




# **Best Practices for Hauling for Consideration with**

## **O. Reg. 406/19: On-site and Excess Soil Management in Ontario**

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# 1. Background

These best practices are intended to complement legal requirements; they are not themselves legal requirements or approvals and must not be taken to be. They are subject to and do not replace legislation or legally binding documents of other kinds. Those who create, manage, transport, receive or store excess soil must be familiar with and remain responsible for complying with all applicable current legislation and other legal requirements.

The best practices are intended to provide general concepts which may be used to address the general management of excess soil for beneficial reuse purposes.

## 1.1 Use of this Document

This document applies to the hauling of excess soils, which is defined as soil, crushed rock or soil mixed with rock or crushed rock, that has been excavated, mainly during construction activities, which cannot or will not be reused at the site where the soil was excavated and must be moved off site. Excess soils are free of contaminants, or relatively clean soil. In some cases, excess soil may be temporarily stored and/or processed 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 is also important to note that excess soil also includes liquid soils - which are excess soils that do not meet the slump test that is outlined in Schedule 9 of Regulation 347. Liquid soil can include sediment cleaned out of a stormwater management pond, materials dredged from a lakebed or excess soils that happen to be in a liquid state when excavated.

The regulatory requirements apply to all loads; however, the best practices may not be as relevant for small, low-risk activities. Those involved with smaller-scale projects and management activities are encouraged to consider which of these best practices may be useful and adopt the best practices accordingly.

## 1.2 Context

In December 2019, the Government of Ontario announced new regulations governing the use of Excess Soils under the Environmental Protection Act (EPA) “O. Reg. 406/19: On-Site and Excess Soil Management” and the accompanying “Rules for Soil Management and Excess Soil Quality Standards” document that is adopted by reference in the Regulation. An amendment was released changing the initial in force date to January 1, 2021 from July 1, 2020. Additional amendments were made in December 2020 under [O. Reg. 775/20](#).

Soil is an important resource. The protection and conservation of soil in Ontario is a valuable component of maintaining the environment for present and future generations. The Ministry of the Environment, Conservation and Parks (MECP) encourages the beneficial reuse of excess soil in a manner promoting sustainability and the protection of the environment. The best practices described within this document are intended to assist those managing excess soil, particularly when the soil may not be affected by contamination, so that excess soil is managed in a manner where human health and the environment are protected, and to ensure the prevention and mitigation of any potential adverse effects.

It should be noted that the MECP has stated the goals of the On-site and Excess Soil Management Regulatory Framework include the following:

- Provide clear rules on managing and reusing excess soil,
- Limit soil being sent to landfill,
- Reduces greenhouse gas emissions from soil transportation,

- Reduce current burden and cost of excess soil management, while continuing to ensure strong environmental protection,
- Remove barriers to brownfield redevelopment, and
- Encourage the environmentally responsible beneficial reuse of excess soils.

### 1.2.1 Greenhouse Gas Emissions

Of particular note is the reduction of greenhouse gas (GHG) emissions. As such, every aspect of applying the Regulation and employing these best practices should include considerations for climate change and GHGs reduction, wherever possible. It is important to note that many GHG emission reduction actions will also result in savings on time and overall costs (e.g., fuel consumption reductions). Reducing GHG emissions does not mean economic losses. When planning your excess soil management activities seek opportunities to both reduce GHG emissions and find efficiencies of operational fuel and energy needs.

Steps should be taken throughout the project to:

- Where possible, promote the use of local firms and resources,
- Minimize the generation of excess soils from Project Areas,
- Reuse the soil on the project area as much as possible,
- Consider the establishment and use of Temporary Sites to maximize beneficial reuse options locally, where applicable,
- Where transportation of excess soils is required for a project, care should be taken to identify appropriate reuse sites that reduce the distance the soil travels, and
- Integrate technology and tracking systems to provide route optimization for hauling, to reduce fuel costs, time and GHG emissions. Carefully select routes and transport times of day that includes not only the shortest distance, but also with consideration to traffic congestion and idling times.

Considerations to reduce GHG emissions should be integrated as early as possible in the project life cycle to generate the highest reductions of GHG emissions and energy efficiency savings.

### 1.3 Definitions

The following definitions are applicable for this document (and are provided for convenience). Official Definitions should be reviewed in the relevant Regulations.

<b>Soil</b>	As defined in Ontario Regulation 153/04 (Records of Site Condition Part XV.1 of the Act): “unconsolidated naturally occurring mineral particles and other naturally occurring material resulting from the natural breakdown of rock or organic matter by physical, chemical or biological processes that are smaller than 2 millimetres in size or that pass the US #10 sieve.”
<b>Excess Soils</b>	Soil, crushed rock or soil mixed with rock or crushed rock, that has been excavated as part of a project and removed from the project area for the project. Excess soils 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 and/or processed 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. Excess soil is non-hazardous, hazardous soil is by definition not excess soil and is considered waste.
<b>Liquid Soil</b>	Soil that has a slump of more than 150 millimetres using the Test Method for the Determination of “Liquid Waste” (slump test) set out in <a href="#">Schedule 9 to Regulation 347</a> .
<b>Dry Soil</b>	Soil that is not liquid soil.
<b>Regulation</b>	The Regulation refers to <a href="#">O. Reg. 406/19: On-Site and Excess Soil Management</a> , unless stated otherwise.
<b>Soil Rules</b>	Rules or Soil Rules refers to the document entitled “Part I: Rules for Soil Management”, published by the Ministry and as amended from time to time, available on a website of the Government of Ontario as Part I of the document entitled “Rules for Soil Management and Excess Soil Quality Standards”, unless stated otherwise.
<b>Standards</b>	Standards, refers to the document entitled “Part II: Excess Soil Quality Standards”, published by the Ministry and dated December 8, 2020, available on a website of the Government of Ontario as Part II of the document entitled “Rules for Soil Management and Excess Soil Quality Standards.
<b>Qualified Person (QP)</b>	<p>Within the meaning of Section 5 of Ontario Regulation 153/04, QPs are Professional Geoscientists and Professional Engineers. A QP is someone who can exercise professional judgment based on his or her experience in order to advise on appropriate reuse options for the excavated soil or excess soil, and make these decisions based on appropriate analysis and characterization of the soil.</p> <p>QPs either have a licence under the <i>Professional Engineers Act</i> 1990, or a certificate of registration under the <i>Professional Geoscientists Act, 2000</i>.</p>
<b>Supervisee</b>	An individual who is supervised by a Qualified Person.
<b>Project</b>	<p>Any project that involves the excavation of soil and includes:</p> <ol style="list-style-type: none"> <li>a. any form of development or site alteration,</li> <li>b. the construction, reconstruction, erecting or placing of a building or structure of any kind,</li> <li>c. the establishment, replacement, alteration or extension of infrastructure, or</li> <li>d. any removal of liquid soil or sediment from a surface water body.</li> </ol>
<b>Project Area</b>	In respect of a project, a single property or adjoining properties on which the project is carried out.

	A project area can include various forms of development involving the excavation of soil including site alteration, construction and removal of liquid soil or sediment from a stormwater management pond or a surface water body.
<b>Project Leader</b>	In respect of a project, the person or persons who are ultimately responsible for making decisions relating to the planning and implementation of the project.
<b>Hauler</b>	The owner or operator of a vehicle used to transport excess soils. Referred to in this document as the hauler, but may also be identified as shippers, transporters or drivers.
<b>Hauling Record</b>	Information required to accompany each load of excess soil and to be carried by the person operating a vehicle for the transport of excess soil. Details must include: location, date and time the excess soil was loaded for transportation; the quantity of excess soil in the load; name and contact details for the person that can be contacted for inquiries about the load and the soil quality; name of the hauler, the driver and the license plate; the location where the soil is to be deposited. There is no specific form provided that needs to be filled. [Note: from the period of January 1, 2021 to January 1, 2022, fewer hauling record details are required and it can be provided verbally.]
<b>Bill of Lading/Manifest/Ticket</b>	These are records required by companies and entities engaged in the tracking and movement of excess soils. They may not refer to the required Hauling Record document required by the regulation though they are likely to have similar information included on them. If all Hauling Record required information is included on these documents they can also serve as the Hauling Record.
<b>Class 1 Soil Management Facility</b>	A soil bank storage site or a soil processing site; [must be operated under a waste-Environmental Compliance Approval].
<b>Class 2 Soil Management Facility</b>	A waste disposal site, at which excess soil is managed on a temporary basis and that is: <ul style="list-style-type: none"> <li>a. located on a property owned by a public body or by the Project Leader for the project from which the excess soil was excavated, and</li> <li>b. operated by the Project Leader for the project from which the excess soil was excavated.</li> </ul>
<b>Soil Bank Storage Site</b>	A waste disposal site, other than a Class 2 soil management site, at which excess soil is managed on a temporary basis and that is operated, by a person who is <b>not the Project Leader</b> for all of the projects from which the excess soil was excavated, for the primary purpose of storing the excess soil from one or more projects until the excess soil can be transported to a site for final placement or

<p><b>Soil Processing Site</b></p>	<p>disposal [must be operated under a waste-Environmental Compliance Approval].</p> <p>A waste disposal site, other than a Class 2 soil management site or soil bank storage site, at which excess soil is managed on a temporary basis, that is operated for the <u>primary purpose of processing excess soil in order to reduce contaminants</u> in the excess soil [must be operated under a waste-Environmental Compliance Approval].</p>
<p><b>Low Risk Processing Activities</b></p>	<p>Must occur at the Project Area, at a Class 2 Soil Management Sites or at a Local Waste Transfer Facility and includes:</p> <ul style="list-style-type: none"> <li>i. Passive aeration;</li> <li>ii. Mixing of soil [for Class 2 Soil Management Sites: from projects that have the same Project Leader] and provided that the soil being mixed with it is of similar quality to it, is destined for the same reuse site and the mixing is not carried out for the purpose of diluting the concentration of contaminants in the soil.</li> <li>iii. Soil turning;</li> <li>iv. Size-based sorting;</li> <li>v. Sorting it for the purpose of removing debris; and</li> <li>vi. Passive or Mechanical dewatering [only at Project Area or Local Waste Transfer Facility].</li> </ul> <p>Under certain circumstances, and if regulatory rules are followed, natural additives or polymers can be mixed with liquid soil, this is for the purpose of solidification/dewatering soils for transport and is not intended for the purpose of reducing concentration of contaminants into the soil. These can occur without the need to obtain a waste ECA.</p>
<p><b>Local Waste Transfer Facility</b></p>	<p>Has the same meaning as in Regulation 347 and is a site:</p> <ul style="list-style-type: none"> <li>a. at which waste from field operations is received, bulked, temporarily stored and transferred,</li> <li>b. that is owned or controlled by the person who undertakes the field operations referred to in clause (a) or by a person on whose behalf those field operations are undertaken,</li> <li>c. at which no waste is received other than waste from field operations,</li> <li>d. that is used primarily for functions other than waste management, and</li> <li>e. that engages in low risk processing activities.</li> </ul>
<p><b>Registry</b></p>	<p>The registry is described in <a href="#">Section 50 of the Resource Recovery and Circular Economy Act, 2016</a>.</p>



<b>Reuse Site</b>	A site at which excess soil is used for a beneficial purpose and does not include a waste disposal site.
<b>Waste Disposal Site</b>	<p>Has the same meaning as in the EPA and means:</p> <ul style="list-style-type: none"> <li>a. any land upon, into, in or through which, or building or structure in which, waste is deposited, disposed of, handled, stored, transferred, treated or processed, and</li> <li>b. any operation carried out or machinery or equipment used in connection with the depositing, disposal, handling, storage, transfer, treatment or processing</li> </ul> <p>[operated under a waste-Environmental Compliance Approval]</p>
<b>Waste</b>	Regulation 406/19 does not address non-soil materials classified as waste. Please refer to Regulation 347 (as amended) for the full list and conditions for which materials are classified as wastes and how they should be appropriately managed.

Additional definitions can be reviewed in the current versions of [O. Reg. 406/19](#), the adopted [Rules for Soil Management and Excess Soil Quality Standards](#), [O. Reg. 153/04](#), [O. Reg. 347](#) and the [Environmental Protection Act \(EPA\)](#).

For additional relevant legislation, regulations, guidance and tools see [Additional Resources](#).

## 2. Responsibilities

### 2.1 Haulers

Under O. Reg. 406/19 haulers are responsible for ensuring their vehicle is in good condition and safe to operate and they can safely transport soils without creating distractions for other drivers. The haulers are also responsible for ensuring that the **Hauling Record Templates** is properly filled out and with them during the pick-up, transportation and delivery of the excess soils and that copies are distributed to the Project Leader and Reuse Site as outlined by the Regulation. Further details regarding the requirements and best practices for the hauler are outlined below.

#### 2.1.1 Vehicle Safety and Maintenance

##### **Regulatory Requirements (O. Reg. 406/19 Section 17(3))**

(3) The owner and operator of a vehicle transporting excess soil that is not designated as waste shall ensure that the excess soil is collected and transported in accordance with the following rules:

1. The excess soil shall only be collected and transported in a vehicle that has been constructed to enable the excess soil be transferred safely and without nuisance.
2. Bodies of vehicles shall be constructed to withstand abrasion and corrosion from the excess soil.
3. Bodies of vehicles shall be leakproof and covered where necessary to prevent the emission of offensive odours, the falling or blowing of material from the vehicle or the release of dust or other airborne materials that may cause air pollution.

##### **Plain Language Summary**

- Haulers must be aware of the regulatory requirements under O. Reg. 406/19 for transporting excess soils (generally relatively clean, uncontaminated soil);
- Haulers collecting excess soils must ensure that their vehicles can transport soils safely by ensuring:
  - Vehicle bodies can withstand abrasion or corrosion caused from transporting excess soils
  - Vehicles shall be leakproof when necessary
  - Vehicles shall prevent the emission of offensive odours
  - Vehicles shall prevent falling or blowing of material, including dust and other airborne material, from the vehicles (loads are to be tarped)

##### **Best Practices**

- Limit nuisances
  - Keep vehicles clean and free of mud and debris that will be tracked on public roadways.
  - Ensure tarps and dump gates are in good working order to prevent dust and spills or leaks of soil materials during transport.

### **Other Regulatory Considerations for Haulers**

Haulers must operate their vehicles per MTO regulation and guidance including adhering to [Commercial Vehicle Safety Requirements](#), which entails conducting annual, semi-annual and daily inspections and reports ([HTA Reg. 199/07](#)).

Compliance with commercial vehicle regulations is enforced on-road by the MTO enforcement officers and police officers, as well as through facility audits.

Ministry officers and police conduct inspections on commercial vehicles to make sure they are being operated safely by qualified drivers. Where a commercial motor vehicle or trailer is found to be in such an unsafe condition that it endangers other people on the highway, the vehicle may be prohibited from operating until required repairs are made.

Commercial vehicle drivers and companies that fail to comply with many of these requirements may be fined up to \$20,000.

### **2.1.2 Fuel Efficiency**

Smart driving practices can improve the efficiency of vehicles and reduce the amount of greenhouse gases emitted during its regular operations. According to the [MTO Truck Handbook](#) the following practices can improve fuel efficiency, reduce expenses with the added benefit of reducing greenhouse gas emissions.

#### **Best Practices**

- When starting your vehicle, make sure you use zero throttle and are in a gear that doesn't need any throttle.
- Don't pump the throttle unnecessarily; the amount of fuel required for starting is pre-measured. Pumping the throttle wastes fuel and can damage cylinder walls.
- Use ether sparingly when having difficulty starting your engine; excessive use can harm the engine.
- Let your vehicle warm up for three to five minutes — if the temperature is below 0 degrees Celsius, allow it warm up for seven to 10 minutes. Do not rev the engine; let it warm up gradually.
- Warm up your vehicle after the initial idle time by driving easily; don't try to get too much speed out of the engine by pushing the throttle down hard.
- Ensure oil and air pressure are in their normal operating ranges during start-up.
- Back off the accelerator when going down a hill; let gravity and momentum do the work.
- Use cruise control where appropriate.
- Change gears smoothly - shifting professionally will result in about 30 per cent improvement in operating costs.
- Always use the clutch; failure to do so can wear down the gear teeth in the transmission.
- Practise progressive gear shifting at approximately 1600 rpm. Shifting before you reach the maximum governed rpm reduces equipment wear, decreases noise levels and saves fuel.
- Run the engine in the highest gear range to keep it in a low-rev range.
- Use your retarder properly and turn it off when you don't need it. Allow the terrain to work for you.
- Turn off your engine when you stop for any length of time. You will save fuel, reduce maintenance requirements, prolong engine life and prevent unnecessary emissions.

### **2.1.3 Hauling Record**

From January 1, 2021 to January 1, 2022 only some details regarding the load is required to be provided by the hauler. See the list of verbal details required in the [Verbal Details \(for use until January 1, 2022\)](#) section below.

This Hauling Record must contain specific information collected from the source site, the hauler and from the deposit site. Prior to January 1, 2022 haulers are not required to keep a written record of the required information and can provide it verbally. See [Hauling Record Templates](#) to see sample documents.

The following sections will provide a plain language description of the information required for the Hauling Record at each stage of the process as well as additional best practices for haulers.

The hauler is legally required under the regulation to collect information for the Hauling Record.

## **Regulatory Requirements (O. Reg. 406/19 Section 18 and 29(2))\***

*\*Note that Section 18 of the regulation is in force from January 1, 2021 until January 1, 2022, at which time it is revoked and replaced with Section 29 (2). Section 18 allows for the verbal exchange of information, Section 29 (2) includes requirements for an electronic or hard copy hauling record.*

### **Section 18 (January 1, 2021 to January 1, 2022)**

18. A person who is operating a vehicle for the purpose of transporting excess soil shall provide the following information to any provincial officer, upon request:

1. The location at which the excess soil was loaded for transportation.
2. The date and time the excess soil was loaded for transportation.
3. The quantity of excess soil in the load.
4. The name of an individual who may be contacted to respond to inquiries regarding the load, including inquiries regarding the soil quality.
5. The name of the corporation, partnership or firm transporting the excess soil, the name of the driver of the vehicle and the number plates issued for the vehicle under the *Highway Traffic Act*.
6. The location at which the excess soil is to be deposited.

### **Section 29 (2) (January 1, 2022)**

18. (1) A person who is operating a vehicle for the purpose of transporting excess soil shall ensure that the record including the following information is available at all times during the transportation:

1. The location at which the excess soil was loaded for transportation.
2. The date and time the excess soil was loaded for transportation.
3. The quantity of excess soil in the load.
4. The name of an individual who may be contacted to respond to inquiries regarding the load, including inquiries regarding the soil quality.
5. The name of the corporation, partnership or firm transporting the excess soil, the name of the driver of the vehicle and the number plates issued for the vehicle under the *Highway Traffic Act*.
6. The location at which the excess soil is to be deposited.

(2) Upon arriving at a Class 1 soil management site, Class 2 soil management site, reuse site, local waste transfer facility, landfilling site or dump, the person who is transporting the excess soil shall ensure that the record mentioned in subsection (1) includes the following:

1. The date and time the load of soil is deposited.
2. The name and phone number of the individual at the Class 1 soil management site, Class 2 soil management site, reuse site, local waste transfer facility, landfilling site or dump who acknowledges that the excess soil has been deposited on the date and at the time specified under paragraph 1.
3. A declaration by the individual mentioned in paragraph 2, stating that he individual acknowledges the deposit of the excess soil.

(3) The person who is transporting the excess soil shall ensure that the individual mentioned in paragraph 2 of subsection (2) is given a copy of the record containing the information mentioned in that subsection.

### **Plain Language Hauling Record information required prior to exiting the Project Area**

The Hauler must ensure they either fill in or collect the following information from the Project Leader, or another designate, prior to transportation:

- Location the soil is coming from,
- date and time the soil was loaded,
- quantity of soil in the load,
- name of person who can be contacted for questions regarding the soil,
- name of business transporting the soil,
- name of driver transporting the soil,
- license plate number on the vehicle transporting the soil, and
- location the soil is to be deposited.

As of January 1, 2022, this record must have a also include a declaration and be in hard copy or electronic form.

### **Best Practices**

It is never the responsibility of the Hauler to select where the excess soil will be deposited. It is always the responsibility of the Project Leader to determine in advance an appropriate receiving location and, if required, to arrange for a contingency site location in the event the soil is deemed unsuitable for the first location.

Due to the extensive and very specific information haulers are required to collect, haulers and hauling companies should work towards creating a written or electronic Hauling Record with all required details by January 1, 2021, even though a written record is not required until Jan. 1, 2022.

Some of the information required for the Hauling Record may already be collected through hauling companies' tickets, bills of lading, manifests or other documentation. Hauling companies should review the information they currently require and update their forms to ensure all required information is collected. In some cases, one hauling record may be used to pick up multiple loads, this is permissible under the regulation as long as all the information for each soil movement is included in the record.

### **Case Study: Multiple Loads**

When picking up multiple loads they can be recorded by individual Hauling Records or through a multiple site Hauling Record. When picking up from multiple sites it is still the ultimate responsibility of the Project Leader to determine the final destination for that load.

In some situations, the hauler may make recommendations or suggestions for where that load will go when low-risk such as residential areas; however, the Project Leader must agree in advance to the final destination and is ultimately responsible for the quality of the soil and the final destination of that soil. Where haulers recommend a final destination, they should ensure the Project Leader is aware in advance of the proposed final destination and that the location is appropriate given their liability for both the quality of the soil and the final site destination.

If a Hauler is delivering excess soils (and responsibly determines that soils are "clean" and appropriate) to an ECA-waste approved facility it is now designated and treated as waste material. The owner of that facility now becomes the new Project Leader and the ECA site will now be required to carry out any required testing and approved management controls.

See below section **Multiple Sites** for more information.

### 2.1.4 Loading and Transport

Drivers should wear the appropriate personal protective equipment on job sites when outside the truck including safety hard hat, safety glasses, reflective safety vest and eight-inch steel-toe safety shoes (required under the [Occupational Health and Safety Act](#)).

#### **Best Practices**

To ensure safe loading and responsible transport, it is recommended that Haulers:

- Ensure their trailer boxes are clean before loading the soil;
- conduct a visual inspection of the load and be present when their vehicle is being loaded;
- only use environmentally friendly anti-freezing agents that do not contaminate the soil. Haulers should not use diesel or other contaminants to keep soil from freezing. Haulers could spray a non-hazardous mixture or spread a plastic sheet on the box floor to address freezing concerns;
- ensure trailer tailgates are secure and locked before getting a load to avoid leakages (vehicle leakages are subject to penalties);
- ensure the load is evenly distributed in the trailer;
- act to limit nuisances, including:
  - avoid queuing on public roadways,
  - limit time spent idling to reduce noise, air pollution and greenhouse gas emissions, and
  - avoid tailgate banging to limit noise pollution and disruption to neighbours.
- Select appropriate transportation **Routes** (see more details in Section 3).

#### **Other Regulatory Considerations for Haulers**

Haulers must operate their vehicles per MTO regulation and guidance including:

- Adhering to traffic and road laws, and selecting appropriate routes
- Acting as a [safe and responsible driver](#)
- maintaining driving logs and maintaining proper on-duty/off-duty hours
- maintaining legal load weight limits
- [properly securing cargo](#)

See the [MTO Truck Handbook](#) for more details.

## 2.1.5 Delivery

### **Plain Language Requirements at the Reuse Site – in effect as of Jan. 1, 2022**

- Prior to leaving the site where excess soil was deposited, the haulers need to ensure the following information is included on the Hauling Record:
  - Date and time the load was deposited,
  - name of the individual at the site who accepted the load, and
  - a signature from the individual at the site who accepted the load.
- The site accepting the load could be a Class 1 soil management site, Class 2 soil management site, local waste transfer facility, reuse site, landfilling site or dump.
- The Hauler is responsible for ensuring the individual who accepted the load at the site is given a copy of the completed hauling record (or access to electronic version if paper versions are not used).

### **Other Regulatory Considerations**

Illegal dumping of excess soils is prohibited in every circumstance under the EPA as well as in municipal by-laws.

**Haulers should only deposit soil at sites selected by the Project Leader.**

There are specific considerations and requirements if loads are rejected at the deposit site. See [Rejected Loads and Contingency Planning](#) for more information.

### **Best Practices**

During delivery and deposit of the excess soils at the deposit site, Haulers should, where applicable, consider the following practices:

- Avoid queuing on public roadways whenever possible,
- limit truck idling to reduce emissions,
- confirm the specific location where the soil is to be deposited, with the deposit site prior to unloading,
- comply with all site and safety controls, including traffic flows and speeds, at the deposit site,
- remain with their trucks while unloading,
- check trailer box before lowering for any leftover material and cleanliness,
- wash vehicle wheels before leaving the site to avoid contamination on the road and surrounding areas (where feasible and facilities are provided),
- clean out their trailers after depositing every load to avoid contamination, and
- avoid tailgate banging to limit noise nuisances.



## 2.1.6 Record Keeping for Haulers

### **Regulatory Requirements** (O. Reg. 406/19 Section 28)

(5) A person transporting excess soil and all persons mentioned in subsection (1) shall retain a record required under Section 18 (29) in respect of excess soil for a period of at least two years after the day that the excess soil was loaded for transportation.

### **Plain Language Requirements for Record Keeping for Haulers**

Haulers and hauling management companies must retain Hauling Records for two years from the date the soil was loaded for transportation, starting January 1, 2021.

## **Best Practices**

In order to keep clear accurate records, Haulers and hauling companies are encouraged to:

- Keep daily summary of all loads;
- provide a weekly summary of loads and where they are to be transported to the Project Areas including rejected loads; and,
- consider using a GPS system.

## 2.1.7 Multiple Sites

For the purposes of tracking excess soils effective January 1, 2022, a hauler must provide a written or electronic record called the Hauling Record covering specific information collected about the source sites, the hauler and the final deposit site. This includes soil picked up from multiple sites (see a sample **Form for Multiple Pick-up Sites**).

Most multiple site pickups typically involve small soil volumes from lower risk infrastructure type projects and sites where there may not always be a designated Project Leader directly involved. The Hauler needs to work with the property owner, contracted companies involved or a designated Project Leader for the required generator information and any contingency plans. All parties must agree, select and confirm in advance of loading, where excess soils will be deposited. Any excess soil picked up in small quantities may be compiled into soil stock piles at temporary sites to confirm soil quality before being delivered to the final reuse sites.

Through the use of the appropriate hauling forms and tracking systems the Project Leader will have determined in advance that the deposit site that is being utilized can accept the soil and ensure that the quality of the collected co-mingled soils follows O. Reg. 406/19, and other associated regulatory requirements.

## **Best Practice**

The recommended best practices and associated hauling record form for the tracking of excess soils picked up from multiple sites recognizes a number of unique factors. The nature of the work involves small locations and small volumes of soil typically from lower risk infrastructure type projects. Client generators are not typically on-site and an owner's representative or Project Leader is usually not directly involved with actual pickups.

The majority of multiple pickup sites are tactical in nature not affording the lead planning time to physically assess and analyze the small amounts of soil involved in advance of loading. Consequently, the primary onus for loading the soil often reverts to the hauler. As the multiple pickups are made the collected excess soil is comingled with material from other small projects

and sites combining into one load. As such, where possible and available, analytical results for the soil should be provided, compiled and retained by each party along the path from generating site to final deposition.

The current industry management practice is for the hauler to deposit the “end of day” compiled load at a previously designated approved storage location on an interim, temporary basis. This location may be a property or yard owned and/or designated by the generating site owner or an independent location owned or arranged for by the hauler involved and approved by soil owner(s) in advance. In some cases, temporary sites will require an ECA.

If consistent with regulatory requirements, the temporary locations would constitute a Class 2 soil management site, or possibly a local waste transfer facility. In accordance with O. Reg. 406/19, the collected and comingled excess soil would be sampled and registered for final disposition to an acceptable receiving site or waste disposal site depending on their quality. The following practice are suggested:

- Prior to arranging the pick-up of the excess soil, analytical results that are available should be provided to the hauler and the deposit location.
- As excess soil generators for multiple sites are generally smaller, they may not be aware of their regulatory obligations under O. Reg. 406/19, haulers should assist in educating the generator of their responsibilities and may support them in selecting an appropriate deposit site when needed.
- Haulers should consider delivering the excess soil to a facility licensed with an appropriate Environmental Compliance Approval (issued by the MECP), to ensure proper management if and when upon sampling the load is determined not to be excess soil, but contaminated soil and/or waste material.

## **2.1.8 Hauling Company Management Considerations**

### **Best Practices**

Hauling companies should provide the following support to the haulers including both employee and contract operators. Hauling companies may face legal and insurance concerns for not following the proper due diligence to ensure haulers are knowledgeable about health and safety practices and Regulations. To demonstrate due diligence and ensure the health and safety of their employees, hauling companies should consider adopting the following best practices in their training and communications:

- Provide proper training on current regulatory requirements to their employees and contract operators, communicate any updates to the Regulation in a timely manner and provide opportunities to review the Regulations as needed;
- provide proper training on procedures for receiving loads and unloading at deposit sites;
- ensure drivers know how to read and properly fill out the Hauling Record;
- provide regular safety orientations; and,
- communicate requirements for dispatch and communication to the Haulers.

Hauling companies should review what information they currently collect during the transportation process to ensure that the information that needs to be collected under the Regulation is included. Hauling companies should highlight the legally required sections in the forms they provide to their operators and provide proper training on filling out the form. Any required adaptations to current forms should be integrated as soon as possible despite the option to present the required

information verbally until January 1, 2022. For more information and samples see the [Hauling Record Templates](#).

## 2.2 Project Leaders

The Project Leader is the decision-maker involved at the Project Area responsible for the excess soil.

### **Plain Language Requirements for Project Leaders related to Hauling**

Project Leaders (or their designates) are responsible for:

- selecting the appropriate deposit sites for all excess soils and communicate these to the Haulers;
- if planning requirements are triggered, working with QPs to identify a contingency plan for rejected loads, including instructions to be provided to the operator of the vehicle hauling excess soil from the Project Area (expanded in [Contingency Planning](#));
- providing any required information to the Hauler for the Hauling Record (expanded in [Tracking](#)); and
- must maintain general records for seven years and Hauling Records for two years (expanded in [Record Keeping](#)).

### **Best Practices**

To minimize their liability, it is in the best interests of the Project Leader or operator of a Project Area to consider integrating the following practices. Project Leaders and Project Area operators should consider:

- Selecting responsible Haulers and hauling companies; some tools for determining responsible Haulers include:
  - proper insurance certificates,
  - proper WSIB coverage,
  - reviewing their profile on the [Commercial Vehicle Operators Record \(CVOR\)](#).
- Allowing Haulers to leave their vehicle and inspect the load (with appropriate PPE and safety rules);
- ensuring respectful communication with Haulers;
- deferring to Haulers in respect to loading their vehicles and weight restrictions;
- ensuring that [Rejected Loads and Contingency Planning](#) include proper and fair compensation for the Hauler for delays and rerouting requirements when a load is rejected;
- conducting an audit of the hauling process to ensure they understand routing, travel times and conditions at the deposit site, particularly for larger sites;
- informing Haulers about any route restrictions and advise on best potential routes;
- where feasible, leveraging technology to provide real-time load tracking, this limits the risk of illegal dumping going unnoticed and allows the Project Leader more supervision without reducing efficiency in the hauling process;
- ensuring deposit sites know how to contact the Project Leader (or designate) prior to sending soil and communicating who should be contacted when a load is rejected;
- creating a [Traffic and Transportation Management Plan](#) Sample Information; and,

- identifying deposit sites located near to the Project Area to reduce greenhouse gas emission generated by hauling, in collaboration with the QP.

**Case Study: Taking excess soils to an ECA facility**

Where excess soils are sent to a waste-ECA approved facility once the soil is accepted by the facility it is then no longer the liability of the original Project Leader. The ECA facility becomes the new owner of the soils also known as the Project Leader if another transfer takes place.

### **2.2.1 Tracking**

The Regulation and Soil Rules includes requirements for the source site generating excess soil, to have a tracking system in place for certain excess soil movements. Although the tracking system is not the responsibility of the hauler, in some cases it may be integrated with the hauling record.

**Regulatory Requirements for Tracking System (O. Reg. 406/19 Section 16)**

16. The project leader for a project shall, if the project leader is required to file a notice under section 8 in respect of the project, before removing from the project area soil that will become excess soil once removed, develop and apply a tracking system, in accordance with the Soil Rules to track each load of excess soil during its transportation and deposit to a reuse site, local waste transfer facility, landfilling site or dump, and any transportation to and from a Class 2 soil management site.

**Rules for Soil Management for Tracking Systems** ([Soil Rules Document, Section 5](#))

(1) For the purposes of section 16 of the regulation, a tracking system must be capable of tracking the following information in respect of each load of excess soil that is removed from the project area:

1. The locations of the project area where the soil was excavated and stockpiled, if applicable, and the quality of the soil associated with those locations and stockpiles.
2. The quality of the load of excess soil being removed from the project area, unless the soil is to be sampled at a Class 2 soil management site.
3. The quantity of the load of excess soil being removed from the project area.
4. The location of the site at which the excess soil is to be deposited as communicated to the driver of the vehicle.
5. The date and time the excess soil left the project area.
6. The person from the project area responsible for overseeing the loading of the excess soil for transportation.
7. The name of the corporation, partnership or firm transporting the excess soil, the name of the driver of the vehicle and the number plates issued for the vehicle under the Highway Traffic Act.
8. The date and time the excess soil was received at the site where the excess soil has been deposited.
9. The contact information of the person who acknowledged receipt of the load of excess soil on behalf of the site where the excess soil was deposited.
10. Confirmation that the vehicle that deposited the excess soil and the volume of soil received at the site where the excess soil was deposited is the same as that which left the project area.

*Continued on next page Section 5(2)...*

### **Rules for Soil Management for Tracking Systems** (Soil Rules Document, Section 5)

(2) If excess soil is to be managed temporarily at a Class 2 soil management site, all the information described in subsection 5 (1) in Section B of PART I of this document (above) must be tracked by the project leader, or the operator of the Class 2 soil management site, in respect of each load of excess soil which has been managed at that site and “project area” shall be substituted with “Class 2 soil management site”.

(3) The tracking system must be capable of tracking information in respect of the total number of vehicles and total volume of excess soil that has left a project area for a site at which the excess is to be deposited and confirmation that the total number of trucks and volume of excess soil received at the site is the same as that which left the project area.

(4) The tracking system must be able to produce reports upon request to respond to any inquiries with respect to the information of each load of excess soil to be tracked.

(5) The tracking system must include procedures or other methods to verify the accuracy of the information required to be tracked in respect of each load of excess soil that is to be removed from the project area.

(6) The tracking system must include procedures or other methods to prevent any form of fraud or other wrongdoing in the management and transportation of excess soil.

### **Information required from the Project Area for the Hauling Record**

The Hauler is ultimately responsible to ensure a properly filled out Hauling Record prior to leaving the Project Area. Project Leaders should assist to expediate this process by preparing some or all of the following information for Haulers:

- Location the soil is coming from;
- Date and time the soil was loaded;
- Quantity of soil in the load;
- Name of person who can be contacted for questions regarding the soil;
- Name of business transporting the soil;
- Name of driver transporting the soil; and,
- Location the soil is to be deposited\*.

#### Additional information that could be provided to the Hauler for the Hauling Record

- Soil analysis that is representative; and,
- confirmation that the excess soil meets the acceptance standards required by the deposit site.

### **Best Practice**

It is reminded that it is never the responsibility of the Hauler to select where the excess soil will be deposited. It is always the responsibility of the Project Leader.

To streamline the process of tracking and providing haulers with the required information to fill in the Hauling Record, Project Area operators should consider how they can provide the Hauling Record information in an efficient and timely manner. A number of factors will determine the best tracking system including, number of loads of soil, duration of site activity, number of haulers contracted, etc.

Project Area operators should review their tracking and ticket/manifest/bill of lading system to ensure the required information for the Hauling Record is integrated into that system. See **Hauling Record Templates** for samples.

Where practical, it is recommended to consider electronic tracking systems that integrate both the tracking and provide a system of producing the required information for haulers for the Hauling Record. Consideration should also be given to integrating electronic records that support soil management activities e.g., analytical results, soil analysis reports, etc.

Benefits of electronic tracking systems:

- Instant hauling record uploads,
- live, real-time tracking,
- route optimization leading to timesaving, reduced fuel costs and GHG emission reductions,
- simplifies administrative and filing processes, and
- reduces management of paper records and storage saving time and reducing errors such as lost tickets.

## 2.2.2 Project Leader – Record Keeping

### **Regulatory Requirements (O. Reg. 406/19 (28))**

28.(1) Subject to subsection (3) [respecting qualified persons], the following persons shall retain every document and record that the person created or acquired under this Regulation for a period of **at least seven years** after the date that the document or record is created or acquired:

1. A project leader or an operator of a project area.

(2) If A project leader or operator of a project area has entered into any contracts relating to the management of excess soil from the project area, including the transporting of excess soil from the project area, the project leader or operator of the project area shall retain the contract for at least seven years after the date the contract was entered into.

(3) Section 28 of this Regulation is amended by adding the following subsection:

(5) A person transporting excess soil and all persons mentioned in subsection (1) shall retain a record required under section 18 in respect of excess soil for a period of **at least two years** after the day that the excess soil was loaded for transportation.

### **Plain Language Requirements for Record Keeping for Project Leaders**

Project Leaders must keep all documents relating to excess soils removed from the Project Area and related contracts for at least seven years after the date that the record was created, or the contract entered into. All parties must also keep the hauling record for a period of at least two years.

## **Best Practices**

Storage of all documentation can be electronic or paper depending on the sophistication of the site and volumes that the site intends on managing. Owners and operators can determine what best suits their needs.



## 2.3 Qualified Persons (QPs)

### **Regulatory Requirements for QPs for Hauling** (O. Reg. 406/19, Section 13)

13. (1) Subject to section 14, if the project leader for a project is required to file a notice under section 8 in respect of the project, the project leader shall ensure that, before filing the notice, a qualified person prepares or supervises the preparation of an excess soil destination assessment report in accordance with the Soil Rules.

(2) The report shall be based on the results of any required assessment of past uses of the project area, any required soil characterization report and any information gathered in respect of the potential sites at which the excess soil may be deposited and shall include the following:

1. Identification of each Class 1 soil management site, reuse site, local waste transfer facility, landfilling site or dump at which the excess soil will be deposited, including the location of each site.
2. Identification of contingency measure to be implemented in the event that the excess soil cannot be deposited at a site identified under paragraph 1 including the location of an alternate site.
3. An estimate of the quality and quantity of excess soil that will be deposited at each location identified under paragraph 1.

Also see [Rules for Excess Soils Management and Excess Soils Quality Standards, Section B.4 Excess Soils Destination Assessment Report](#).

### **Plain Language Requirements for QPs**

QPs will provide the Project Leader with the required information through the Destination Assessment Report including:

- The locations selection as deposit sites and collation of deposit site information; and,
- develop a contingency plan and support the selection of alternate sites.

The Project Leader may request the QP to be involved with assurance of specific details for the Hauling Records. The QP shall ensure that the details required to answer the questions regarding to soil quality required on the Hauling Record, is available to the Project Leader and/or the assignee of the Project Leader. Additionally, the QP will provide support on **Rejected Loads and Contingency Planning**.

The QP may be identified as the “person who may be contacted to respond to inquiries regarding the soil quality” on the Hauling Record (O. Reg. 406/19 18(1)4). This should be identified and agreed to with the project area operator at the project onset.

The QP may be asked to assist the Project Leader in determining appropriate reuse/processing/storage/disposal sites. The QP is responsible for liaising with the deposit site QP to ensure that the material intended to be shipped is acceptable to the site.

If a load is rejected, the QP at the Project Area should be informed by the Project Leader or other designate.



## 2.4 Deposit Sites

### **Regulatory Requirements for Deposit Sites for Receiving Loads** (O. Reg. 406/19 Section 19)

19(5) ... the procedures must provide for the following:

1. For each load deposited, identification of the project area, Class 1 soil management site or Class 2 soil management site from which the excess soil was transported.
2. Ensuring that all relevant reports and information in respect of the excess soil to be deposited at the [deposit] site are obtained by the owner or operator of the [deposit] site before the excess soil is deposited at the [deposit] site.
3. Ensuring that before the owner or operator of the [deposit] site permits a load of excess soil to be deposited at the site, the load is inspected by the owner or operator of the [deposit] site or a person acting on the owner or operator's behalf to ensure the load is appropriate for depositing at the site and that it is consistent with any reports and information referred to in paragraph 2.

### **Additional Considerations for Deposit Sites regarding the Hauling Record** (O. Reg. 406/19 Section 18 amended by Section 29)

2) Upon arriving at a Class 1 soil management site, Class 2 soil management site, [deposit] site, local waste transfer facility, landfilling site or dump, the person who is transporting the excess soil shall ensure that the record mentioned in subsection (1) includes the following:

1. The date and time the load of soil is deposited.
2. The name and phone number of the individual at the Class 1 soil management site, Class 2 soil management site, reuse site, local waste transfer facility, landfilling site or dump who acknowledges that the excess soil has been deposited on the date and at the time specified under paragraph 1.
3. A declaration by the individual mentioned in paragraph 2, stating that he individual acknowledges the deposit of the excess soil.

3) The person who is transporting the excess soil shall ensure that the individual mentioned in paragraph 2 of subsection (2) is given a copy of the record containing the information mentioned in that subsection.

### **Plain Language Requirements for Deposit Sites Receiving Loads**

For large reuse sites (10,000 m<sup>3</sup> or more) procedures for receiving loads at the deposit site must include the source where the soil was transported, copies of all relevant reports and information prior to the delivery, and the load is fully inspected to confirm that the material is acceptable and as represented in the reports.

Further, the Hauling Record shall be fully updated with the deposit site details and a declaration acknowledging the excess soil has been deposited. A copy of the completed Hauling Record shall be given to the deposit site representative.

## **Best Practices**

The Hauler is responsible for collecting the required information for the Hauling Record from the Project Area and from the deposit site. Deposit sites can expediate the process of filling out the Hauling Record by being prepared to provide the required information as outlined in the Regulation.

For site operations, deposit sites should consider, where relevant, integrating the following practices to ensure safe and efficient hauling takes place:

- Deposit sites should have clear site identification signage which identifies the address (for ease of Hauler's identification), contact name, hours of operations (with reference to local by-laws where appropriate), and a daily and after-hours contact telephone numbers;
- site operators should maintain site conditions, proper communication and engineered controls to ensure truck traffic is directed to the proper locations on site;
- deposit site inspectors should screen loads for odour, visible staining, or excessive debris before and during unloading;
- deposit sites should communicate when a load is rejected to the Project Leader or other designate at the Project Area, and ensure they highlight specific concerns with the load that was brought for delivery; and,
- deposit sites should develop a **Traffic and Transportation Management Plan**.

#### **2.4.1 Deposit Sites – Record Keeping**

##### **Regulatory Requirements** (O. Reg 406/19 Section 28)

28.(1) Subject to subsect (3), the following persons shall retain every document and record that the person created or acquired under this Regulation for a period of at least seven years after the date that the document or record is created or acquired:

2. An owner or operator of a Class 1 soil management site, [deposit] site, local waste transfer facility, landfilling site or dump.
3. An operator of a Class 2 soil management site.

##### **Plain Language Requirements for Record Keeping for Reuse Sites**

Deposit sites must keep all records of all soil management activities for seven years. Hauling Records must be kept by all parties for a period of two years, including by the reuse sites.

##### **Best Practices**

Storage of all documentation can be electronic or paper depending on the sophistication of the site and volumes that the site intends on receiving. Owners and operators can determine what best suits their needs.

### 3. Traffic and Transportation Management Plan

#### **Best Practices**

It is recommended that owners and operators engaged in excess soil management activities should have a *Traffic and Transportation Management Plan* that should address the following concerns and considerations:

- Location and configuration of site entrances;
- limit truck queuing and parking on public roadways;
- where feasible, integrate dust control and mud-tracking prevention/truck cleaning, some options for consideration include:
  - mud mats or truck rumble gates,
  - wheel washes and tire cleaning,
  - asphalt paved surfaces for truck traffic minimizing tire contact with dirt surfaces,
  - cleaning and sweeping on site, and/or
  - restriction of operating hours during wet conditions.
- Limit noise related to truck traffic, where feasible configure the site to use existing physical barriers such as buildings, fences or soil piles to act as a sound barrier.
- **Haul routes** between Project Areas, reuse or disposal sites and temporary soil storage sites should consider:
  - municipal trucking routes,
  - local load restrictions and seasonal load limits, particularly those for March – May,
  - avoid residential streets where possible,
  - attempt to reduce traffic congestion, particularly at peak traffic times and,
  - where possible, hauling routes should take the shortest (or fastest) available route to minimize greenhouse gas emissions.

When preparing a Traffic and Transportation Management Plan those managing excess soils should consult with local upper-tier and lower-tier municipalities regarding appropriate transportation routes.

To facilitate finding appropriate routes there are software solutions available to assist haulers in selecting appropriate routes. See the **Traffic and Transportation Management Plan Sample Information** for more details.

### 4. Stormwater Management Pond Sediment

Excess soils (in the form of sediment) are often removed from stormwater management ponds as part of maintaining a healthy municipal stormwater system. A stormwater management pond, also known as a wet pond, is a detention basin designed to temporarily store collected stormwater runoff and release it at a controlled rate ([Stormwater Management Plan and Design Manual, 2013](#)). O. Reg. 406/19 applies to any project that involves the excavation and removal of liquid soil or sediment from stormwater ponds ([O. Reg. 406/19, 1\(1\) “Project” definition](#)).

Wet sediment (liquid soil) must be hauled in vehicles that are equipped with valve locking systems to contain the “liquid soil”. One option may include but is not limited to hydro-vac trucks. See **Liquid Soilsuid Soils** for more information.

## **Best Practices**

Hauling stormwater pond sediment best practices will vary depending on the specific site, result of testing and the reuse plan. If dewatering on site is not possible, stormwater pond sediments could be dewatered at a municipal yard, where it is considered to be a local waste transfer facility or another facility that is appropriate to receive this type of material for storage and/or processing under a waste-ECA. If this is the case, appropriate hauling activities and precautions should be taken to ensure the safe transport of the liquid soil, refer to **Liquid Soilsuid Soils**.

## 5. Liquid Soils

Liquid soil is soil that has a slump of more than 150 millimetres using the Test Method for the Determination of “Liquid Waste” (slump test) set out in Schedule 9 of Regulation 347. The Regulation applies to any project that involves the excavation of soil and includes any removal of liquid soil or sediment from a surface water body or stormwater management pond ([O. Reg. 406/19, 1\(1\) “Project” definition](#)).

### 5.1 Vehicle Requirements and Operation

#### **Regulatory Requirements** ([O. Reg. 406/19 Section 17\(3\)](#))

(3) The owner and operator of a vehicle transporting excess soil that is not designated as waste shall ensure that the excess soil is collected and transported in accordance with the following rules:

4. If the soil is liquid soil,
  - i. valves that are part of the vehicle shall have a locking system and shall be locked when the vehicle contains the liquid soil and the owner or operator of the vehicle is not in attendance, and
  - ii. whenever liquid soil is being transferred to or from the vehicle, the owner or operator of the vehicle must be present.

#### **Plain Language Requirements for Hauling Liquid Soils**

- Operators are responsible for keeping their vehicle in good working order;
- vehicles hauling liquid soil must have an operation locking valve system;
- valves are locked when the operator is not with the vehicle; and,
- the vehicle operator is present when loading and unloading the vehicle.

#### **Other Regulatory Considerations**

Vehicle operators are subject to specific training requirements under [O. Reg. 347, C-12](#).

### 5.2 Hauling Record Requirements for Liquid Soil

#### **Best Practices**

Depending upon the site, volume of load and surrounding areas the following could be considered:

- When making multiple stops to comprise a single load, track all stop locations using a multiple stop hauling record, note that all stops must be tracked, but a single stop record could also be used;
- where sites are at higher risk of contamination use a risk analysis framework including the following considerations, if materials were excavated:
  - near industrial areas, or
  - near sites with potential for subsurface impacts (i.e., retail fuel outlets).

## 6. Compliance Considerations

Haulers will face compliance issues under O. Reg. 406/19 if they are unable to produce the required hauling record information (written/electronic after Jan. 1 2022, or provide verbal details

prior to Jan. 1, 2022). They will also face issues if illegally dumping loads or for safety violations under Ontario Ministry of Transportation (MTO) Regulations. If the Hauler has the hauling record and it is properly completed then if there is an issue with a load, the responsibility falls to the Project Leader if from a Project Area, or other parties involved in the excess soil management such as the facility manager (decision-maker) for Class 2 Soil Management Facilities or Local Waste Transfer Facility.

## 6.1 Rejected Loads and Contingency Planning

### **Regulatory Requirements for Contingency Planning** (O. Reg. 406/19, Section 13)

13. (1) ...the project leader for a project is required to file a notice under section 8 in respect of the project, the project leader shall ensure that, before filing the notice, a qualified person prepares or supervises the preparation of an excess soil destination assessment report in accordance with the Soil Rules.

(2) The report shall be based on the results of any required assessment of past uses of the project area, any required soil characterization report and any information gathered in respect of the potential sites at which the excess soil may be deposited and shall include the following:

2. Identification of contingency measure to be implemented in the event that the excess soil cannot be deposited at a site identified under paragraph 1 including the location of an alternate site.

### **Best Practices**

It should be noted that the Project Leader, not the Hauler, is always responsible for selecting the destination for excess soils and rejected loads. When a load is rejected from a deposit site, the legal requirements and best practices include:

- The deposit site contacting the Project Leader, or designate, to inform them and provide any additional details;
- the Project Leader or designate informing the Project Area QP that a load was rejected;
- the Hauler contacting the Project Leader, or designate, to determine if the load can be delivered as outlined in the contingency plan, or if the soil should be returned to the Project Area or dropped at another location;
- where possible, efforts should be made to directly deliver rejected loads to another local deposit site to reduce greenhouse gas emissions from hauling;
- if a contingency plan has not been prepared and the Hauler is unable to communicate with the Project Area the Hauler should return the load to the Project Area; and,
- include language in soil management contracts outlining payment for fair cost recovery for the Hauler by the Project Leader when a load is rejected.

### **Case Study: Sample Pay Arrangement for Haulers for Rejected Loads**

For contracts charging per load:

*Rejected loads, when rejected prior to unloading and returning to the source site, require no additional charges and would just charge for the initial load. If a load is rejected after being unloaded and the Hauler must return to the deposit site to pick-up the load and return the materials it will be charged as an additional full load.*

*Once a load is rejected the driver charges an hourly rate from the time that the truck starts to sit if they are waiting to hear back from the Project Area on where to take a rejected load.*

Note that for contracts working on an hourly rate rather than load rate, the time spent and compensation for hauling rejected loads will already be accounted for.

## 6.2 Enforcing Authorities

Enforcing authorities of O. Reg. 406/19 may include municipal by-law officers, MECP officers, MTO officers, or provincial and local police forces. The Ministry of Labour is the enforcing body for Haulers' health and safety practices.

### **Regulatory Requirements (O. Reg. 406/19 Section 18)\***

18. (1) A person who is operating a vehicle for the purpose of transporting excess soil **shall provide the following information to any provincial officer**, upon request:

1. The location at which the excess soil was loaded for transportation.
2. The date and time the excess soil was loaded for transportation.
3. The quantity of excess soil in the load.
4. The name of an individual who may be contacted to respond to inquiries regarding the load, including inquiries regarding the soil quality.
5. The name of the corporation, partnership or firm transporting the excess soil, the name of the driver of the vehicle and the number plates issued for the vehicle under the *Highway Traffic Act*.
6. The location at which the excess soil is to be deposited.

*\*As of Jan 1, 2022, the list of required information expands to include information about the reuse site under O. Reg. 406/19 Section 29(2).*

### **Plain Language Requirements for Enforcing Authorities**

If pulled over by an enforcing authority the Hauler will need to provide a Hauling Record. Prior to January 1, 2022, verbal Hauling Record information, as outlined above, is acceptable, but must be complete.

The information required for the Hauling Record expands on Jan. 1, 2022. See **Hauling Record Templates** for more information.

### **Other Considerations: Enforcing Authorities**

Haulers also face enforcement around hours worked, breaks, etc., as enforced by the Ministry of Labour and Transportation. See link below for more information:

<http://www.mto.gov.on.ca/english/trucks/commercial-vehicle-safety-requirements.shtml>

## **Best Practice**

As outlined in the previous sections, to ensure compliance for hauling it is recommended:

- Haulers keep a written/electronic hauling record;
- Project Leaders take initiative to understand the haulers experience, address issues before they arise through appropriate planning and promptly address non-compliance or other issues with Haulers;
- reuse and disposal sites actively engage in discussions with the Project Area on rejected loads; and,

- Project Leaders and Project Area operators should ensure that their loads are accounted for at the deposit sites in a timely manner to limit liability that could arise from illegal dumping.

## 7. Hauling Record Templates

It is the responsibility of the Hauler to ensure they collect all required information for the Hauling Record. The Project Leader and deposit site must collaborate with the Hauler to ensure they receive the proper information when it is required. The Hauling Record must stay with the load/vehicle until it is delivered to the deposit site and can be requested by enforcing authorities at any point during transport.

It is the responsibility of the Hauler to collect additional information from the deposit site representative upon arrival and unloading/deposit of the excess soils to complete the Hauling Record. It is the responsibility of the Hauler to ensure the individual making a declaration of deposit at the reuse site is provided a copy of the completed Hauling Record (as outlined in Section 29(2) which amends Section 18(3)) (or access to the electronic version if paper copies are not used).

The Hauler and all parties involved in the soil movement are required to keep a copy of the Hauling Record for two years following the date of delivery. All parties involved in excess soil management activities are required to keep all other site records for seven years.

### 7.1 Verbal Details (for use until January 1, 2022)

From January 1, 2021 to January 1, 2022 the driver must be able to provide the following information during transport:

- The location at which the excess soil was loaded for transportation;
- the date and time the excess soil was loaded for transportation;
- the quantity of excess soil in the load;
- the name of an individual who may be contacted to respond to inquiries regarding the load, including inquiries regarding the soil quality;
- the name of the corporation, partnership or firm transporting the excess soil, the name of the driver of the vehicle, and the number plates issued for the vehicle under the *Highway Traffic Act*, and,
- the location at which the excess soil is to be deposited.

### 7.2 Standard (printable)

This sample can be used for reference, to download a word or excel version of this template that can be adapted visit [www.oneia.ca/excess-soils](http://www.oneia.ca/excess-soils)

(See next page)



<Insert your company logo here>

## Hauling Record

P.O/Job/Ticket # \_\_\_\_\_

GENERATOR (PROJECT AREA)			
<b>Contact Name:</b>		<b>Tel:</b>	
		<b>Email:</b>	
<b>Generating Company</b>	<b>Address</b>	<b>City, Province</b>	<b>Postal Code</b>
GENERATING SITE (PROJECT AREA)			
<b>Address</b>		<b>City, Province</b>	<b>Postal Code</b>
<b>Pick-up Location:</b>			
<b>Date Loaded:</b>		<b>Time Loaded:</b>	Lat.:
			Long.:
<b>Soil Information</b>			
<b>Profile/ID #:</b>	<b>Materials Type</b>	<input type="checkbox"/> Compost <input type="checkbox"/> Clean fill <input type="checkbox"/> Other: <input type="checkbox"/> Contaminated soil <input type="checkbox"/> IC&I	
<b>Quantity Loaded</b>	Yards:	Tons:	<b>Material Description:</b>
	Meters:	Tonnes:	
<b>Contact Name:</b> <i>(For soil quality info)</i>		<b>Tel:</b>	<b>Email:</b>
I hereby certify that the above material has been properly described, classified and packaged, and is in proper condition for transportation to applicable regulation.			
<b>Authorized Signature:</b>			
<b>TRANSPORTER</b>			
<b>Transport Company</b>	<b>Address</b>	<b>City, Province</b>	<b>Postal Code</b>
<b>Driver Name:</b>		<b>Tel:</b>	
<b>License Plate #:</b>		<b>Email:</b>	
<b>Driver Signature:</b>			
RECEIVER			
<b>Receiving Company</b>	<b>Address</b>	<b>City, Province</b>	<b>Postal Code</b>
<b>Date Unloaded:</b>		<b>Time Unloaded:</b>	Lat.:
			Long.:
I hereby certify that the above listed material has been accepted and that the materials are representative of the materials outlined in the above.			
<b>Authorizer Name:</b>		<b>Tel:</b>	
<b>Signature:</b>		<b>Email:</b>	

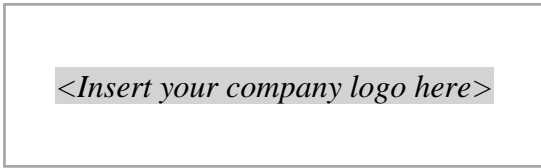
### **7.3 Standard (electronic fillable)**

There are a variety of ways to create electronic hauling records. Here we have listed out some services for your reference. This list is not exhaustive but meant to act as a starting point. If you would like to be added to the list of electronic hauling record service providers, please email [info@oneia.ca](mailto:info@oneia.ca).

- PATH (Project Area Tracking Hub);
- SoilFlo;
- SoilCloud;
- TraceNet;
- Tread.io;
- Google Forms with e-signature integration;
- Survey123; or,
- Research other field data collection apps.

When selecting an electronic form service, ensure they are able to collect the necessary information to meet the requirements under O. Reg. 406/19 including collecting information from multiple sources and collecting signatures.

7.4 Form for Multiple Pick-up Sites



**Excess Soil  
Multiple Pickup Hauling Record**

P/O Ticket \_\_\_\_\_

<b>REGISTERED GENERATOR: Location 1</b>		<b>P/O Ticket #:</b>	
<b>Contact Name:</b>		<b>Tel:</b>	
<b>Signature:</b>		<b>Email:</b>	
<b>Generating Company</b>	<b>Address</b>	<b>City, Province</b>	<b>Postal Code</b>
<b>GENERATING SITE</b>			
<b>Street Address</b>		<b>City</b>	<b>Quantity</b>
<b>Location 1</b>			
<b>Soil Information</b>			
<b>Profile/ID #:</b>		<b>Other Notes:</b>	
<b>Quantity Loaded:</b>			
<b>Contact Name:</b> <i>(For soil quality info)</i>		<b>Tel:</b>	<b>Email:</b>
<b>REGISTERED GENERATOR: Location 2</b>		<b>P/O Ticket #:</b>	
<b>Contact Name:</b>		<b>Tel:</b>	
<b>Signature:</b>		<b>Email:</b>	
<b>Generating Company</b>	<b>Address</b>	<b>City, Province</b>	<b>Postal Code</b>
<b>GENERATING SITE</b>			
<b>Street Address</b>		<b>City</b>	<b>Quantity</b>
<b>Location 2</b>			
<b>Soil Information</b>			
<b>Profile/ID #:</b>		<b>Other Notes:</b>	
<b>Quantity Loaded:</b>			
<b>REGISTERED GENERATOR: Location 3</b>		<b>P/O Ticket #:</b>	
<b>Contact Name:</b>		<b>Tel:</b>	
<b>Signature:</b>		<b>Email:</b>	
<b>Generating Company</b>	<b>Address</b>	<b>City, Province</b>	<b>Postal Code</b>

<b>GENERATING SITE</b>			
<i>Street Address</i>		<i>City</i>	<i>Quantity</i>
<b>Location 3</b>			
<b>Soil Information</b>			
<b>Profile/ID #:</b>		<b>Other Notes:</b>	
<b>Quantity Loaded:</b>			
<b>Contact Name:</b> <i>(For soil quality info)</i>		<b>Tel:</b>	<b>Email:</b>
<b>REGISTERED GENERATOR: Location 4</b>		<b>P/O Ticket #:</b>	
<b>Contact Name:</b>		<b>Tel:</b>	
<b>Signature:</b>		<b>Email:</b>	
<b>Generating Company</b>	<b>Address</b>	<b>City, Province</b>	<b>Postal Code</b>
<b>GENERATING SITE</b>			
<i>Street Address</i>		<i>City</i>	<i>Quantity</i>
<b>Location 4</b>			
<b>Soil Information</b>			
<b>Profile/ID #:</b>		<b>Other Notes:</b>	
<b>Quantity Loaded:</b>			
<b>Contact Name:</b> <i>(For soil quality info)</i>		<b>Tel:</b>	<b>Email:</b>
<b>TRANSPORTER</b>			
<b>Transport Company</b>	<b>Address</b>	<b>City</b>	<b>Postal Code</b>
<b>Driver Name:</b>		<b>Tel:</b>	
<b>License Plate #:</b>		<b>Email:</b>	
<b>RECEIVER</b>			
<b>Receiving Company</b>	<b>Address</b>	<b>City</b>	<b>Postal Code</b>
<b>Date Unloaded:</b>		<b>Time Unloaded:</b>	<b>Lat.:</b>
			<b>Long.:</b>
<i>I hereby certify that the above listed material has been accepted and that the materials are representative of the materials outlined in the above.</i>			
<b>Authorizer Name:</b>		<b>Tel:</b>	
<b>Signature:</b>		<b>Email:</b>	

You can download word and excel version of this file here <https://www.oneia.ca/excess-soils/hauling-best-practices/>.

## 8. Additional Resources

### 8.1 Useful Links

- [Ontario Regulation 406/19 On-Site and Excess Soil Management, 2019](#)
- [Rules for Soil Management and Excess Soil Quality Standards, 2019](#)
- [Ontario Ministry of Transportation – Commercial Vehicles Portal](#)
- [Ontario Traffic Manual, Book 7, Temporary Conditions](#)
- <https://www.ontario.ca/page/handling-excess-soil>

### 8.2 Related Regulations

- [Highway Traffic Act Reg. 611: Safety Inspections](#)
- [Highway Traffic Act Reg. 199/07: Commercial Motor Vehicle Inspections](#)
- [National Safety Code Standards: Commercial Regime](#), including Hours of Service
- [Ontario Regulation 363/04: Security of Loads](#)
- [Ontario Regulation 347 – General - Waste Management](#)

### 8.3 Traffic and Transportation Management Plan Sample Information

A Traffic Management Plan is to address safe and efficient traffic by outlining the location and configuration of the site entrance, truck queuing locations and parking, dust control, mud-tracking prevention, and haul routes from the immediate vicinity of the Project Area and deposit site.

#### 1. Regulatory Standards and Reference Documents

The Traffic Management Plan must comply with applicable regulatory requirements administered through various agencies/public bodies at the federal, provincial, and municipal levels. It will reference and be developed according to the following regulatory standards and guidelines, in addition to the requirements and conditions of the Project operations:

- Bylaws and/or Terms of Reference of the local municipality;
- Ontario Traffic Manual (especially, Book 7 - Temporary Conditions);
- Manual of Uniform Traffic Control Devices for Canada (MUTCDC); and
- King's Highway Guide Signing Policy Manual (KHGSPM), Ontario.

Generally, the conditions for application of the statutory provisions are met if either the construction activity occurs directly on the roadway itself, or, occurs off of the roadway but has the potential to disrupt normal traffic operations (e.g., requiring detours or lane closures, or significantly delaying non-site-related traffic). The level of disruption on area traffic operations including provision for school, hospital traffic sensitive zones is typically assessed with established tools and techniques, based for example on the methodologies of the Highway Capacity Manual 2000 (HCM-2000) as published by the Transportation Research Board (TRB), or of the Canadian Capacity Guide for Signalized Intersections.

#### 2. Plan Outline

The Traffic Management Plan should include the following directions:

- Outline the work zone for vehicle staging including temporary closures of travel lanes or disruptions to street segments and intersections during activities within the roadway right of way or any other utility connections.
- Identify detour routes for construction workforce vehicles and the public. Ensure access for emergency vehicles to and around the project site.
- Identify oversize load haul routes:
  - Transporters will follow regulations for the transportation of oversized and overweight loads on all roads. These regulations include provisions for time of day, pilot cars, law enforcement escorts, speed limits, flaggers, and warning lights.
- Procedures for directing traffic.
- Requirements for temporary signing, lighting, and placement of traffic control devices, if required.
- Requirements for accommodating receipt of fill/work outside regular hours.
- Requirements of communication with construction committee and local traffic management.
- Requirements for truck queuing and establishing truck routes to site, including information about daytime and nighttime routes.
- Timing requirements of deliveries of heavy equipment and construction materials.
- Construction scheduling outside of legal holidays and special events to avoid affecting large fluxes in traffic volumes.

- Procedures for the identification of vehicle safety for entering and exiting site access roads.
- Procedures for the notification of potential road closures prior to construction.
- Procedures for notification to transit operators of potential road closures prior to construction.
- Procedures to maintain access to adjacent properties.
- Procedures to maintain access to transit, bicycle, and pedestrian facilities along the project route(s).
- Procedures to maintain nearby trails.
- Determine the need for construction work hours and arrival/departure times outside peak traffic period.



## 9. Acknowledgements

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