trigger the requirement for an *excess soil management* plan because they fall below the volume- or risk-based threshold. (as described in Action 1). This could include testing protocols at source and/or *receiving sites* and the development of an inspection protocol for these sites.

5. PLANNING FOR REUSE OPPORTUNITIES

5.1 Policy Needs

- Encourage municipalities to consider *excess soil* reuse opportunities when planning for growth and intensification
- Integrate identification of reuse opportunities into design and management of large projects
- Facilitate identification of viable reuses and management protocols

5.2 Actions to be Taken

The province proposes the following policy actions related to planning for reuse:

15. MMA, MOECC and partner ministries to encourage municipalities to develop soil reuse strategies as part of planning for growth and development (e.g. official plans, master planning) through proposed plan amendments as part of the coordinated review of provincial plans.

Encourage municipalities to help ensure that future growth and planning includes an assessment of *excess soil* that may be generated and considers opportunities for reuse. This direction could help inform future updates to official plans and ensure consideration is given to large scale developments which require the management of *excess soil*, and also the location of future *receiving sites* and temporary sites for *excess soil*.

16. MOECC to develop guidance for the consideration of *excess soil* in the environmental assessment processes that govern large scale infrastructure and other development projects.

MOECC will develop guidance to encourage proponents of relevant projects to consider *excess soil management*. This approach is intended to help integrate *excess soil management* planning into Environmental Assessments for large projects, including consideration of opportunities for reuse within the project, reuse locally, and for use of other local *excess soils* within a project.

Guidance will also be developed to help ensure proponents consider integrating *excess soil management* as part of the overall project planning process, as applicable.

17. Province to support pilot projects identifying opportunities and procedures for *excess soil* reuse.

The province will continue to support pilot projects with partners to help promote opportunities for *excess soil* reuse. These types of projects will also help to identify areas for improvements in the framework delivery and will inform proposed future policy, guidance and regulatory development.

6. INTEGRATION AND IMPLEMENTATION

6.1 Policy Needs

- Integrate and align provincial legislation, regulations, guidelines, processes and other policy related to *excess soil* to ensure consistency and alignment with this framework. Including alignment related to:
 - Environmental Protection Act
 - Regulation 347 (General – Waste Management)
 - O. Reg. 153/04 (Records of Site Condition)
 - Aggregate Resources Act
 - Provincial plans
 - Municipal Act and Tools (by-laws, policies)
 - Conservation Authorities Act
 - Environmental Assessment Act

The province will also ensure consistency with existing legislative frameworks such as the Clean Water Act, Invasive Species Act and Endangered Species Act.

- Draw upon the expertise outside of the MOECC to ensure effective and practical policies
- Education to facilitate alignment of policies and implementation

6.2 Actions to be Taken

The province proposes the following policy actions related to integration and implementation:

18. MOECC to bring forward proposed regulatory amendments to integrate and align various aspects of provincial policy including Regulation 347 and O. Reg. 153/04.

MOECC will bring forward proposed regulatory amendments in order to help ensure that current regulations and policy are aligned with this framework. This would include:

- Clarifying in Regulation 347 under the Environmental Protection Act (EPA) when excess soil must be managed in accordance with Part V of the EPA. MOECC will consider an approach in which excess soil materials transported off-site from a project would be designated as a waste but not be subject to Part V requirements if:

- a. The excess soil is managed and disposed of in accordance with an excess soil management plan required for the project by the excess soil regulation;
- b. The excess soil is disposed of at an appropriate site that is governed by a site specific instrument (other than a Part V EPA approval) such as a municipal permit issued pursuant to a section 142 Municipal Act site alteration by-law; or
- c. The excess soil material from a project that is transported off-site is disposed of in accordance with MOECC standards for the reuse of excess soil materials or other acceptable risk-based standards.

MOECC will also investigate opportunities associated with new resource recovery legislation, including the potential use of policy statements, in order to help achieve integration of excess soil best management practices into various processes involving soil movement.

- Make amendments to O. Reg. 153/04 (Records of Site Condition) under the Environmental Protection Act to ensure that the requirements governing the management of excess soil materials at RSC properties, including circumstances where RSC properties generate excess soil materials for disposal off-site or receive excess soil materials for deposition at the RSC property, align where appropriate with the new Environmental Protection Act regulation on excess soil management.

19. The province, including MOECC, MTO and MOI, to review and update existing guidance for provincial projects (e.g. transportation and infrastructure) to ensure alignment.

The province, including MOECC, MTO and MOI, will review existing guidance, practices and rules for provincial infrastructure projects and expenditures to align with new requirements and incorporate best practices for the management of *excess soil*. Guidance will provide for greater consistency in the management of *excess soil* with consideration for the goals and principles laid out within this framework. This approach will respond to stakeholders who have indicated that there are gaps in current tendering processes. This approach could further be promoted to municipalities, in particular those who may have large *source sites* for projects producing *excess soil*.

Procurement practices will be formalized through education and outreach efforts with agencies responsible for large scale projects, but also by working to ensure

that standardized tendering requirements incorporate considerations for sustainable management of *excess soil*.

20. MOECC to develop an engagement group and sub-working groups composed of key interests to provide input on proposed policies, technical matters, guidance and implementation, including coordination with external programs.

MOECC will establish an **Excess Soil Engagement Group** to help inform and validate approaches (already underway). This working group will consist of provincial ministries, the development and construction industry, qualified persons, municipal representatives, conservation authority representatives (both urban and rural), community and environmental representatives, the aggregate industry, the agricultural and rural community sectors, infrastructure, transit and the waste sector, and others as appropriate. First Nation and Métis representatives will be invited to participate and will also be invited to engage in policy development.

This group will also support implementation e.g., to help ensure education and outreach is undertaken.

This group will provide a critical role in informing the development of industry-led innovations including support for *excess soil* matching programs that facilitate and encourage matching and better tracking of *excess soil* between *source sites* and appropriate *receiving sites*.

The Excess Soil Engagement Group will further be supported by sub-working groups which will focus more closely on specific areas of interest. These will include:

1. Technical Teams to provide input on technical matters, including the **Standards Development Support Team** and the **Sampling Guidance Support Team**.
2. **Market Support Team** to act as a sounding board for market-based programs developed to support Framework implementation.

These sub groups will consist of experts from municipalities, industry, qualified persons, environmental representatives and scientists, and other interest groups where appropriate.

These groups will include membership from other ministries, including the Ministry of Municipal Affairs, Ministry of Transportation, Ministry of Natural Resources and Forestry, and the Ministry of Agriculture, Food and Rural Affairs, wherever appropriate.

21. MOECC will work with industry, municipalities and non-government organizations on market-based approaches and tools to encourage the reuse of excess soil which will draw upon the United Kingdom’s CL:AIRE model and upon the expertise and collaboration of a number of jurisdictions including the Netherlands and Quebec. The market-based tools developed will include a registry related to excess soil movement.

Industry and MOECC will work together, through the working group and sub-working group, to consider program delivery approaches led by industry or through a non-government organization or enterprise. This type of enterprise could raise awareness, encourage reuse, and facilitate better matching and tracking (e.g. through a registration system) of *excess soil* between *source sites* and appropriate *receiving sites*. This approach could help identify innovative and practical solutions for planning, management and reuse of excess soil.

Work under this action could be supported by pilot projects (Action 17).

6.0 PRIORITIES AND TIMELINE

The actions outlined in the framework have been prioritized based on feedback heard through consultation. MOECC will continue to work with its partner ministries, industry, qualified persons, interested organizations, and First Nation and Métis communities to follow through on a number of actions over the next year and into the future, including the following actions which are either already underway or are planned to be initiated in the near future:

KEY ACTIONS	Currently Underway	Short-term (Year One)	Longer-term
1. MOECC to work with partner ministries to develop a new regulation under the Environmental Protection Act requiring larger and riskier <i>source sites</i> to develop and implement <i>excess soil management</i> plans certified by a Qualified Person and made available to MOECC and local authorities.	X	X	
2. MMA and MOECC, could require the preparation of an <i>Excess Soil Management Plan</i> for issuance of certain building permits.		X	
3. MMA, MOECC and partner ministries to promote through policy, guidance and information sharing linking requirements for <i>excess soil management</i> to applicable Planning Act approvals including development applications, planning for interim storage sites and long-term beneficial reuse when planning for growth.		X	X
4. MOECC to work with Qualified Persons on <i>excess soil management</i> guidance.	X	X	
5. MOECC to clarify when waste approvals apply to <i>excess soil processing sites</i> and for temporary storage sites.		X	

6.	MMA with MOECC to consider approaches that would encourage municipalities to identify appropriate areas (e.g. industrial) for <i>excess soil</i> storage and processing to encourage local reuse.	X	X	
7.	MMA and MNRF to consider bringing forward proposed amendments to legislation to enable section 142 of the Municipal Act regarding site alteration by-laws, to apply in conservation authority regulated areas.	X	X	
8.	MMA to coordinate development of a by-law language tool to support municipalities in developing or updating fill and site alteration by-laws. MMA, MOECC, and other ministries to consider ways to promote the municipal role in effective and consistent management of <i>excess soil</i> at receiving sites, including larger (commercial) sites, to inform municipalities in the development or updating of by-laws.	X	X	
9.	MMA and MNRF to explore, with partners, legislative and non-legislative ways to improve compliance and enforcement with Municipal Act and Conservation Authorities Act requirements.	X	X	
10.	MNRF to consider requiring record keeping for fill being brought to licensed and permitted aggregate sites, through the current review of the Aggregate Resources Act.	X	X	
11.	OMAFRA and MOECC, to develop best-practice guidance for farmers to limit impacts of the importation of soil onto farmland.	X	X	
12.	MOECC to develop approaches and standards for reuse of <i>excess soil</i> that provide for environmental protection and sustainable reuse of <i>excess soil</i> .	X	X	X
13.	MOECC to develop clear guidance to inform requirements on sampling and analyses of <i>excess soil</i> .	X	X	X
14.	MOECC to develop guidance for smaller, lower risk source or receiving projects or sites.			X
15.	MMA, MOECC and partner ministries to encourage municipalities to develop soil reuse strategies as part of planning for growth and development (e.g. official plans, master planning) through the coordinated review of provincial plans.	X	X	
16.	MOECC to develop guidance for the consideration of <i>excess soil</i> in the environmental assessment processes that govern large scale infrastructure and other development projects.			X
17.	Province to support pilot projects identifying opportunities and procedures for <i>excess soil</i> reuse.		X	X
18.	MOECC to bring forward proposed regulatory amendments to integrate and align various aspects of provincial policy including Regulation 347 and O. Reg. 153/04.		X	
19.	The province, including MOECC, MTO and MOI, to review and update existing guidance for provincial projects (e.g. transportation and infrastructure) to ensure alignment.			X
20.	MOECC to develop an engagement group and sub-working groups composed of key interests to provide input on proposed policies, technical matters, guidance and implementation, including coordination with external programs.	X	X	X
21.	MOECC will work with industry, municipalities and non-government organizations on market-based approaches and tools to encourage the reuse of excess soil which will draw upon the United Kingdom's CL:AIRE model and upon the expertise and collaboration of a number of jurisdictions including the Netherlands and Quebec. The market-based tools developed will include a registry related to excess soil movement.	X	X	X

7.0 APPENDICES

7.1 EXISTING POLICY

While several pieces of legislation and regulations apply to specific aspects of *excess soil management*, the majority of *excess soil* moved in Ontario is, for the most part, not directly regulated by MOECC. Ontario's January 2014 Best Management Practices for *excess soil* though provides guidance on *excess soil management*, including at the site where it is excavated, during its transportation and at the receiving site.

Different levels of government and various agencies regulate certain aspects of *excess soil* movement, particularly the province, municipalities and conservation authorities. The table below outlines specific legislation, regulation, policy and other instruments and their roles in the management of *excess soil*.

Environmental Protection Act and Ontario Water Resources Act

Broad provisions prohibiting discharges that cause or may cause adverse effect, and providing authority for MOECC to issue orders requiring measures to prevent, stop or remediate adverse effects.

Provides authority to address impairment of waters, and measures to prevent impairment of waters.

Weblinks for more information:

- [Environmental Protection Act](#)
- [Ontario Water Resources Act](#)

Records of Site Condition (RSC) – Environmental Protection Act and O. Reg. 153/04

A Record of Site Condition (RSC) is required before certain changes in property use take place, where the property use goes from a less sensitive to more sensitive use (e.g. from industrial to residential).

The regulation ensures the quality of soil brought to an RSC property meets certain standards, depending on a number of factors including historical uses, as well as environmental site assessment requirements.

Weblink for more information:

- [Records of Site Condition \(RSC\) – Environmental Protection Act and O. Reg. 153/04](#)

Management of Excess soil – A Guide for Best Management Practices

- A best practices document that provides guidance on how to handle *excess soil* generated from large-scale projects. It provides guidance for: soil source sites; soil receiving sites; temporary soil storage sites; traffic and transportation management; and procurement practices for projects that include soil management. It also provides guidance that could be used to inform municipal by-laws.

Weblink for more information:

- [Management of Excess soil – A Guide for Best Management Practices](#)

Reg. 347 (General-Waste Management) under the Environmental Protection Act

Transportation, storage, deposit and disposal of soil that is subject to the waste requirements must be authorized by an environmental compliance approval, except where the waste soil is “inert fill” as defined in Reg. 347.

Inert fill is designated as waste, but exempted from both the need for an ECA and the requirements in Regulation 347. Inert fill may or may not be soil.

Weblink for more information:

- [Reg. 347 \(General-Waste Management\) under the Environmental Protection Act](#)

Municipal Act, 2001 - By-laws

S. 142 provides authority for municipalities to establish by-laws to prohibit or regulate the placing or dumping of fill, removal of topsoil, or alteration of the grade of land, and establish a requirement for permits for these activities. Municipalities may also enact by-laws to manage other aspects of site alteration and filling (e.g. noise and dust control). Municipal site alteration by-laws are of no effect in certain conservation authority regulated areas.

Weblink for more information:

- [Municipal Act, 2001 - By-laws](#)

Conservation Authorities Act - Regulations

Enables municipalities with the province to establish conservation authorities and defines regulation-making authority for purposes of public safety and natural hazard management. The placement, dumping or removal of any material in areas affected by the regulations made under the Conservation Authorities Act requires a conservation authority permit. All conservation authorities have programs in flood and erosion control within their jurisdictions.

Weblink for more information:

- [Conservation Authorities Act - Regulations](#)

Provincial Policy Statement and Provincial Plans

Include a range of policies affecting development and site alteration. Policies do not generally apply to excess *soil*, as commercial filling is not considered a land use.

Weblinks for more information:

- [Provincial Policy Statement](#)
- [Provincial Plans](#)

Aggregate Resources Act

Supplementary guidance to the legislation provides conditions for placing of fill on aggregate sites (e.g. for rehabilitation purposes).

Weblink for more information:

- [Aggregate Resources Act](#)

Farming and Food Production Protection Act

The Act continues the Normal Farm Practices Protection Board and provides a procedure to apply to the Board to determine what constitutes a “normal farm practice” in a particular case. The Act protects farmers from liability in nuisance resulting from a normal farm practice. It further provides that certain

municipal by-laws may not restrict a normal farm practice that is carried on as part of an agricultural operation. The Act provides the Minister with authority to issue directives, guidelines or policy statements and Board decisions are required to be consistent with those documents.

Weblink for more information:

- [Farming and Food Production Protection Act](#)

Environmental Assessment Act

Sets framework for individual environmental assessments (EAs), Class EAs, and streamlined EAs under regulation.

Weblink for more information:

- [Environmental Assessment Act](#)

OPSS (180 and 1010)

Provides guidance for management of excess earth, aggregate, rock, and various other materials for consideration in provincial transportation and infrastructure contracts.

Weblinks for more information:

- [OPSS180](#)
- [OPSS1010](#)

7.2 SUMMARY OF SELECT OTHER JURISDICTIONS

Below is a summary of findings from key jurisdictions.

UNITED KINGDOM

Implementation Approach:

- Voluntary best practices approach, when following code of practice provides exemption from government approvals
- Contaminated Land: Applications in Real Environments (CL:AIRE) is an independent not-for-profit organization in the UK which encourages the regeneration of contaminated land
- Primarily industry-led

Key Elements:

- CL:AIRE developed a Code of Practice (COP) which allows users to determine if excavated materials are a waste or not
- If deemed not to be a waste the material can be used without an Environmental Permit or Waste Exemption from the UK Department of the Environment, and requires some self-regulation
- The COP is applicable to those who commission earthworks and a range of other parties. It is also of interest to land owners and developers
- The three basic steps of the process are
 1. Ensuring that a **Materials Management Plan (MMP)** is in place for the use of materials on a specific site
 2. Ensuring that the MMP is based on risk assessment, that underpins the Remediation Strategy (for contaminated sites) or Design Statement (for uncontaminated sites)
 3. Auditing the process in a Verification Plan
- Standards and exceedances for reuse based on direction for UK Environment Agency; COP has additional technical direction, e.g. testing strategies

- A Qualified Person must review evidence related to a proposed use of materials and if it is acceptable sign a Declaration. This is submitted to the UK Environment Agency
- CL:AIRE has also developed a Register of Materials website, that helps link source sites (donor sites) with receiver sites

QUEBEC

Implementation Approach:

- Over-arching soil management policy supported by regulations and incentives
- Primarily led by province
- Also has guidance for sampling

Key Elements:

- Approach strongly based on reuse; Quebec has a variety of regulations affecting the landfilling of soil
- Quebec has developed a **Soil Management Grid**, which provides management options for excavated soils depending on their level of contamination
- Province provides grants to foster contaminated sites clean up and revitalisation
- Regulation Respecting Contaminated Soil Storage and Contaminated Soil Transfer Stations determines the conditions for the operation of transfer stations and temporary storage sites for contaminated soils

BRITISH COLUMBIA

Implementation Approach:

- Primarily led by ministry and industry
- Uses Environmental Protection Act, Contaminated Sites regulation, and a range of guidance

Key Elements:

- Uses **Contaminated Soil Relocation Agreements (CSRAs)** for applicable soil movements based on size and quality standards; the focus is on contaminated soil and the size threshold is small (5 cubic metres)
- A CSRA is an agreement between the owner of a source site, the receiving site, and the Director of Waste Management, authorizing the relocation of soils from a contaminated site to a suitable deposit site
- Soils to be relocated need to be adequately characterized to determine reuse options and if the soils will meet the numerical or risk-based environmental quality standards for the receiving site

NETHERLANDS

Implementation Approach:

- Development of the regulation is done intensively by government and private market working together and recognizing the need for facilitation of suitable approaches
- Based on 15 years' experience and policy evaluations, implementation of soil management (including excavation) is fully accepted by the private market (operational, administrative and financial aspects)
- To make the system of soil management enforceable and acceptable, quality control and quality assurance are a main consideration in the Dutch system
- Implemented through the federal government, as well as municipal partners who require assurances about the matching between soil quality and application

Key Elements:

- Has a balanced (pragmatic) Soil Quality Decree, containing regulations and protocols to address soil management
- Practical balanced protocols outline sampling requirements and strategies

- Soil is a valuable resource; legislation and policies are tied to ensuring the sustainable use (including reuse) of soils at all levels of government
- Has national registry for soil matching for use by the private market and municipalities and which provides for traceability of materials. The registry is also available to the public for most information relating to soil movement
- The private market has substantial investment in soil banking systems
- To enable reuse, adopts principles such as the “standstill principle”, which requires that the *excess soil* to be placed at the receiving site should be of equal or better quality than the soil that is present at the receiving site, and uses **soil quality maps** of zones with varying sampling and reuse requirements

MASSACHUSETTS

Implementation Approach:

- Requirements largely self-regulated by Licensed Site Professionals (LSPs)

Key Elements:

- Regulatory approach for sites falling under the Massachusetts Oil and Hazardous Material Release Prevention Act (Chapter 21E sites)
- Has a Similar Soils Provision outlined in a guidance document which intended to prevent the degradation of sites by ensuring that the relocated soil does not increase the risk at the receiving site, since it will be similar to what is already there.
- In May 2015, The Massachusetts Department of Environmental Protection (DEP) released a new **Draft Interim Policy on the ReUse of Soil for Large Reclamation Projects**, describing an approach for obtaining site-specific approval from the DEP for the reclamation of quarries, sand pits and gravel pits using more than a threshold amount. The policy states the type of information to be submitted to support the issuance of an approval for such projects (e.g. soil management plan)

7.3 SUMMARY OF KEY ISSUES HEARD

Below is a list of some of the broader key issues heard through engagement on the EBR review related to *excess soil management* policy. This list is not a reflection of provincial opinion, but rather a listing of some of the broader themes heard through engagement sessions with various stakeholders.

1. **Improved oversight** – issues raised related to general perception that current system is fragmented and requires stronger provincial direction
2. **Standards and direction** – issues raised related to need for clear standards to provide direction on where *excess soil* can be reused and where it may be subject to the waste requirements
3. **Testing** – issues raised related to scope of testing needed, costs and timing
4. **Source site responsibility** – issues raised related to need for generator of *excess soil* (*source sites*) to be more responsible for its end use

5. **By-laws** – issues raised related to difference in approaches being taken in by-laws and need for guidance
6. **Education and outreach** – issues raised related to need for additional technical guidance and education for others (e.g. farmers, public)
7. **Traceability and tracking** – issues raised related to need for mechanisms to ensure *excess soil* is better tracked
8. **Municipal by-laws in conservation authority regulated areas** – issues raised related to the need to remove restriction on by-laws in conservation authority regulated areas
9. **Protecting agriculture** – issues raised related to need to protect agricultural land from potential contamination so as to limit potential impacts on crops and/or livestock
10. **Need to protect sensitive areas and limit environmental impacts** – issues raised related to the need to protect sensitive areas (e.g. Greenbelt, Oak Ridges Moraine, groundwater, source protection, soil erosion and climate change)
11. **Temporary storage** – issues raised related to need for clearer direction on temporary storage of *excess soil*
12. **Planning process** – issues raised related to perception that *excess soil* should be managed early on in the development and planning process
13. **Identification of appropriate *receiving sites*** – issues raised related to need to identify appropriate sites which could be appropriate for *excess soil* reuse
14. **Enforcement** – issues related to the perception that there is a lack of ability to enforce current requirements due to limited capacity and scope of powers
15. **Pilots** – support for pilot projects to incent change and garner buy-in
16. **Information gaps** – issues raised related to the lack of information with respect to the movement of *excess soil* (e.g. quantity, quality, impacts)
17. **Traffic, air, dust, noise, and other social impacts** – issues raised related to the need to minimize impacts like traffic, noise, air, dust, etc.
18. **Liability** – issues raised related to the need to consider financial insurance, security, and monetary penalties
19. **Restrictions on aggregate licenses** – issues raised related to perception that requirement for rehabilitation of aggregate sites are too restrictive

20. **Aerodromes** – issues raised related to whether *excess soil* is being inappropriately brought on to properties who are operating as an aerodrome under federal jurisdiction and as a result are avoiding municipal permits
21. **Normal farm practices** – issues raised about whether some farmers may not be following certain municipal by-laws because they are under the misconception that the by-law does not apply to them
22. **Soil remediation** – support for the need to promote remediation
23. **Flexibility and costs** – support for the need for flexibility in approaches and need to consider costs of *excess soil management* in any future approaches
24. **Smaller projects** – need to recognize that smaller sites have a cumulative impact, but need to be handled differently from larger sites
25. **Municipal capacity** – issues raised related to lack of capacity amongst some municipalities to deal with issues, both technically and financially
26. **Cultural heritage resources** – issues raised related to need to assess impacts to and protect sites of cultural heritage value or interest (e.g. significant cultural heritage landscapes and areas of archaeological potential)
27. **Need to better consider *excess soil management* in government projects** – issues related to the need to better consider *excess soil management* in government-funded projects
28. **Need to align provincial policy** – issue related to the need to better align on *excess soil* related management across ministries
29. **Protection of rural areas and rural lens** – issues raised related to the perception that there are policies allowing for the contamination of rural areas at the expense of development and intensification in urban centres
30. **Qualified persons** – issues raised related to skills, credibility, consistency in opinion, conflict of interest and public confidence

7.4 GLOSSARY OF FREQUENTLY USED TERMS

Below are general definitions for terms used more frequently throughout this document. For the purposes of any future policy or regulation, the province would develop and consult on appropriate definitions for these terms.

Beneficial reuse: The placement of *excess soil* at a site that is not a waste disposal site, in a manner that complies with applicable legislation and is environmentally responsible.

Excess soil: Soil that has been excavated, typically as a result of construction activities that cannot or will not be reused at the site where the soil was excavated and must be moved off site. In some cases, *excess soil* may be temporarily stored at another location before the *excess soil* is brought back to be used for a *beneficial reuse* at the site where the soil was originally excavated. It could include naturally occurring materials commonly known as earth, topsoil, loam, subsoil, clay, sand or gravel, or any combination thereof. *Excess soil* does not refer to such materials as compost, engineered fill products, asphalt, concrete, reused or recycled aggregate product, mine tailings or other products, including soil mixed with debris such as garbage, shingles, painted wood, ashes, or other waste.

Excess soil management: The management of *excess soil*, including its excavation, placement, hauling, tracking, record keeping, reporting and registration, characterization, and disposal.

Fill: Any type of material deposited or placed on land.

Interim site: Sites owned or controlled by the owner/operator of a *Source site* or *Receiving site*, at which *excess soil* is temporarily stored. The term can also refer to sites that treat, remediate and transfer *excess soil* to other sites for final placement or disposal (defined below as “*soil processing sites*”).

Receiving site: Sites that accept and receive *excess soil* and constitute the *excess soil*'s final resting place. The term also includes larger commercial fill operations as well as other sites like agricultural operations or aggregate operations.

Soil processing site: Are subsets of *interim sites*, such as a waste disposal site that processes poorer-quality soil to remove or reduce the concentrations of contaminants, such that the soil can be reused. These sites are subject to approval requirements under Part V of the Environmental Protection Act and are subject to inspections by the Ministry of the Environment and Climate Change.

Source site: Sites that generate *excess soil*. They are often construction or development sites or projects where *excess soil* is excavated and must be managed.