



National Energy Board

Office national de l'énergie



# REMEDIATION PROCESS GUIDE



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# 1 PURPOSE

The National Energy Board (NEB) is committed to protecting the environment and the public from adverse effects resulting from NEB-regulated facilities. A hydrocarbon or other contaminant release may affect soil and groundwater which may trigger a need for soil and groundwater remediation to the most stringent criteria so that risks to the public and the environment are minimized. The NEB has developed the Remediation Process Guide (Guide) for industry to follow to facilitate well documented and successful remediation. The goal of this Guide is to provide a clear process for submitting appropriate remediation information to the NEB.

This Guide applies to NEB-regulated facilities under the *National Energy Board Act* (NEB Act) and the *Canada Oil and Gas Operations Act* (COGOA). At a minimum this Guide applies to:

- remediation of residual contamination in soil and groundwater to an appropriate standard;
- remediation of all spill sites whether the spill is reportable or not;
- off-site contamination remediation; and
- historic contamination events.

The Guide does not apply to:

- cleanup of free product on visibly contaminated soil or surface water;
- offshore contamination;
- sites that have been considered remediated at the time of production of this Guide;
- reclamation or restoration of land; and
- abandonment of an NEB-regulated facility.

The *Onshore Pipeline Regulations 1999* (OPR-99) stipulate that companies must have an Environmental Protection Program to, among other things, manage conditions which have the potential to adversely affect the environment. COGOA also states as follows:

- a. reasonable measures must be taken to prevent further spills;
- b. a company is to repair or remedy any condition resulting from a spill; and
- c. steps should be taken to reduce or mitigate any danger to life, health, property or the environment.

This Guide describes the way a company can demonstrate that a contaminated site associated with an NEB-regulated facility has met remediation criteria.

## 2 REMEDIATION REGULATORY APPROACH

**If a contaminant release has or will have an adverse effect on groundwater or soils including soil vapour, the site is considered contaminated. Remediation of the site is necessary and the procedures outlined in this Guide will apply.**

At the time this Guide is published there may be remediation projects underway where companies are engaged with municipal or provincial agencies to obtain a remediation approval. The NEB will become involved with these projects as a stakeholder until a closure report is produced as required by other regulators. This closure report should also be submitted to the NEB.

Going forward under this Guide the NEB will be the lead agency for all contamination incidents or remediation requirements for contamination from an NEB-regulated facility. Other regulators such as provincial or territorial departments of environment and health, as well as municipalities and federal departments may be involved and may be consulted at various stages in the remediation process.

Section 5.6 of the Guide identifies that the NEB requires the most stringent criteria be used for remediation unless it can be demonstrated that site specific conditions justify the use of other criteria. This site specific approach includes remediation that was underway before this Guide was produced or contamination that requires a risk management approach. Also, if contamination remains on company owned land and there is no risk of migration off-site, then a company can use other criteria providing that appropriate monitoring is conducted.

## 3 REPORTING CONTAMINATION

While the NEB expects industry to follow procedures to minimize releases, leaks, and spills, from time to time accidents can occur. When an incident results in a reportable release of a liquid or any other contaminant that may cause an adverse effect on the environment, companies are required to report the incident and take appropriate measures to remediate the contamination.

A company may also encounter contamination that:

- a. is not a liquid but may cause an adverse environmental effect;
- b. occurred because of a previous incident; or
- c. is an accumulation of contaminants over time.

In these three cases, the NEB expects notification of the contamination by writing to the Secretary of the Board as soon as practicable. This notification is not reportable under the OPR and therefore should not be identified as an “incident”. The notification should confirm that:

- a. clean up is to occur within a short period of time and details will be provided when completed; or
- b. an Environmental Site Assessment is required and the NEB will be advised at a later time on the remediation approach.

## 4 CONTAMINATED SITE REMEDIATION APPROACH

The remediation procedure set out in Appendix A should be followed after any emergency response is complete. The procedure set out in Appendix A would also apply to sites where contamination has occurred in the past and remediation has not commenced.

An example of where it will likely not be necessary to follow the procedure set out in Appendix A is where there is a minor release that is contained on site and the contaminating substance(s) and any impacted materials (e.g. sorbent pads) are removed and there is no impact on soil or water.

## 5 REMEDIATION ASSESSMENT

### 5.1 NEB ENVIRONMENTAL SPECIALIST

Once the NEB becomes aware of a contamination that requires remediation, it will appoint an Environmental Specialist (ES) to act as a liaison with the responsible party. In most cases the ES will be the NEB contact throughout the remediation project.

### 5.2 ENGAGEMENT OF REGULATORS AND INTERESTED PARTIES

The involvement of other regulators including federal, municipal and provincial/territorial governments<sup>1</sup> is necessary when:

- contamination has occurred off site;
- the type of contaminant has the potential for offsite migration; or
- the magnitude of a release has the potential for offsite migration of contaminants.

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<sup>1</sup> At oil and gas exploration or production sites, there may be a shared jurisdiction with a land use or water use administration agency such as Indian and Northern Affairs Canada.

Engagement of interested parties is encouraged in all situations. A company should:

- a. strive for open communication between all agencies, organizations and persons involved and develop a communication protocol on information to be shared for the project; and
- b. commit to undertaking remediation activities that have the best possible outcomes, ones which take into consideration the concerns of regulators and interested parties (e.g. Aboriginal groups, landowners, etc.).

### 5.3 ENVIRONMENTAL SITE ASSESSMENT

Once a company reports a contamination incident or notifies the NEB of a contaminated site, it needs to conduct the appropriate level of Environmental Site Assessment (ESA). A detailed ESA should be conducted to determine whether remediation is required and to provide sufficient information for a Remedial Action Plan (RAP). Typical elements of a detailed ESA include a site investigation resulting in delineation of the contamination, calculations of volume, calculations of affected soil and groundwater, identification of remediation objectives and identification of remediation options. This assessment may be called a Phase II ESA or Phase III ESA depending on regional conventions.

### 5.4 INITIAL CLEANUP PLAN

In some cases the extent of contamination may be complex enough that a detailed ESA is not possible before significant remediation must commence. In this case an Initial Cleanup Plan (ICP) should be created in consultation with affected parties. The ICP is to be submitted to the NEB for approval.

This plan would typically set out the remediation objectives based on initial assessments of the site. It should delineate the contaminated area, identify how contaminants are to be contained, identify sensitive receptors and explain how these are to be protected. The ICP also should identify and facilitate the immediate remediation needs while a detailed ESA is conducted to determine the longer term remediation needs. Once the ESA is completed then a RAP should be produced that will transition the remediation project from the initial remediation activities to the more extensive remediation identified in the RAP.





## 5.5 NEED FOR A REMEDIAL ACTION PLAN

A RAP is required when a Phase II ESA identifies that remediation is required. The Guide contains a document called a “Self Assessment – Need for Remedial Action Plan” (Self Assessment) which can be found at Appendix B. The Self Assessment may be used to determine whether the company should submit a RAP or only a Remediation Closure Report (discussed in further detail below). The Self Assessment is not designed to collect spill data or to assess adequacy of reports. It is designed to be used by the company and the NEB to determine whether sufficient information has been submitted regarding the need for a RAP.

If contamination is extensive, the NEB may direct that a RAP be provided. The company should endeavor to stabilize the contamination so that further movement of contaminants in groundwater or soil is not occurring even before a RAP is approved. If the contamination has stabilized, then remediation may be put in abeyance until a RAP is approved.

## 5.6 REMEDIATION CRITERIA

The NEB accepts remediation criteria established by the province or territory where the remediation site is located but requires the use of the Canadian Council of Ministers of the Environment (CCME) standards if the CCME criteria are more stringent. Remediation criteria must be selected based on the type of soil and land use. Typical land use categories are industrial, commercial, residential, parkland, and agricultural. Justification for the use of particular criteria must be provided.

### *Site Specific Remediation Objectives*

There are times when a RAP cannot accommodate typical remediation criteria; for example, in the following situations:

- national criteria for a contaminant does not exist;
- remediation to guideline-based criteria is not feasible for the targeted land use;
- guideline-based objectives do not seem appropriate given the site specific conditions, (i.e. recovery of the contaminant is too deep or otherwise unfeasible to access) so a risk assessment is necessary to establish site specific objectives;
- receptors of concern have been identified; or
- there is significant public concern, as determined by the lead agency.

In situations where a RAP cannot accommodate typical remediation procedures, a risk management approach is necessary. This involves the selection and implementation of a risk control strategy based on site specific objectives. Monitoring and evaluation of the proposed strategy’s effectiveness is required. The CCME approach to risk assessment and management is recommended.

Risk management may include direct remedial actions or other strategies which reduce the probability, intensity, frequency or duration of exposure to contamination through soil, water or air/vapour pathways. Other strategies may include controls such as zoning designations, land use restrictions or bylaws. The decision to select a particular risk-based strategy will be informed by risk assessment information.

Implementation of a risk management approach for contamination that is contained within a right of way (ROW) is unlikely to be required due to the limited land base involved and the high potential that contamination can be remediated within a ROW. If the company wants assurance that its risk management approach is equivalent to remediation then a request can be submitted to the NEB for consideration.

## 5.7 CONTAMINATION SCENARIOS AND EXPECTED ACTIONS

National Energy Board Regulated Facility Contamination Scenarios and Expected Actions	
Scenario	Expected Action
1. A liquid release occurs that meets reporting requirements.	Immediately report the release as an incident to the NEB and other regulators in accordance with company Environmental Protection Program (EPP), begin clean up in consultation with the assigned NEB Environmental Specialist (ES) and conduct an Environmental Site Assessment (ESA).
1 a. The initial ESA identifies that the contaminants are not mobile and are easily accessible for clean up.	Inform the assigned ES of the situation and discuss remediation plans. Then produce a closure report or Detailed Incident Report within a specified timeline documenting the remediation project. A site survey is expected.
1b. The ESA demonstrates that contaminants are mobile and that remediation will take considerable effort.	Inform the assigned ES of the situation and immediately begin containment and recovery operations. At the same time produce an Initial Cleanup Plan for approval by the NEB prior to completing a RAP.
1c. The ESA demonstrates that remediation will take considerable effort and that generic soil remediation criteria may be used.	Inform the assigned ES of the situation and begin production of a RAP for approval by the NEB. The RAP should utilize the most stringent remediation criteria applicable at that location.

<p>1d. The ESA demonstrates that generic soil remediation criteria cannot be used.</p>	<p>Inform the assigned ES of the situation and produce a proposal for a risk assessment to identify site-specific objectives. Once the approach is approved by the NEB then a RAP will be required.</p>
<p>2. A liquid release occurs that does not meet reporting requirements but has the potential for an adverse effect on the environment e.g. gasoline is spilled on coarse grained soil where groundwater is near the surface.</p>	<p>Immediately inform the NEB and other regulators in accordance with company EPP, clean up accessible contaminants in consultation with the assigned ES and conduct an ESA.</p>
<p>3. A liquid release occurs that does not meet reporting requirements and does not appear to have the potential for adverse effects on the environment or is contained within company owned property.</p>	<p>Record details of the release as a performance indicator and clean up any contaminants. If the contamination is within a facility and there is no risk of migration off site then ongoing monitoring may be a long term strategy.</p>
<p>4. Contamination is encountered that has occurred either at a location of a previously reported incident or is not the result of an obvious release (accumulation over time).</p>	<p>Inform the NEB of the discovery and advise if it was a previous incident. Identify what action will be undertaken to mitigate the contamination. Work with the assigned ES to address the appropriate approach.</p>

## 6 REMEDIAL ACTION PLAN

A RAP is a document which describes how the cleanup of a contaminated site will occur. The RAP may also address reclamation of the site, which is the site restoration such that it is returned to as close a state to original, or an equivalent, capability.

### 6.1 CONTENT OF REMEDIAL ACTION PLAN

At a minimum the RAP should include the following:

#### Background:

- A summary of the data collected during ESA site characterization and delineation investigations, including complete surface and subsurface site characterization and contaminant characterization.
- A detailed map or maps that clearly identify the contaminant source location, affected surface and subsurface areas and all sample locations.

### Scope of Remediation:

- Contaminants of concern to be addressed (including rationale for selection).
- Remediation objectives to be achieved (including rationale for selection).
- Method by which remediation will be conducted (detailed description). This should include consideration of physical/chemical limitations, construction requirements, environmental as well as health and safety implications, regulatory approvals and public expectations.
- Details of sampling and analyses to be performed and quality assurance and quality control measures to be implemented.
- Control measures and contingency plans to mitigate potential adverse effects to adjacent receptors such as humans, water wells, surface water, livestock, vegetation and wildlife.
- A detailed timeline for implementation of the RAP.

### Post-Remediation

- Any proposed long term monitoring program including details and timing of sampling and analysis to be performed.
- Contingency plans for new contamination discovered during a long term monitoring program.
- Slope stability and erosion control as necessary.
- Reclamation and restoration required to return the site to a productive or natural state. This component will not be addressed in the Remediation Closure Letter since several growing seasons may be required to stabilize the site.

### Concordance Table

This is a table, as illustrated in Appendix C, which lists contaminants of concern, potential impacts (adverse environmental effects) and regulatory requirements. It also provides RAP measures of success including engagement of interested parties.

Additionally, it is advisable that the RAP incorporate any consultations with landowners affected by offsite contamination as well as a summary of the landowner's concerns and the company's efforts to address them.

## **6.2 APPROVAL OF REMEDIAL ACTION PLAN**

The NEB will conduct an assessment of the RAP and may consult with other regulators as needed. If the RAP is found to be acceptable based on site specific information and is consistent with the NEB's knowledge of the site, then the NEB will issue a letter approving the RAP and requesting progress updates and a Remediation Closure Report.

Timelines for reporting progress and submitting the closure report will be established in consultation with the company.

If there is an imminent risk to the environment or threat to offsite property, and containment and recovery of contaminants is required, then following consultation with the ES, remediation of the site may proceed in advance of receiving approval of the RAP. Any reasonable efforts to remediate do not require NEB endorsement. The approval letter documents that the company, NEB and other interested parties have established remediation expectations.

If a change in conditions at the site requires a change in the RAP or if the timelines for remediation change, then the company should advise the NEB so the Board can decide if an amendment to the RAP is necessary.

## 7 REMEDIATION CLOSURE INFORMATION

### 7.1 REMEDIATION CLOSURE REPORT

A Remediation Closure Report should be submitted when the Self Assessment indicates there is no need for an RAP or when the remediation efforts indicated in a RAP have been completed. This report is to be submitted by the company to document:

- a) details about the original contamination incident and site;
- b) remediation and reclamation activities that were conducted;
- c) maps including a location survey or GPS information;
- d) monitoring data and ongoing monitoring;
- e) interested parties engagement (measure of success); and
- f) a Concordance Table (Appendix C) demonstrating that all aspects of the RAP were identified and addressed.

The NEB may request additional information from the company. The NEB may refer the Remediation Closure Report to other regulators or interested parties for comment.

## 7.2 COMPANY CONFIRMATION LETTER

The Remediation Closure Report is to be accompanied by a letter signed by an officer of the company. If a RAP was not prepared, the letter accompanying the Remediation Closure Report should identify that remediation was not required based on the ESA. In some cases a Detailed Incident Report may serve this purpose. If a RAP was prepared, the letter from the officer must confirm that remediation was conducted according to the RAP and that the spill site was remediated to the appropriate criteria.

## 8 REMEDIATION CLOSURE LETTER

Once the NEB is satisfied that remediation has occurred to acceptable criteria, it will issue a letter to confirm that the applicable standards or guidelines have been met and that the remediation file for the site has been closed as of the date of the letter. The NEB will not provide assurance of remediation being acceptable if conditions change at the site or if regulatory standards or guidelines change in the future. A template for the letter is found in Appendix D.

The NEB expectation for reclamation is that the land is restored to a state comparable with the surrounding environment. Facility owners and operators should accommodate the desired land use of those affected when it is reasonable to do so. However, validating that reclamation has been successful may take more than one growing season so once that has occurred an application may be made to the NEB for a letter confirming acceptable reclamation.

## 9 CONTACT INFORMATION AND GUIDE IMPROVEMENT

Remediation documents and feedback on this Guide should be submitted to the Secretary of the Board at:

Address:	National Energy Board 517 Tenth Avenue SW Calgary, Alberta T2R 0A8
Telephone:	403-292-4800
Toll free:	1-800-899-1265
Fax:	403-292-5503
Toll free fax:	1-877-288-8803

## 10 REFERENCES

- A Federal Approach to Contaminated Sites, Dillon Consulting Ltd., Nov. 1999 for Contaminated Sites Working Group under the Federal Committee on Environmental Management Systems.
- Canada-Wide Standard for Petroleum Hydrocarbons (PHC) in Soil: User Guidance Petroleum Hydrocarbons in Soil, January 2008, PN 1398 CCME.
- COGO Act and Regulations.
- Guidance Document on the Management of Contaminated Sites in Canada. April 1997 PN 1279 CCME.
- Guidance Manual for Developing Site-Specific Soil Quality Remediation Objectives for Contaminated Sites in Canada, March 1996 PN 1196 CCME.
- National Classification System for Contaminated Sites Guidance Document PN 1403 CCME 2008 (Includes Excel worksheets).
- NEB Act and Regulations.
- Treasury Board Federal Contaminated Sites Policy (2002).

## 11 ABBREVIATIONS

<b>CCME</b>	Canada Council of Ministers of the Environment
<b>COGOA</b>	<i>Canada Oil and Gas Operations Act</i>
<b>ES</b>	Environmental Specialist
<b>FACS</b>	A Federal Approach to Contaminated Sites, November 1999
<b>FM</b>	NEB Filing Manual
<b>GIS</b>	Geographic Information System
<b>GPS</b>	Global Positioning System
<b>ICP</b>	Initial Cleanup Plan
<b>NEB</b>	National Energy Board
<b>NEBA</b>	<i>National Energy Board Act</i>
<b>NT</b>	Northwest Territories
<b>NU</b>	Nunavut
<b>OPR-99</b>	<i>Onshore Pipeline Regulations, (1999)</i>
<b>PPR</b>	<i>Processing Plant Regulations</i>
<b>RAP</b>	Remedial Action Plan
<b>ROW</b>	Right of Way

## 12 GLOSSARY OF TERMS<sup>2</sup>

**Adverse Effect** – An adverse effect occurs when contaminants have an effect or have the potential to affect, groundwater or soil such that vegetation, wildlife or human life is impacted.

**Cleanup** - The removal of a chemical substance or hazardous material from the environment to prevent, minimize or mitigate damage to public health, safety or welfare, or the environment, that may result from the presence of the chemical substance or hazardous material. The cleanup is carried out to specific cleanup criteria. (FACS Glossary)

**Contaminant** - Any physical, chemical, biological or radiological substance in air or soil or water that has an adverse effect. Any chemical substance whose concentration exceeds background concentrations or which is not naturally occurring in the environment. (FACS Glossary)

**Contaminated Site** – A contaminated site is defined as a site at which substances occur at concentrations: (1) above background levels and pose or are likely to pose an immediate or long term hazard to human health or the environment, or (2) exceeding levels specified in policies and regulations. (FACS Glossary)

**Detailed Incident Report (DIR)** - Companies are legally required to file a DIR under the OPR, that is expected to contain a description of the incident, agencies and persons affected, losses and impacts on people, environment and property, conditions contributing to the incident detailed analysis of any failed component, corrective actions taken, as well as underlying causes and actions proposed to prevent a similar incident.

**Environmental Site Assessment (ESA)** – A systematic due diligence process that includes studies, services and investigations to plan, manage and direct assessment, decommissioning and cleanup actions. (FACS Glossary)

**Phase I Environmental Site Assessment (Phase I ESA)** – The four principal components of a Phase I ESA are: records review; site visit; interviews; and evaluation of information and reporting. The requirements, methodology, and practices are more fully described in the CSA document Z768-94 or ASTM Practice E 1527.

**Phase II Environmental Site Assessment (Phase II ESA)** – The principal components of a Phase II ESA are: development of investigation and sampling work plans; investigations and inspections; and interpretation and reporting of sampling results. This investigation is normally undertaken when a Phase I ESA determines a likelihood of significant site contamination. The requirements, methodology, and practices are more fully described in the CSA document Z769 or ASTM Practice E 1903-97. A

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<sup>2</sup> Definitions in this Glossary are taken from the NEB Filing Manual, The Federal Approach to Contaminated Sites (1999) or are created for the purposes of this document.



Phase II ESA sometimes includes what may be termed a Phase III ESA. This may include investigating the nature and extent of adverse environmental impacts and determining the potential risk to human health and the environment. Key components include: delineation of contamination, calculations of volumes of soil and groundwater affected, notification, establishing remediation objectives and determining remediation options.

**Receptor** – The person or organisms, including plants, subjected to chemical exposure. (FACS Glossary)

**Release** – Includes discharge, spray, spill, leak, seep, pour, emit, dump and exhaust. (OPR-99 and PPR)

**Remediation** - The improvement of a contaminated site to prevent, minimize or mitigate damage to human health or the environment. Remediation involves the development and application of a planned approach that removes, destroys, contains or otherwise reduces the availability of contaminants to receptors of concern. (FACS Glossary)

**Remediation Criteria** – Numerical limits or narrative statements pertaining to individual variables or substances in water, sediment or soil which are recommended to protect and maintain the specific use of contaminated sites. When measurements taken at a contaminated site indicate that the remediation criteria are being exceeded, the need for remediation is indicated. (FACS Glossary)

**Reportable Liquid Release** – A liquid release is reportable if it is greater than 1.5 m<sup>3</sup> for NEBA-regulated facilities and 0.1 m<sup>3</sup> (100 L) for COGOA-regulated exploration or production facilities or if it has the potential to cause an adverse effect.

**Site Characterization and Delineation** – A program or study that determines the magnitude, nature, degree, and lateral and vertical extent of the contamination that exceeds appropriate criteria or standards.

**Survey** – Either GPS coordinates or a survey drawing provided to show a contaminated site area, boundaries, contours, elevations, improvements, and its relationship to the surrounding land in accordance with accepted coordinates.

## 13 APPENDICES

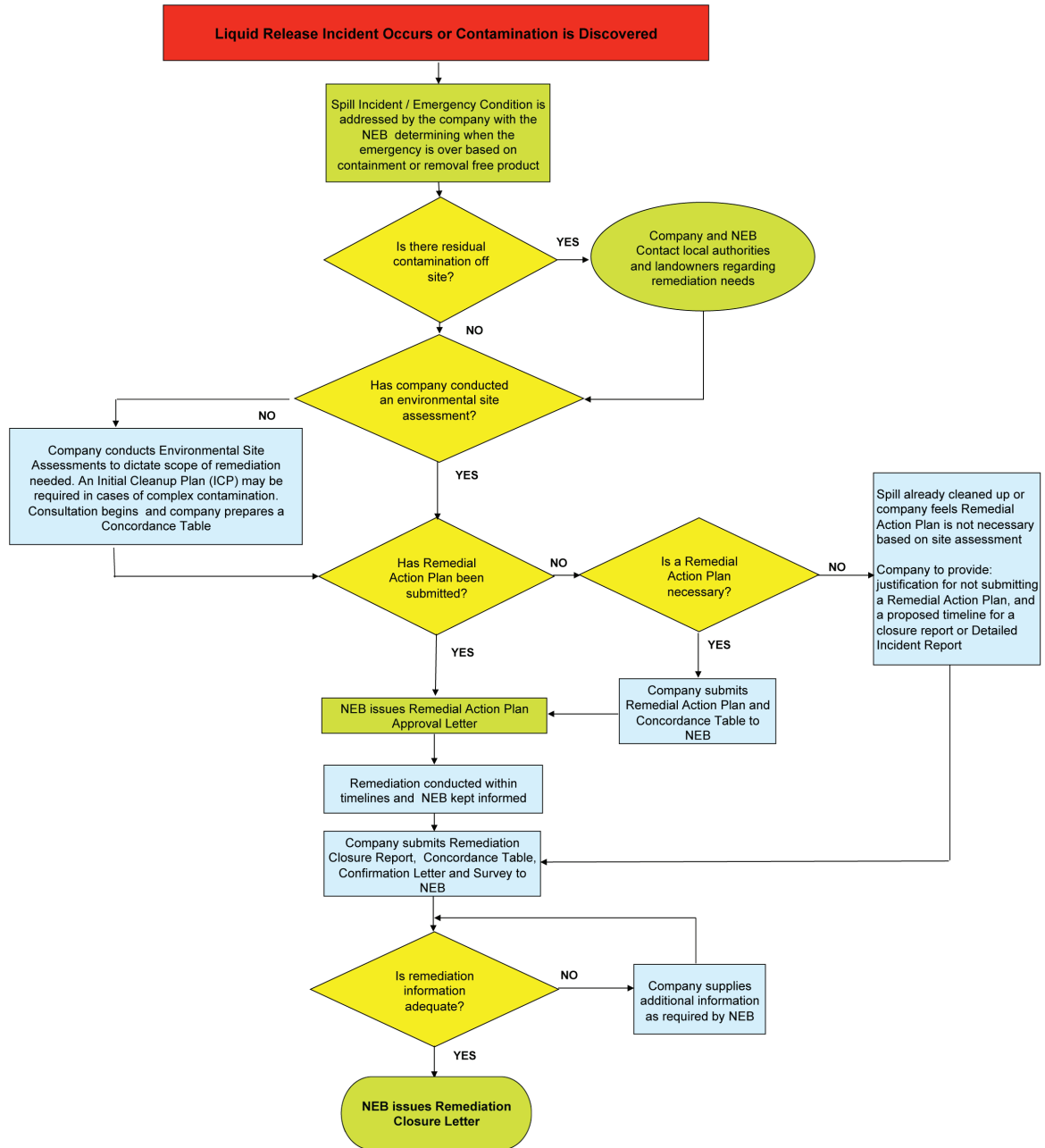
Appendix A.	Remediation Process Guide Flowchart
Appendix B.	Self Assessment - Need for a Remedial Action Plan
Appendix C.	Concordance Table Template
Appendix D.	Remediation Closure Letter Template

# APPENDIX A

## REMEDIATION PROCESS GUIDE

### FLOWCHART

# National Energy Board - Remediation Process Guide



## **APPENDIX B**

### **SELF ASSESSMENT**

#### **NEED FOR A REMEDIAL ACTION PLAN**



## SELF ASSESSMENT - NEED FOR A REMEDIAL ACTION PLAN

Screening Question	Assessment	Comment
<b>Prescreening</b>		
1. Is the spill less than 1.5 cubic metres or if it is North of the 60th parallel, less than 100 litres in volume?	Yes___ No___	If Yes, normal cleanup is expected with documentation of location.
2. Has a detailed Incident Report or NT-NU Spill Report been submitted?	Yes___ No___	If No, company should supply it.
3. If the spill is greater than 1.5 cubic metres or greater than 100 litres in the North, has it already been appropriately cleaned up or remediated?  <i>Note: clean-up means removing all free product and/ or material from surface of soil, water, snow, ice or impermeable site.</i>	Yes___ No___	If Yes, company should submit a report certified by a company official that the site has been remediated to applicable standards, with a survey of the spill site, or that contaminated materials have been removed and appropriately disposed.
4. Have environmental site assessment(s) been done?	Yes___ No___	If No, the company should explain why not.
5. Is there sufficient information to not do environmental site assessment(s)	Yes___ No___	If No, the company should conduct environmental site assessment(s).

### Need for a Remedial Action Plan

Screening Question	Assessment	Comment
<p>6. Are there contamination exceedances based on:</p> <p>a) CCME environmental quality guidelines,</p> <p>b) equivalent provincial/territorial guidelines/standards in lieu of (a) for a specific chemical, or</p> <p>c) toxicity benchmarks for chemicals not covered in (b)?</p> <p>This does not apply to contamination contained within a NEB-regulated facility but does apply to a Right of Way</p>	Yes___ No___	
<p>7. Is there evidence of impact to humans at the site or off-site due to spill migration?</p>	Yes___ No___	
<p>8. Is there evidence of significant impacts to ecological receptors (vegetation, wildlife)?</p>	Yes___ No___	
<p>9. Is the size of the affected area greater than 2 hectares or 1000 square metres if it is in the North or does it extend beyond the property boundary?</p>	Yes___ No___	
<p>10. Are there indicators of adverse environmental effects at the spill site (hydrocarbon sheen, stressed biota or presence of contaminants in soil) following initial cleanup?</p> <p>This does not apply to contamination contained within a NEB-regulated facility but does apply to a Right of Way</p>	Yes___ No___	

11.	Is there a potential for contamination to reach groundwater based on depth to groundwater, depth to confining layer, soil permeability etc.?	Yes___ No___	
12.	Is there a potential for contamination to reach surface water based on distance to a waterbody, ditches, soil permeability, conduits etc.?	Yes___ No___	
13.	Does the top 1.5 metres of soil contain contaminants that cannot easily be removed?	Yes___ No___	
14.	Is there a potable surface water or groundwater source within 300 metres?  This does not apply to contamination contained within a NEB-regulated facility but does apply to a Right of Way	Yes___ No___	
15.	Are there any utility conduits through or under the spill site that will remain in contact with any contaminant?	Yes___ No___	
<b>Screening Assessment</b>			
<b>Screening Question</b>		<b>Assessment</b>	<b>Comment</b>
16.	Were any of the Screening answers (Q6-15) Yes?	Yes___ No___	If Yes, company prepares a Remedial Action Plan.
17.	Were any of the Screening answers (Q6-15) not able to be answered?	Yes___ No___	If Yes, the company needs to acquire and provide appropriate information.
18.	Were all of the Screening answers No?	Yes___ No___	If Yes, company must submit a company certified report that either, the site has been remediated to standards with a survey of the spill site, or remediation is not necessary as contaminated materials have been removed and appropriately disposed.

# APPENDIX C

## CONCORDANCE TABLE TEMPLATE



NATIONAL ENERGY BOARD

Remediation Information Concordance Table (Example)

Site Location: \_\_\_\_\_

Aspect	Potential Impact	Regulatory Requirements	Remediation Results
Oil - Soil Contamination	Vegetation growth, groundwater affected	NEB Act	Soil removed to 3 m. over 50 sq. m. Replaced with clean fill
Free product on Groundwater	Drinking water effects, migration to surface water	CCME specific criteria Provincial specific criteria	
Off-site migration	Other landowner concerns	Contain and recover	
Benzene in Groundwater		CCME specific criteria	
Additional Measures of Success			
Desired Outcome		How Outcome Was Achieved	
Landowners informed and in agreement with planned remediation activities			
Restoration of land capability			

## APPENDIX D

### REMEDATION CLOSURE LETTER TEMPLATE

Company XYZ

Dear \_\_\_\_\_ :

**Remediation Closure – Description and Legal Location**

The National Energy Board acknowledges receipt of the \_\_\_\_\_ Remediation Closure Report for the above referenced site.

Based on the information contained in the \_\_\_\_\_ Report, it has been determined that the remediated area meets the \_\_\_\_\_ criteria. The NEB spill incident database will now show that remediation of this site has been closed as of the date of this letter.

This letter is not intended to absolve any party from the potential for future liability for remediating this site in situations where the land use may change or where additional concerns arise from contaminants remaining on or offsite.

Once validation of reclamation and restoration of the land surface has occurred, an application for confirmation may be submitted to the NEB.

If you have any questions or comments please contact \_\_\_\_\_ at \_\_\_\_\_ or the NEB toll free number 1-800-899-1265, or via email at \_\_\_\_\_.

Yours truly,

Secretary of the Board

