

AMENDMENT TO OPSS 180, NOVEMBER 2016

Special Provision No. ENVR0014

Compliance With Ontario Regulation (O. Reg.) 406/19 for On-Site and Excess Soil Management

180.02 REFERENCES

Section 180.02 of OPSS 180 is amended by the addition of the following:

Ontario Ministry of Transportation Publications

MTO Forms:

PH-CC-181	Site Selection Notification for Temporary Stockpiling Excess Materials Managed Through Re-use
PH-CC-182	Site Selection Notification for Excess Material Managed as Disposable Fill and Excess Soil
PH-CC-183	Property Owner's Release
PH-CC-185	Excess Soil Quantity and Quality Report

Provincial Statutes

- O. Reg. 406/19: On-Site and Excess Soil Management, under the Environmental Protection Act, R.S.O. 1990, c. E.19
- O. Reg. 153/04: Records of Site Condition - Part XV.1 of the Act, under Environmental Protection Act, R.S.O. 1990, c. E.19

Ministry of the Environment, Conservation and Parks Publications

Rules for Soil Management and Excess Soil Quality Standards

180.03 DEFINITIONS

Section 180.03 of OPSS 180 is amended by the addition of the following definitions:

Excess Soil means as defined in O. Reg 406/19.

Excess Soil Standards means as defined in O. Reg 406/19.

Liquid soil means as defined in O. Reg.406/19.

MOECC means MECP (Ministry of the Environment, Conservation and Parks).

Property Owner means the owner or operator of a re-use site, Class 2 soil management site, a landfill site, dump, or a local waste transfer facility.

Rock means as defined in O. Reg.406/19.

Rock Block means rock as defined in OPSS 206.

Reuse Site means as defined in in O. Reg 406/19.

Salt-Impacted Excess Soil means a type of excess soil as described in the Rules for Soil Management and Excess Soil Quality Standards.

180.04 DESIGN AND SUBMISSION REQUIREMENTS

180.04.01 Submission Requirements

180.04.01.01 Notification of Site Selection, and Property Owner Release

Clause 180.04.01.01 of OPSS 180 is deleted in its entirety and replaced with the following:

180.04.01.01.01 General

The qualifications of the qualified person retained to oversee the management of excess soil according to O. Reg. 406/19 shall be submitted to the Contract Administrator for information purposes only.

When testing is required, the Contractor shall be responsible for sampling, delivery, and testing according to O.Reg. 406/19 and O.Reg. 153/04. The Contractor shall also be responsible for any sampling and testing requirements imposed by a property owner as a condition of accepting excess soil, at no additional cost to the Owner.

180.04.01.01.02 Excess Material Managed as Disposable Fill and Excess Soil

MTO form PH-CC-182, Site Selection Notification for Excess Material Managed as Disposable Fill and Excess Soil shall be completed when excess material is managed as disposable fill or beneficial re-use of excess soil.

180.04.01.01.03 Temporary Stockpiling Excess Materials Managed Through Re-Use

MTO form PH-CC-181, Site Selection Notification for Temporary Stockpiling Excess Materials Managed Through Re-Use shall be completed when temporary stockpiling of excess materials are managed through re-use.

Subsection 180.04.01 of OPSS 180 is amended by the addition of the following clauses:

180.04.01.08 Excess Soil Documentation and Tracking

A minimum of 14 Days prior to commencing the removal of excess soil from the Working Area, the following excess soil documentation shall be submitted to the Contract Administrator for each reuse site that is subject to the requirements of O. Reg. 406/19 and Rules for Soil Management and Excess Soil Quality Standards for information purposes only:

- a) Where the excess soil is intended to be deposited for the purposes of final placement:
 - i. The location of the reuse site (the municipal address and/or the geographic coordinates of the centroid of the reuse site measured using a global positioning system receiver and projected on the Universal Transverse Mercator (UTM) coordinate system).
 - ii. A description of the property use of the reuse site and any characteristics associated with the reuse site or nearby properties (including, but not limited to, sensitive receptors) that may affect the excess soil quality standards applicable to the reuse site.

- iii. A description of the undertaking or the beneficial purpose for which the excess soil is to be used.
- b) The estimated quantity of excess soil, including any salt impacted quantities, to be managed at the reuse site and that are necessary for the identified beneficial purpose.
- c) The applicable excess soil quality standards for the reuse site, as determined according to:
 - i. The excess soil standards, and/or;
 - ii. The site-specific excess soil quality standards developed for the reuse site by a qualified person by using the Beneficial Reuse Assessment Tool (BRAT), an indication that this is the case and the name and contact information of the qualified person who developed the site-specific excess soil quality standards.
- d) Documentation showing that appropriate property owner consultation and disclosure has taken place and confirmation of the property owner's / operator's written permission to accept the excess soil.
- e) Completed copies of MTO form PH-CC-181, Site Selection Notification for Temporary Stockpiling Excess Materials Managed Through Re-Use and/or MTO form PH-CC-182, Site Selection Notification for Excess Material Managed as Disposable Fill and Excess Soil. Any change to the reuse site location shall require re-submission of newly completed forms.
- f) If the reuse site is or will be governed by a site-specific instrument, identify the instrument, attach a copy of the identified instrument, the public body responsible for issuing the instrument and any other information relevant to the reuse of excess soil at that site.
- g) Confirm if a notice to be filed on Registry is required according to O. Reg. 406/19.
- h) A description of the excess soil tracking system that will be applied, according to the Rules for Soil Management and Excess Soil Quality Standards, to track each load of excess soil during its transportation and deposit at a reuse site.
- i) An excess soil destination assessment report, prepared by a qualified person according to the Soil Rules if required as per O. Reg. 406/19. This report shall be based on the results of any required assessment of past uses of the Working Area, any required soil characterization report and any information gathered in respect of the potential sites at which the excess soil may be deposited.

[* Designer Option, see Notes to Designer]

180.04.01.09 Notice to be Filed in the Registry

If a notice to be filed on Registry is required according to O. Reg. 406/19, information under Schedule 1 of O. Reg. 406/19 shall be completed. The Registry shall be updated as soon as there are any changes of the information originally input to the Registry. Complete the Registry within 30 Days after the final load of excess soil for final placement of the work has been deposited at the reuse site and if as soon as there are any changes to the information originally added to the notice on the Registry. The Contract Administrator shall be notified in writing each time a notice is filed. The registration of the Working Area on the Registry shall be at no additional cost to the Owner.

180.07 CONSTRUCTION

Subsection 180.07.01 of OPSS 180 is deleted in its entirety and replaced by the following:

180.07.01 Conditions on Management of Excess Material

180.07.01.01 General

A qualified person shall be retained to oversee the management of excess soil according to O. Reg. 406/19.

Management of excess material shall be as described in Tables 1, 2 and 3.

Excess soil shall only be finally placed within an environmentally sensitive area if the excess soil meets Table 1 according to excess soil quality standards of the Rules for Soil Management and Excess Soil Quality Standards.

The Contract Administrator shall be notified 48 hours prior to any excess soil transferred from one location to another.

180.07.01.02 Temporary Stockpile for Re-Use

Unless an instrument is in place that specifies alternative storage rules for temporary stockpiling of excess soil, excess soil storage at the Working Area, at a Class 2 soil management site, at a local waste transfer facility or a reuse site before it is finally placed shall only be located:

- a) A minimum of 30 m away from waterbodies.
- b) A minimum of 10 m away from the property line (boundary), unless any of the following apply:
 - i. 500 m³ or less of soil will be stored at any one time.
 - ii. Storage will be for a period of time of less than 1 week.
 - iii. The storage location has a physical barrier (e.g., concrete wall) between the soil and property boundary.
 - iv. The storage is taking place on the MTO right of way with written permission from the Contract Administrator.
 - v. Residences located within a minimum distance separation according to Table 2.
- c) A minimum of 2 m above the ground water table.
- d) A minimum of 100 m from water wells.

Maximum size of each stockpile of soil shall not exceed 2,500 m³ and soil that is from different Working Area intended for different beneficial reuses or soil that requires sampling must remain segregated.

Addition requirements for management of liquid soil shall be according to Section C of Part 1 of the Rules for Soil Management and Excess Soil Quality Standards.

180.07.01.03 Salt-Impacted Excess Soil

Salt-impacted excess soil shall be managed according to the requirements specified in the Rules for Soil Management and Excess Soil Quality Standards.

Salt-impacted excess soil may only be placed:

- a) Where it is reasonable to expect that the soil will be affected by the same chemicals as a result of continued application of a substance for the safety of vehicular or pedestrian traffic under conditions of snow or ice; or
- b) At an industrial or commercial property use where non-potable excess soil quality standards would be applicable; or
- c) At least 1.5 m below the surface of the soil.

Salt-Impacted Excess Soil shall not be finally placed:

- a) Within 30 m of a waterbody;
- b) Within 100 m of a potable water well or area with an intended property use that may require a potable water well; or
- c) On lands that will be used for growing crops or pasturing livestock unless the excess soil is placed 1.5 m or greater below the soil surface.

Section 180.07 of OPSS 180 is amended by the addition of the following subsections:

180.07.08 Excess Earth Quantity Report

A completed MTO form PH-CC-185, Excess Soil Quantity and Quality Report, shall be submitted to the Contract Administrator a minimum of 3 Business Days prior to all regularly scheduled site meetings, for information purposes only. The submittal shall account for all excess earth managed as disposable fill, by stockpiling, and by re-use. Revisions shall be highlighted. The form shall confirm the submission date of the corresponding Site Selection Notification and Property Owner Release forms to the Contract Administrator.

A final completed MTO Form PH-C-CC-185, Excess Soil Quantity and Quality Report, shall be submitted to the Contract Administrator prior to Contract Completion, for information purposes only.

180.07.09 Verification of Deposit of Excess Soil

Within 14 Days of the deposit of the final load of excess soil from the Working Area at the reuse site, a report shall be submitted to the Contract Administrator including the following:

- a) All records generated as part of the Excess Soil Documentation and Tracking clause.
- b) Verification that the excess soil has been placed at the correct reuse site(s) with the appropriate quality and quantity of excess soil for the beneficial purpose identified in the Excess Soil Documentation and Tracking clause, for information purposes only.
- c) Completed copy of form PH-CC-183, Property Owner's Release showing the property owner of the reuse site has consented in writing to the deposit of the excess soil at the reuse site.

d) Any applicable amendments to the sampling and analysis plan shall be identified in the report.

Table 1 of OPSS 180 is deleted in its entirety and replaced by the following Table:

Table 1
Excess Material Management Conditions

EXCESS MATERIAL DESCRIPTION	Subsection in This Specification				
	Conditions on Management by Re-Use	Conditions on Management as Disposable Fill	Conditions on Management by Open Burning	Conditions on Management by Disposal as Non-hazardous Solid Industrial or Commercial Waste	Conditions on Management by Stockpiling
EARTH	Yes	Yes	n/a	Yes	Yes
EXCESS SOIL	Yes	Yes	n/a	Yes	Yes
SWAMP MATERIAL	Yes	Yes TABLE 2	n/a	Yes	Yes TABLE 2
AGGREGATE	Yes	Yes	n/a	Yes	Yes
ROCK BLOCK	Yes	Yes	n/a	Yes	Yes
BITUMINOUS PAVEMENT	Yes TABLE 2	Not Permitted	n/a	Yes	Yes
CONCRETE	Yes TABLE 2	Not Permitted	n/a	Yes	Yes
MASONRY	Yes TABLE 2	Not Permitted	n/a	Yes	Yes
MANUFACTURED WOOD	Yes	Not Permitted	Not Permitted	Yes	Yes TABLE 2
NATURAL WOOD	Yes	Yes TABLE 2	Yes	Yes	Yes TABLE 2
DEBRIS FROM OPEN FIRES	n/a	Yes TABLE 2	n/a	Yes	Yes TABLE 2
METAL/PLASTIC POLYSTYRENE PRODUCTS	Yes	Not Permitted	Not Permitted	Yes	Yes
SUBJECT WASTE	Subject waste shall be managed as specified in the subsection for Conditions on Management by Disposal as Subject Waste.				
MATERIALS SUSPECTED OF BEING CONTAMINATED	When excess materials that were not generated by the Contractor's operations and are not specified in the Contract Documents, are suspected of being contaminated, direction on their management shall be obtained from the Owner.				
OTHER MATERIALS	Excess materials that are not listed above shall be managed as specified in the subsection for Conditions on Management by Disposal as Non-Hazardous Solid Industrial or Commercial Waste, unless prior alternative management conditions are approved in writing by the MECP.				

OPSS 180 is amended by the addition of the following Table:

**Table 3
Generic Excess Soil Quality Standards**

Township	Station (Offset)	Excavation Depth Range <small>(Note 1)</small>	Generic Excess Soil Quality Standard <small>(Note 2)</small>	Property Use <small>(Note 3)</small>
**	**	**	**	**
<p>Notes:</p> <ol style="list-style-type: none"> 1. Depth as measured from the original ground surface. 2. Values refer to the table number in Appendix 1 of Rules for Soil Management and Excess Soil Quality Standards. 3. Values are acronyms coinciding with table headings in Appendix 1 of Rules for Soil Management and Excess Soil Quality Standards. AO = Agricultural and Other Property Use, RPIICC = Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use, RPI = Residential/Parkland/Institutional Property Use, ICC = Industrial/Commercial/Community Property Use, (Surf) = Surface, and (Sub) = Subsurface. 				

[** Designer Fill-Ins for Table 3, See Notes to Designer]

NOTES TO DESIGNER:

*Insert

OPTION 1: When the designer completes the assessment of past uses, sampling and analysis plan, and soil characterization report, the Contractor shall not be required to carry out any additional sampling and testing (with the exception of any additional sampling and testing requirements imposed by the property owner).

When this requirement applies, do not insert anything.

OPTION 2: When the designer completes the assessment of past uses, due diligence sampling and analysis plan, and preliminary soil characterization report, the Contractor shall be required to:

- a) Update the sampling and analysis plan,
- b) Complete any additional sampling and analysis, and
- c) Complete the soil characterization report.

Insert the following:

The excess soil documentation shall also include the following information from the site where excess soil originated:

- j) A sampling and analysis plan and a soil characterization report, prepared by the Contractor's qualified person according to the Rules for Soil Management and Excess Soil Quality Standards when required according to O. Reg. 406/19.

OPTION 3: When the designer has not completed an assessment of past uses, a sampling and analysis plan, and a soil characterization report. Insert the following:

The excess soil documentation shall also include the following information from the site where excess soil originated:

- j) An assessment of past uses of the Working Area, prepared by a Contractor's qualified person according to the Rules for Soil Management and Excess Soil Quality Standards.
- k) A sampling and analysis plan and a soil characterization report, prepared by a qualified person according to the Rules for Soil Management and Excess Soil Quality Standards when required according to O. Reg. 406/19.

OPTION 4: When the designer has completed the assessment of past uses. Insert the following:

The excess soil documentation shall also include the following information from the site where excess soil originated:

- j) A sampling and analysis plan and a soil characterization report, prepared by the Contractor's qualified person according to the Rules for Soil Management and Excess Soil Quality Standards when required according to O. Reg. 406/19.

** Designer Fill-Ins for Table 3:

Fill-in Table 3 based on information supplied by environmental project and geotechnical engineering team members, or within an environmental or geotechnical report. When the appropriate soil quality standard is uncertain, specify the more restrictive standard.

Example Fill-Ins for Table 3:

Township	Station (Offset)	Excavation Depth Range (Note 1)	Generic Excess Soil Quality Standard (Note 2)	Property Use (Note 3)
Toronto	9+975 (2.7 Rt) [21-03 (Sa 2)]	0.4 - 0.6 m	Table 2.1: Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition	AO, RPI, ICC
Toronto	10+085 (4.2 Rt) [21-04 (Sa 1)]	0.0 - 0.2 m	Table 3.1: Full Depth Excess Soil Quality Standards in a Non-Potable Ground Water Condition	ICC

Notes:

1. Depth as measured from the original ground surface.
2. Values refer to the table number in Appendix 1 of Rules for Soil Management and Excess Soil Quality Standards.
3. Values are acronyms coinciding with table headings in Appendix 1 of Rules for Soil Management and Excess Soil Quality Standards.
 AO = Agricultural and Other Property Use,
 RPIICC = Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use,
 RPI = Residential/Parkland/Institutional Property Use,
 ICC = Industrial/Commercial/Community Property Use,
 (Surf) = Surface, and (Sub) = Subsurface.

Example Fill-Ins for Table 3:

Township	Station (Offset)	Excavation Depth Range (Note 1)	Generic Excess Soil Quality Standard (Note 2)	Property Use (Note 3)
Cameron	12+300 - 17+546		Table 1: Ceiling Values for Excess Soil Re-use	AO, RPIICC
Cameron	17+546 - 18+912	0 - 2.5 m	Table 3: Ceiling Values for Full Depth Excess Soil in a Non-Potable Ground Water Condition	RPI
Cameron	17+546 - 18+912	2.5 m - 7 m	Table 2.1: Ceiling Values for Full Depth Excess Soil in a Potable Ground Water Condition	ICC
Cameron	18+912 - 21+640		Table 1: Ceiling Values for Excess Soil Re-use	AO, RPIICC
Jacob	13+460 - 14+125 (2 m Lt - 14 m Rt)		Table 4.1: Ceiling Values for Stratified Excess Soil in a Potable Ground Water Condition	ICC (Sub)

Example Fill-Ins for Table 3:

Township	Station (Offset)	Excavation Depth Range <small>(Note 1)</small>	Generic Excess Soil Quality Standard <small>(Note 2)</small>	Property Use <small>(Note 3)</small>
Entire Working Area		0 - 2.5 m	Table 1: Full Depth Background Site Condition Standards	AO, RPIICC

WARRANT: All Contracts that will or may generate excess earth. In consultation with the Regional Environmental Delivery Section.

CUSTODIAN: Environmental Policy Office.