

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR

Department of Environment & Conservation

Policy Directive

Division:

Pollution Prevention

P.D.

PPD05-01

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Issue Date: February 22, 2005

Authorized by:

Director

Supersedes: PPD97-01

Authorized by:

Approved by:

Approved by:

Minister

Management of Impacted Sites. Subject

Objective Update and Replace Contaminated Sites Cleanup Criteria PPD97-01

Background

Prior to May 2002, provisions of the Environment Act, Waste Material Disposal Act and associated Regulations, supplemented with policy and guidelines documents, provided authority to manage contaminated or impacted sites. Through national and regional initiatives, protocols have been updated. An example is the risk based (as an alternative to criteria based) approach to management of impacted sites. Other developments have also occurred in Canada-wide Standards, CCME Environmental Quality Guidelines and Atlantic PIRI software.

Legislative Authority

- The Environmental Protection Act, 2002, Part VII, Section 26(2)
- The Storage and Handling of Gasoline and Associated Products Regulations, CNLR 58/03
- Heating Oil Storage Tank System Regulations, CNLR 60/03(amended 103/03)
- Used Oil Control Regulations, CNLR 82/02
- Environmental Control Water and Sewer Regulations, CNLR 65/03

Definitions

CCME means Canadian Council of Ministers of Environment
CEQG means Canadian Environmental Quality Guidelines
Department means Department of Environment and Conservation

GSC means Government Service Centre

PIRI means Partnership in Risk Based Corrective Action Initiative involving

Government Regulators, Oil Industry and Environmental Consultants

in Atlantic Canada.

Risk Based Approach means characterizing potential risks, hazards and exposures of receptors

to contaminants at a site that is or may be impacted or contaminated.

General Provisions:

• Harmonize with other jurisdictions in accordance with the Canada-wide Accord on Environmental Harmonization and the Canada-wide Environmental Standards Sub Agreement.

• Harmonize protocols with Canada-wide Standards for Petroleum Hydrocarbons in Soil.

• CCME CEQG as cleanup objectives for impacted sites.

• Criteria and risk based options to manage an impacted/contaminated site.

• Limited Remedial Action as an option for cleanup of a contaminated site.

• Scope of management to include metals, chlorinated and non-chlorinated organic compounds, pesticides and microbiologicals.

• Protect human health and the environment.

• Polluter pays principle.

• Scientifically defensible in each step of the management process.

• A voluntary procedure and process (unless prescribed in writing by the Minister as with designation of an area that is/is suspect to be contaminated).

• A phased approach to environmental site assessment consistent with national protocols.

• Removal of free product required prior to use of protocols.

• A flexible and cost effective approach.

• A management process to be completed in a timely manner.

• Defined duties and responsibilities of the province, responsible person and site professional.

• A formal structure for impacted site/contaminated site management.

• Clear language.

• Documentation for each step.

• 3 tiered approach for petroleum impacted sites.(Tier to be chosen by person responsible).

 A letter or other document to be issued by the department or its agents at the completion of management steps.

• Consistency via standard internal forms and formats.

• Updated software developed by Atlantic PIRI.

• Laboratory analyses to be conducted by laboratories having a form of accreditation as provided for in the Department's policy on Laboratory Accreditation

• Provision for 3rd party review when environmental professional and regulator positions conflict.

Policy

- 1. The "Guidance Document for Management of Impacted Sites" as amended replaces Department Policy Document PPD97-01, Contaminated Sites Cleanup Criteria.
- 2. The CCME CEQG,1999 (as amended) are adopted as the environmental quality standard in the absence of a specific regulation when assessing or in remediation of an impacted site.
- 3. In cases where the identified groundwater contamination has the potential to impact on-site or nearby wells that are used for drinking purposes, the relevant human health criteria for portable groundwater shall be used. Where this is not a concern the relevant non-potable groundwater criteria shall be used. For those sites with petroleum hydrocarbon impacts only, the use of the Atlantic RBCA Ecological Screening Checklist is required to evaluate the potential for impacts to off-site ecological receptors within 150m, although that distance is subject to professional judgement and must be justified in each case. Regardless for contaminant of concern, the nearest ecological habitat must be identified and the potential for impacts must be ruled out to the satisfaction of the Department, otherwise further qualitative or quantitative assessments may be required.
- 4. Specific risk based methodologies shall be approved by the Department
- 5. All remedial action plans shall include a confirmatory sampling program to demonstrate that applicable remediation objectives have been met.
- 6. In instances where naturally occurring background levels at a contaminated site exceed the criteria levels established by this policy, the remediation requirements may be modified, with Department approval, such that the objectives are not at levels below background concentrations.