



GOVERNMENT OF
NEWFOUNDLAND AND LABRADOR

Department of Environment and Conservation
Pollution Prevention Division

GUIDANCE DOCUMENT

Title: Protocol for the Management of Soils Excavated on Impacted Sites

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**MANAGEMENT OF SOILS
EXCAVATED ON IMPACTED SITES
GD-PPD-045**

1.0 SUBJECT:

The management of soils excavated on impacted sites.

2.0 OBJECTIVE:

To set out the protocol acceptable to the Department of Environment and Conservation for the management of soils that are excavated on impacted sites.

3.0 DEFINITIONS:

Adverse effect: An effect that impairs or damages the environment and includes an adverse effect to the health of humans.

Contaminant: A substance that causes or may cause an adverse effect.

Department: Newfoundland and Labrador Department of Environment and Conservation.

Designated Contaminated Site: A site formally designated as a contaminated site by the Minister of Environment under section 26 of the *Environmental Protection Act SNL 2002 cE-14.2*.

GSC: Government Service Centre, Department of Government Services (Province of Newfoundland and Labrador)

Impacted Site: A designated or non-designated contaminated site.

Non-Designated Contaminated Site: A site on which the Department has knowledge that there has been a release of a substance (which includes a spill or leak of gasoline or an associated product including heating oil), which causes or may cause an adverse effect but which has not been formally designated as a contaminated site by the Minister of Environment and Conservation.

Site: An area of the environment that has been impacted by contaminants.

Remediation: The actions necessary at an impacted site to prevent, minimize, or mitigate unacceptable risk to exposed human and ecological receptors.

Site-Specific Target Levels (SSTLs): Risk-based remedial criteria for a specific site that are derived using site-specific conditions and accepted risk assessment / risk management methods at Tier II or III.

TPH: Total petroleum hydrocarbons.

4.0 BACKGROUND:

It is the Department's policy that impacted sites are to be managed in accordance with the "Guidance Document for the Management of Impacted Sites."¹ As outlined in that document, the Department has adopted a tiered approach to the management of impacted sites, whereby three tiers of increasing technical complexity are available for use.

Through this management process, applicable criteria for contaminants on an impacted site will either be selected from generic Look Up Tables (Tier I), or will be developed as Site-Specific Target Levels (SSTLs) using risk assessment models and scientific approaches (Tiers II and III). If the applicable criteria (Tier I, II, or III) are exceeded, remediation or site management is required to mitigate any impacts.

Section 6 of this guidance document outlines the protocol to be followed when managing soils that have been excavated as part of the remediation process for an impacted site.

5.0 LEGISLATION:

Applicable Legislation:

- Environmental Protection Act, Sections 26(2), 29(a) and 29(b)

6.0 PROTOCOL:

- 6.1 **If soil contaminant concentrations are lower than applicable criteria**, excavated soils may be left on site. On more complex or larger sites where different areas have individual Tier I criteria or SSTLs, any excavated soils that remain on site must remain in the area where they were excavated (i.e. they cannot be moved to another area of the site having a less stringent applicable criteria).
- 6.2 **If soil contaminant concentrations exceed applicable criteria but TPH concentrations are less than or equal to 1000 mg/kg**, excavated soils must be removed from the site. These soils may be disposed of in an approved waste disposal site, provided that the owner/operator is willing to accept such waste and the local GSC has agreed with the disposal of the waste at the site.
- 6.3 **If soil contaminant concentrations exceed applicable criteria and TPH concentrations are greater than 1000 mg/kg**, excavated soils must be removed from the site and sent to a Soil Treatment Facility that has a valid Certificate of Approval issued by the Department or GSC. Soil that has been treated to a concentration below 1000 mg/kg may be disposed of in an approved waste disposal site, provided that the owner/operator is willing to accept such waste and the local GSC has agreed with the disposal of the waste at the site.

7.0 REFERENCES:

1. Government of Newfoundland and Labrador, Department of Environment and Conservation, *Guidance Document for the Management of Impacted Sites*, Version 1.01, September 2005.