

Federal, Provincial and Territorial Framework for the Management of Contaminated Sites in Canada



**Final Report
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LJM Environmental Consulting**

Federal, Provincial and Territorial Framework for the Management of Contaminated Sites in Canada

Disclaimer

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Electronic Supplement

(on a CD)

Contains copies of relevant statutes, regulations, guidelines, policies and management information collected during the research phase of the project.

Part I Contaminated Sites Legal Framework¹

1.0 Federal²

Fisheries Act, R.S.C. 1985, c. R-14

Canadian Environmental Assessment Act, S.C. 1992, c.37

Canadian Environmental Protection Act, 1999, S.C. 1999, c.33

CCME Guidelines

There are no laws in place that specifically addresses the designation and remediation of contaminated sites at the federal level. There are, however, two federal statutes that have general application: the *Fisheries Act*, and the *Canadian Environmental Protection Act*.

1.1 Fisheries Act

Subsection 36(3) of the *Fisheries Act* prohibits the deposit of a “deleterious substance” into water frequented by fish or in any place where the substance may enter water frequented by fish. The term deleterious substance is broadly defined in the Act and includes,

Any substance that, if added to any water, would degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or to the use by humans of fish that frequent that water...³

The following persons may be found liable under the *Fisheries Act*:

Any person who,

- (1) owns a deleterious substance,
- (2) has the charge, management or control of a deleterious substance, or
- (3) has caused or contributed to the deposit of a deleterious substance.

Subsection 38(5) requires that all reasonable steps be taken to prevent the deposit or, if the deposit occurs, to remedy any adverse effects.

Any deposit of a deleterious substance, that is not authorized, must be reported in accordance with subsection 38(4) of the Act. Fisheries inspectors have the power to issue orders to any person responsible for the deposit requiring that person to take action to address any adverse effects resulting from the deposit.

¹Refer to Table A for a comparative review of relevant provincial and territorial statutes, regulations and guidelines.

² The *Fisheries Act* and *Canadian Environmental Protection Act, 1999*, can be found in the electronic supplement. The CCME Guidelines have not been included in the electronic supplement, but may be found at: www.ccme.ca .

³ *Fisheries Act*, s.34

1.2 Canadian Environmental Assessment Act⁴

The *Canadian Environmental Assessment Act* (CEAA) defines “project” as follows:

2(1) "project" means

- (a) in relation to a physical work, any proposed construction, operation, modification, decommissioning, abandonment or other undertaking in relation to that physical work, or
- (b) any proposed physical activity not relating to a physical work that is prescribed or is within a class of physical activities that is prescribed pursuant to regulations made under paragraph 59(b);

Based on this definition a site remediation may fall within the definition of project and be subject to an environmental assessment under the Act. An environmental assessment may be triggered where a federal authority exercises any of the following powers, duties or functions in respect of a project:

- (a) is the proponent of the project;
- (b) provides some form of financial assistance to enable the project to be carried out;
- (c) provides land or any interest or control in land to enable the project to be carried out; or
- (d) issues a permit, license, approval or other action to enable the project to be carried out.⁵

The Northern Wood Preservers Site Sediment Remediation Project is an example of a remediation project that fell within the scope of the CEAA.⁶

1.3 Canadian Environmental Protection Act

The *Canadian Environmental Protection Act, 1999* (CEPA) does not include provisions that prohibit the release of a specific substance or contaminant. The Act provides a process by which substances may be identified as “toxic.” A substance that is determined, under the Act, to be toxic and is added to the List of Toxic Substances may be regulated in many ways through the CEPA regulations. For example, halocarbons are regulated via the *Federal Halocarbon Regulations*. Those regulations prohibit and control the release of halocarbons in a variety of circumstances.

Paragraphs 95(1)(a) and 212(1)(a) of CEPA require the release, or likely release, of any substance on the *List of Toxic Substances*, where the release contravenes a regulation or an order made under CEPA, to be reported to an enforcement officer. Any person that, owns the substance; has the charge, management or control of the substance; or has caused or contributed to the release, must report the release to an enforcement officer and must take all reasonable measures to prevent the release or remedy any dangerous condition created by the release. Paragraphs 95(3) and 212(3) of CEPA require any person who owns property affected by the release to report the release to an enforcement officer.

Part 9 of CEPA specifically addresses the “federal house” which includes federal departments, agencies, boards, commissions, Crown corporations, federal works and undertakings such as banks, airlines, and broadcasting systems, federal land and aboriginal land. This Part provides the Minister with the authority to establish objectives, guidelines and codes of practice for the “federal house.” Guidelines could be

⁴ The *Canadian Environmental Assessment Act* can be found at www.ceaa.gc.ca.

⁵ *Canadian Environmental Assessment Act*, s.5

⁶ For more information on this project see www.ceaa.gc.ca

developed to address the release of toxic substances and the remediation of sites contaminated by these substances.

1.4 CCME Guidelines

The following Canadian Council of Ministers of the Environment (CCME) Guidelines are used by federal, provincial and territorial governments in the identification and management of contaminated sites:

- *Canadian Environmental Quality Guidelines* (CCME 1999, updated annually)
- *Guidance Document on the Management of Contaminated Sites in Canada* (CCME 1997)
- *Petroleum Hydrocarbons in Soil -- Canada Wide Standard* (CCME 2000)
- *Guidance Manual for Developing Site Specific Soil Quality Remediation Objectives for Contaminated Sites in Canada* (CCME 1993)
- *The National Classification System for Contaminated Sites* (CCME 1992)
- *A Framework for Ecological Risk Assessment: General Guidance* (CCME 1996)
- *National Classification System for Contaminated Sites* (CCME 1992)

2.0 Western Region

2.1 Alberta⁷

Environmental Protection and Enhancement Act, S.A. 1992, c.E-13.3
Guidelines for the Designation of Contaminated Sites under the Environmental Protection and Enhancement Act (AENV 2000)

2.1.1 Definitions

Alberta's *Environmental Protection and Enhancement Act* (EPEA) does not provide a definition for "contaminant" or "contaminated site." The identification of a contaminated site is based on the presence of a "substance" which has caused or is causing a significant "adverse effect." To that end the EPEA defines "substance" and "adverse effect."

A "substance" includes any matter that is capable of becoming dispersed in the environment, any sound, vibration, heat, radiation or other form of energy, and any combination of the above.⁸

An "adverse effect" means impairment of or damage to the environment, human health, safety or property.⁹

2.1.2 Site Identification

Under Alberta's EPEA any person who releases a substance, or causes or permits the release of a substance, into the environment, where the release may cause an adverse effect is required to report the release. The report must be made as soon as that person knows or ought to know of the release to the following persons:

- Director under the EPEA,
- The owner of the substance,
- The person's employer,

⁷ The *Environmental Protection and Enhancement Act* and *Guidelines for the Designation of Contaminated Sites under the Environmental Protection and Enhancement Act* can be found in the electronic supplement.

⁸ *Environmental Protection and Enhancement Act*, s. 1(kkk)

⁹ *Environmental Protection and Enhancement Act*, s. 1(b)

- The person having control of the substance, and
- Any other person who may be directly affected.¹⁰

Various provisions in EPEA provide Alberta Environment with powers to deal with site contamination. These powers include environmental protection orders for substance release and reclamation, conditions in approvals and codes of practice and the designation of contaminated sites. EPEA imposes certain conditions or limitations on the implementation of contaminated sites provisions. Sections 102 and 103 of EPEA provides the Director with the power to issue an environmental protection order (EPO) or emergency environmental protection order (EEPO), respectively, to the person responsible for a substance that has been released or may be released to the environment. Under EPEA, an actual or anticipated adverse effect that is caused, or may be caused by, the release is a required condition prior to issuing an EPO. Sections 125 and 126 of EPEA give inspectors power to issue Environmental Protection Orders, which require work to be done to conserve and reclaim land. There is no requirement to establish an adverse effect under s. 125, but s. 126 orders for off-site damage are conditional either upon either the escape of a substance from specified land to off-site locations or an adverse effect off-site.

Once the Director becomes aware of a potentially contaminated site, he or she has the authority to designate the site as contaminated. The Director must be of the opinion that a substance is present that may cause, is causing or has caused a significant adverse effect.¹¹ The *Guidelines for the Designation of Contaminated Sites under the Environmental Protection and Enhancement Act* include a number of criteria that a Director may consider before designating a site as contaminated. The Director is not required to designate the site as contaminated even if it meets the criteria for designation. However, once a site has been designated the Director must inform the site owner, any other responsible person and the relevant local authority.¹²

2.1.3 Site Remediation

Remediation of a contaminated site may take place on a voluntary basis or under an environmental protection order issued by a Director. EPEA does not define “remediation” or prescribe any remediation criteria. Remediation criteria are determined on a case by case basis and are set out either voluntarily, by the responsible person in a remedial plan, or by a Director in an environmental protection order. If remediation is satisfactorily complete, EPEA allows for the Director to issue a remediation certificate. . However, remediation certificates are not currently regulated and used.

2.2 British Columbia¹³

Waste Management Act, S.B.C. 1982, c.41
Contaminated Sites Regulation, B.C. Reg. 375/96
Special Waste Regulation, B.C. Reg. 52/95¹⁴

2.2.1 Definitions

For general application, the *Waste Management Act* (WMA) defines “pollution” as the presence in the environment of substances or contaminants that substantially alter or impair the usefulness of the environment.¹⁵

¹⁰ *Environmental Protection and Enhancement Act*, s.99

¹¹ *Environmental Protection and Enhancement Act*, s. 110(1)

¹² *Environmental Protection and Enhancement Act*, s. 111

¹³ British Columbia has a well developed contaminated sites regime, including numerous technical guidance documents and protocols which are not described in this report. The report specifically addresses the legislative framework with some reference to the management framework.

¹⁴ The *Waste Management Act*, *Contaminated Sites Regulation*, and *Special Waste Regulation* can be found in the electronic supplement

¹⁵ *Waste Management Act*, s.1(1)

In the context of spill prevention and reporting, the term “polluting substance” is defined in the WMA as,

...any substance, whether gaseous, liquid or solid, that could, in the opinion of the Minister, substantially impair the usefulness of land, water or air if it were to escape into the air, or were spilled on or were to escape onto any land or into any body of water.¹⁶

Part 4 of the WMA, which addresses contaminated site remediation, defines “contamination” to mean, “...the presence, in soil, sediment or groundwater, of special waste or another substance in quantities or concentrations exceeding prescribed criteria, standards or conditions.”¹⁷

Part 4 of the WMA also contains the following definition of contaminated site:

“contaminated site”

...an area of land in which the soil or any groundwater lying beneath it, or the water or the underlying sediment, contains (a) a special waste, or (b) another prescribed substance in quantities or concentrations exceeding prescribed criteria, standards or conditions¹⁸

The “prescribed criteria, standards or conditions” can be found in the *Contaminated Sites Regulation* (CSR). The CSR provides a more detail to the definition of “contaminated site” by including information on land use and the concentration of certain substances in the soil, surface water and groundwater.¹⁹

2.2.2 Site Identification

Any person who has possession, charge or control of a polluting substance must immediately report an unauthorized escape or spill of the substance to a pollution prevention manager.²⁰

Basing their decisions on the relevant criteria, standards and conditions, pollution prevention managers have the authority to determine whether a site is contaminated. In making this determination the manager will consider a site profile, a preliminary site investigation, a detailed site investigation or other available information.²¹ The site profile is a four page form that must be provided with a municipal application for zoning, soil removal, demolition, development, etc.²² A preliminary site investigation includes a site visit, and review of historical records, interviews and other information gathering activities, including some preliminary sampling.²³ A detailed site investigation includes sampling and analysis to identify contaminating substances and specific areas of contamination.²⁴

The WMA includes a direction to any person who undertakes independent site remediation to notify a manager in writing promptly on initiating remediation, and notify a manager in writing within 90 days of completing remediation. This requirement applies to all sites, regardless of designation.²⁵

¹⁶ *Waste Management Act*, s.12(1)

¹⁷ *Waste Management Act*, s.26(1).

¹⁸ *Waste Management Act*, s.26(1)

¹⁹ *Contaminated Sites Regulation*, s.11

²⁰ *Waste Management Act*, s.12(5)

²¹ *Waste Management Act*, s. 26.4(1). A site may be contaminated, as defined in the WMA, even where a manager has failed to make a determination

²² *Waste Management Act*, 26.1 and *Contaminated Sites Regulation*, Part 2

²³ *Contaminated Sites Regulation*, s.58

²⁴ *Contaminated Sites Regulation*, s.59

²⁵ *Waste Management Act*, s.28

2.2.3 Site Remediation

British Columbia is the only jurisdiction to include legislated remediation standards. Remediation is defined in the WMA as,

... action to eliminate, limit, correct, counteract, mitigate or remove any contaminant or the negative effects on the environment or human health of any contaminant, and includes, but is not limited to, the following:

- (a) preliminary site investigations, detailed site investigations, analysis and interpretation, including tests, sampling, surveys, data evaluation, risk assessment and environmental impact assessment;
- (b) evaluation of alternative methods of remediation;
- (c) preparation of a remediation plan, satisfactory to the manager, including a plan for any consequential or associated removal of soil or soil relocation from the site;
- (d) implementation of a remediation plan;
- (e) monitoring, verification and confirmation of whether the remediation complies with the remediation plan, applicable standards and requirements imposed by the manager;
- (f) other action that the Lieutenant Governor in Council may prescribe.²⁶

A contaminated site is satisfactorily remediated if substances on the site (in soil, surface water and groundwater) are found in concentrations less than applicable standards stated in the Schedules to the CSR.²⁷ This approach to remediation ensures that responsible parties have very specific information on the level of contamination and the likelihood of remediation. The BC legislative framework also allows for remediation based on health risk assessment and environmental impact assessment. This process may allow a site to be used even where certain contaminants remain on the site.²⁸

Following successful site remediation, a manager may issue a certificate of compliance to verify that a site has been remediated in accordance with the prescribed numerical standards and any other applicable conditions. Alternatively, the manager may issue a conditional certificate of compliance to verify that a site has been remediated in accordance with prescribed risk-based standards, environmental impact requirements and any other applicable conditions.²⁹

2.3 Manitoba³⁰

Environment Act, S.M. 1987-88, c. 26 - Cap. E125

Dangerous Goods Handling and Transportation Act, R.S.M. 1987, c. D12

Contaminated Sites Remediation Act, S.M. 1996, c. 40 - Cap. C205

Contaminated Sites Remediation Regulations, 105/97

Guidelines for the Designation of Contaminated Sites in Manitoba (March 1997)

Guideline for Site Environmental Investigations in Manitoba (June 1998)

2.3.1 Definitions

The *Contaminated Sites Remediation Act* (CSRA) defines "contaminant" in the context of contaminated sites, as

²⁶ *Waste Management Act*, s.1(1).

²⁷ *Contaminated Sites Regulation*, s.17

²⁸ *Contaminated Sites Regulation*, s.18.

²⁹ *Waste Management Act*, s.27.6

³⁰ The *Environment Act*, *Dangerous Goods Handling and Transportation Act*, *Contaminated Sites Remediation Act*, *Contaminated Sites Remediation Regulations* and the *Guideline for Environmental Site Investigations in Manitoba* can be found in the electronic supplement.

... a product, substance or organism that is foreign to or in excess of the natural constituents of the environment at the site and that

- (a) has affected, is affecting or may affect the natural, physical, chemical or biological quality of the environment, or
- (b) is, or is likely to be, injurious or damaging to the health or safety of a person.³¹

According to the CSRA, soil, surface water or groundwater is contaminated if it has been permeated or infused with a contaminant.³²

The term “contaminant” is defined in similar fashion in the *Dangerous Goods Handling and Transportation Act* (DGA) except that “product, substance or organism” is replaced with “solid, liquid, gas, waste, radiation or any combination.”³³

2.3.2 Site Identification

In the province of Manitoba, sites may be identified through the *Dangerous Goods Handling and Transportation Act* or the *Contaminated Site Remediation Act*.

Dangerous Goods Handling and Transportation Act: Any person who is responsible for or has the custody of a contaminant that is involved in an environmental accident must immediately report the accident to an environment officer.³⁴ An “environmental accident” is an unauthorized release, leak or spill of a contaminant into the environment that creates a hazard to human life, health, other living organisms, or the environment. If an environmental accident does occur the Director, under the DGHTA, may issue a remedial order requiring an investigation, tests, monitoring, etc.³⁵

Contaminated Site Remediation Act: Where a Director, under the CSRA, believes, on reasonable grounds, that a site may be contaminated, he or she may order an investigation of the site.³⁶ If the Director determines that contamination is at a level that may pose a risk to human health, safety or the environment, he or she may designate the site as contaminated. Once the site has been designated, if the Director determines that remediation of the site will be required, he or she may order further investigations to be carried out on the site to determine the extent of the contamination.

2.3.3 Site Remediation

Once a site has been designated as contaminated, the Director, under the CSRA, has the authority to order any potentially responsible person to prepare a remediation plan for the site.³⁷ Upon receipt of the remediation plan the Director must consult with any person potentially responsible for the remediation. The Director may also choose to have the plan reviewed by a consultant, refer it to the clean environment commission for consideration, recommend a public hearing take place, or make the plan available to the public.³⁸ The Director has the power, after following appropriate criteria, to issue a remediation order to ensure that the site is properly monitored, cleaned and rehabilitated. Remediation plans and clean-up may also be completed voluntarily and submitted to the Director. There are no pre-determined remediation criteria in the CSRA or *Contaminated Sites Remediation Regulations*.

³¹ *Contaminated Sites Remediation Act*, s.2

³² *Contaminated Sites Remediation Act*, s.2.

³³ *Dangerous Goods Handling and Transportation Act*, s.1

³⁴ *Dangerous Goods Handling and Transportation Act*, s.28

³⁵ *Dangerous Goods Handling and Transportation Act*, s.1 and s.16

³⁶ *Contaminated Site Remediation Act*, s.4

³⁷ *Contaminated Sites Remediation Act*, s. 15

³⁸ *Contaminated Sites Remediation Act*, s.16(1)

Following a successful remediation, the Director is required to issue a certificate of compliance to any person named in a remediation order that applies for the certificate. A similar certificate or closure letter may also be issued where a voluntary remediation has taken place. The certificate of compliance includes, among other things, a statement regarding site restrictions and a reference to the standard or level to which the site has been remediated.³⁹

2.4 Saskatchewan⁴⁰

Environmental Management and Protection Act, S.S. 1983-84, c.E-10.2

The Environmental Spill Control Regulations, Chapter D-14 Reg. 1 (1981)

The Hazardous Substances Waste Dangerous Goods Regulations, Chapter E-10.2, Reg. 3 (1989)

The Mineral Industry Environmental Protection Regulations, 1996, Chapter E-10.2, Reg. 7 (1996)

The Municipal Refuse Management Regulations, Chapter E-10.2, Reg. 4 (1986)

Environmental Liability and Contaminated Site Management (SERM 1999)

2.4.1 Definitions

The *Environmental Management and Protection Act* (EMPA) defines contaminant as, "...a substance capable of changing the quality of water or of causing water pollution."⁴¹ The definition is not of general application but rather applies specifically to the contamination of water. The term "pollutant" is defined in a more general manner as, "...a substance that causes or may cause pollution of the environment."⁴²

2.4.2 Site Identification

The EMPA does not define "contaminated site" and there are no specific powers or criteria in the EMPA to designate a site as contaminated. The Minister does have the power to require an investigation to be performed if a pollutant has been discharged. The investigation can consider the source and extent of the discharge, the effect on the environment and any remedial action that may be advisable.⁴³ The discharge of a pollutant would generally come to the attention of the Minister through reporting requirements in the EMPA and the *Environmental Spill Control Regulations*. The reporting provisions require the following persons to provide any information requested by the Minister, an environment officer or any other designated person: the owner of the pollutant, the person having control of the pollutant, any person on whose property a pollutant is located or any other person who has knowledge relating to the pollutant or its discharge.⁴⁴ The Minister may also become aware of remediation projects through decommissioning plans required by *The Hazardous Substances Waste Dangerous Goods Regulations*, *The Mineral Industry Environmental Protection Regulations, 1996*, and *The Municipal Refuse Management Regulation*.

2.4.3 Site Remediation

The EMPA does not include any provisions that specifically require the creation or submission of remediation plans. In some instances regulations under the EMPA or other environmental statutes and regulations may require the development of a remediation plan.⁴⁵ The Minister does have the power to order clean up and restoration of the environment where a pollutant has been discharged or is present in the environment and may be harmful to the environment. The order can be issued to the owner of the pollutant

³⁹ *Contaminated Sites Remediation Act*, s.19

⁴⁰ The *Environmental Management and Protection Act* and *Environmental Liability and Contaminated Site Management* can be found in the electronic supplement. See also www.canadianenvironmental.ca

⁴¹ *Environmental Management and Protection Act*, s.2(b)

⁴² *Environmental Management and Protection Act*, s.2(u)

⁴³ *Environmental Management and Protection Act*, s.3

⁴⁴ *Environmental Management and Protection Act*, s.9

⁴⁵ For example, s.17 of the *Hazardous Substances and Dangerous Goods Act* requires a remediation plan for the decommissioning of a regulated storage facility.

or the person having control of the pollutant.⁴⁶ The EMPA does not include any criteria or standards for cleanup of a contaminated site.

The *Environmental Liability and Contaminated Site Management* states that both numerical guidelines and risk assessment processes may be used to remediate a contaminated site. There is no formal process under the EMPA to certify that a site is remediated. Informal, oral or written, comments may be provided by the government authority.⁴⁷

3.0 Central and Northern Regions

3.1 Ontario⁴⁸

Environmental Protection Act, R.S.O. 1990, c. E-19
Guideline for Use at Contaminated Sites (1998)

3.1.1 Definitions

The *Environmental Protection Act* (EPA) defines a contaminant as, "...any solid, liquid, gas, odour, heat, sound, vibration, radiation or combination of any of them resulting directly or indirectly from human activities that may cause an adverse effect."

An "adverse effect" means one or more of

- impairment of the quality of the natural environment for any use that can be made of it,
- injury or damage to property or to plant or animal life,
- harm or discomfort to any person,
- an adverse effect on the health of any person,
- impairment of the safety of any person,
- rendering any property or plant or animal life unfit from human use,
- loss of enjoyment of normal use of property, or
- interference with the normal conduct of business⁴⁹

The definition of pollutant is indirectly relevant to contaminated site identification and management in Ontario. The EPA defines pollutant as, "...a contaminant other than heat, sound, vibration or radiation."⁵⁰ This definition applies only to Part X (sections 91-123) of the EPA which addresses spills.

3.1.2 Site Identification

The EPA does not define contaminated site and it does not specifically provide for the designation of contaminated sites. However, the Director under the EPA has broad order making powers that may effectively identify a site as contaminated. For example, subsection 7(1) of the EPA states:

When the report of a provincial officer contains a finding that a contaminant discharged into the natural environment is a contaminant the use of which is prohibited by the regulations or is being discharged in contravention of section 14 or the regulations, the Director may issue a control order to

⁴⁶ *Environmental Management and Protection Act*, s.4

⁴⁷ *Environmental Liability and Contaminated Site Management*, 2.2 (Step 5)

⁴⁸ The *Environmental Protection Act* and the *Guideline for Use at Contaminated Sites* can be found in the electronic supplement.

⁴⁹ *Environmental Protection Act*, s.1(1)

⁵⁰ *Environmental Protection Act*, s.91(1)

- (a) an owner or previous owner of the source of contaminant;
- (b) a person who is or was in occupation of the source of contaminant; or
- (c) a person who has or had the charge, management or control of the source of contaminant.⁵¹

Any person, who has the control of a pollutant or spills a pollutant that may result in an adverse effect to the environment, is required by the EPA to report the spill to the Minister.⁵² The Minister must also be notified if a contaminant, that is likely to cause an adverse effect, is released into the environment.⁵³ These provisions assist the Minister in identifying a potentially contaminated site. Sites may also be identified during municipal land use planning processes. In certain circumstances where stratified cleanups and risk management measures are used, the Minister has the power under the EPA to issue a certificate of prohibition against a property. This certificate can be filed with the land registry, which provides notice to anyone interested in acquiring an interest in the property that it is subject to an order or decision of the Ministry of Environment.⁵⁴

3.1.3 Site Remediation

There are no specific provisions or powers under the EPA to address the remediation of a contaminated site. However, there are several order-making powers that the Minister or Director can use to require remediation where a contaminant has been released into the environment. For example, where a contaminant has been discharged into the environment and that discharge has or is likely to injure, damage or endanger land, water, property, animal life, plant life or human health or safety, the Minister has the power to order the responsible person to repair the injury or damage.⁵⁵ Alternatively, where a pollutant is spilled and the Minister is of the opinion that there is, or is likely to be, an adverse effect and that it is in the best interest of the public to make an order, the Minister may make an order. The contents of the order will require that everything practicable be done to prevent, eliminate and ameliorate the adverse effects and restore the natural environment.⁵⁶ Finally, under section 17 of the EPA, the Director can order a person that has caused or permitted the discharge of a contaminant into the natural environment, where there is or is likely to be damage or injury, to repair the injury or damage.

The *Guideline for Use at Contaminated Sites* provides information on the elements of a remedial work plan that may be used as a means of guiding site remediation. Although the Guideline provides information on cleanup criteria, site assessments, etc., it does not tell you how to carry out the remediation. The Guideline also requires the submission of a Record of Site Condition, the receipt of which is acknowledged by the Ministry of Environment.

3.2 Québec⁵⁷

Environmental Quality Act, R.S.Q., 1972 c. Q-2
Spill Contingency Planning and Reporting Regulations, R-068-93
Soil Protection and Contaminated Sites Rehabilitation Policy (1998)

⁵¹ Section 14 of the EPA provides a general prohibition against the discharge of a contaminant into the natural environment that causes or is likely to cause an adverse effect.

⁵² *Environmental Protection Act*, s.92

⁵³ *Environmental Protection Act*, s.13 and 15

⁵⁴ *Environmental Protection Act*, s.197

⁵⁵ *Environmental Protection Act*, s.17

⁵⁶ *Environmental Protection Act*, s.97

⁵⁷ The *Environmental Quality Act* and *Soil Protection and Contaminated Sites Rehabilitation Policy* can be found in the electronic supplement.

3.2.1 Definitions

The *Environmental Quality Act* (EQA) defines “contaminant” as, “... a solid, liquid or gaseous matter, a microorganism, a sound, a vibration, rays, heat, an odour, a radiation or a combination of any of them, likely to alter the quality of the environment in any way.”⁵⁸

3.2.2 Site Identification

The EQA does not define contaminated site and does not provide for the designation of a contaminated site.

The accidental release of any contaminant into the environment that is likely to affect the life, health, safety, welfare or comfort of human beings, or to cause damage to or otherwise impair the quality of the soil, vegetation, wildlife or property must be reported to the Minister.⁵⁹

The *Soil Protection and Contaminated Sites Rehabilitation Policy* targets specific industries and activities that are at risk for contaminating soil. The Ministry of Environment keeps a data bank of general information on contaminated lands.

3.2.3 Site Remediation

The Minister can order any person who has released a contaminant into the environment to prepare a program of decontamination or restoration of the environment and to recover, remove, collect or neutralize the contaminant taking any measure he specifies to decontaminate or restore the environment if the contaminant,

- is in a quantity that is greater than that prescribed by the regulations, or
- is likely to affect the life, health, safety, welfare or comfort of human beings, or to cause damage to or to otherwise impair the quality of the soil, vegetation, wildlife or property.⁶⁰

The *Soil Protection and Contaminated Sites Rehabilitation Policy* provides guidance on the rehabilitation of contaminated sites through generic and risk-based criteria. It does not, however, provide detailed management of the remediation process. Following a successful remediation the Policy authorizes the Ministry of Environment to issue a certificate of compatibility to demonstrate that the site is safe for its intended use.

3.3 Northwest Territories⁶¹

Environmental Protection Act, R.S.N.W.T. 1988, c. E-7

Spill Contingency Planning and Reporting Regulations (1993)

Guideline for Contaminated Site Remediation (Environmental Protection Service of the Department of Resources, Wildlife and Economic Development 1998)

3.3.1 Definitions

The term “contaminant” is defined in the *Environmental Protection Act* (EPA) to mean, “... any noise, heat, vibration or substance and includes such other substance as the Minister may prescribe that, where discharged into the environment,

⁵⁸ *Environmental Quality Act*, s.1(5)

⁵⁹ *Environmental Quality Act*, s.20 and 21

⁶⁰ *Environmental Quality Act*, s..31.42 and s.31.43

⁶¹ The *Environmental Protection Act*, *Spill Contingency Planning and Reporting Regulations* and the *Guideline for Contaminated Site Remediation* can be found in the electronic supplement.

- endangers the health, safety or welfare of persons,
- interferes or is likely to interfere with normal enjoyment of life or property,
- endangers the health of animal life, or
- causes or is likely to cause damage to plant life or to property.”⁶²

3.3.2 Site Identification

The *Environmental Protection Act* does not define contaminated site and does not contain any provisions to designate a site as contaminated. A spill of a contaminant, in excess of an identified amount, must be immediately reported to the Department, and this information may be used to identify potentially contaminated sites.⁶³

The *Guideline for Contaminated Site Remediation* defines a “contaminated site” as,

Areas of land, water, groundwater, or sediments that have levels of contaminants exceeding the remediation criteria. Contaminant sources can include on-site burial of wastes, small, frequent drips and spills, stockpiling and storage of materials, major spills, and releases during fires. Contamination may also be due to illegal dumping of contaminated soil. Contaminated sites may have short or long term consequences to people or the environment.⁶⁴

The Guideline encourages any person who suspects that they have a contaminated site to conduct a site assessment.

3.3.3 Site Remediation

Under the EPA an inspector can order any person who discharges or permits the discharge of a contaminant into the environment to repair or remedy any injury or damage to the environment that results from the discharge.⁶⁵ Where the person fails to carry out the remediation, or in the event of an emergency, the Chief Environmental Protection Officer may cause the remediation to be carried out. Remediation criteria are established through the *Guideline for Contaminated Site Remediation*.

3.4 Nunavut

For information on Nunavut please refer to section 3.3 on the Northwest Territories. Nunavut shares the relevant legislation and guidelines with the Northwest Territories.

3.5 Yukon⁶⁶

Environment Act, S.Y. 1991, c.5
Contaminated Sites Regulations, O.I.C. 1996/192
Spills Regulation, O.I.C. 1996/193

⁶² *Environmental Protection Act*, s.1

⁶³ *Environmental Protection Act*, s.5.1 and *Spill Contingency Planning and Reporting Regulations*, s.9

⁶⁴ *Guideline for Contaminated Site Remediation*, 1.1

⁶⁵ *Environmental Protection Act*, s.7(1)

⁶⁶ The *Environment Act*, *Contaminated Sites Regulations* and *Spills Regulation* can be found in the electronic supplement.

3.5.1 Definitions

The *Environment Act* defines “contaminated site” as,

an area of land in which the soil, including any groundwater lying beneath it, or the water including the sediment and bed below it, contains a contaminant which is in an amount, concentration or level in excess of that prescribed by regulation or allowed under a permit.⁶⁷

The *Contaminated Sites Regulations* (CSR) further define “contaminated site” based on land use and general numerical soil standards.

3.5.2 Site Identification

Approximately 80% of the total land area in the Yukon is owned by the federal government. The *Environment Act* and regulations do not apply to the federal government. The Act applies to land owned by the Territory, private land, and first nations settlement land only.

The release of a contaminant, in excess of regulated or permitted amounts, must be immediately reported to an environmental protection officer.⁶⁸ This report may lead the Minister to assess the site as potentially contaminated.

A site may be designated as contaminated by the Minister under the EA.⁶⁹ Prior to designation the Minister must follow a number of criteria outlined in the CSR, including information gathering via a site investigation or assessment.⁷⁰ The decision to designate a site as contaminated is discretionary.

Once a site has been designated and where the Minister believes the contaminated site may cause unsafe conditions, irreparable damage to the natural environment, or threaten public health, he or she may issue an order. The contents of the order will require a responsible party to carry out information gathering activities, including site investigations, relating to the contaminated site.⁷¹

3.5.3 Site Remediation

Any person who owns land that has been designated a contaminated site by the Minister is required to obtain authorization from the Minister before undertaking specific activities. A number of criteria must be met in order to obtain authorization, such as a plan of restoration or rehabilitation and a timetable for the execution of the work.⁷²

The Minister has the power to order a responsible party to provide a restoration or rehabilitation plan and to carry out work in accordance with this plan, in order to remediate a contaminated site.⁷³ Once a site has been remediated in accordance with an approved plan, the Minister must issue a certificate of compliance. The certificate of compliance does not warrant that the area of land is free of contamination.⁷⁴

⁶⁷ *Environment Act*, s.111

⁶⁸ *Environment Act*, s.113

⁶⁹ *Environment Act*, s.114

⁷⁰ *Contaminated Sites Regulation*, s.4

⁷¹ *Environment Act*, s.115

⁷² *Environment Act*, s.114(6)

⁷³ *Environment Act*, s.115

⁷⁴ *Environment Act*, s.116

4.0 Eastern Region

Risk Based Corrective Action

All four of the Atlantic Provinces have implemented the Atlantic Risk Based Corrective Action process along with their own legislation and guidelines. The Risk Based Corrective Action (RBCA) refers to a management philosophy for contaminated sites. The RBCA process is based on risk management where the risks posed by the contaminants are assessed as well as the likelihood that people or environmental resources could be harmed by the contaminant. This risk-based approach allows the risks associated with leaving substances in place to be estimated. Atlantic RBCA is an adaptation of the U.S. RBCA process and is modified for conditions in Atlantic Canada.

There are six steps in the Atlantic RBCA cleanup:

Step 1: Initial Notification

When contamination is discovered, the relevant provincial department must be notified and a departmental inspector will investigate.

Step 2: Site Evaluation - Tier 1

A professional, trained to use the Atlantic RBCA process, must complete the site evaluation. The Atlantic RBCA includes three tiers of site evaluation. At Tier 1, the sources of contamination, the transport pathways and exposure pathways are identified. Measures of the levels of contaminants on the site are compared to risk-based screening levels provided in an Atlantic RBCA generic look-up table. If the screening levels are not exceeded and the conditions on the site are not exceptional, no further action may be required.

Step 3: Remedial Action Plan or an Expanded Site Evaluation - Tiers 2 and 3

Where contaminant concentrations on a site are above the screening levels, the site professional prepares a remediation action plan to correct the situation and submits it to the relevant department. An appropriate remedial action plan sometimes requires a Tier 2 evaluation, specific to conditions of the site, to correctly identify the best ways to manage and reduce the risks.

Some sites with complex conditions or contaminants benefit from a more extensive evaluation. This is a Tier 3 approach which goes beyond the Atlantic RBCA software to include detailed site characterization, development of site-specific numerical models and evaluations, and complex fate and transport models.

After the Tier 1, 2, or 3 site evaluation is completed, the site professional develops an appropriate remedial action plan to meet the risk management targets that have been identified and submits it to the appropriate provincial department.

Step 4: Review of the Remedial Action Plan

The relevant department reviews each remedial action plan to evaluate if it properly manages identified risks. Once the department accepts the remedial action plan, cleanup work can begin.

Step 5: Remedial Action Plan Implementation

The property owner and site professional implement the remedial action plan to remove contamination, limit exposure pathways and institute controls on how the land is used. Testing after clean-up work is completed will confirm that target levels have been achieved.

Step 6: Compliance Monitoring and Site Maintenance

Once the property owner and site professional are satisfied that the objectives of the remedial action plan are achieved, they submit a Closure Report to the relevant department. The report details the final condition of the site, any land-use restrictions and any ongoing monitoring requirements. The department acknowledges receipt of the Closure Report and confirms if further actions are required.

4.1 New Brunswick⁷⁵

Clean Environment Act, R.S.N.B. 1973, c. C-6

Guideline for the Management of Contaminated Sites (June 1999, version 1.0)

4.1.1 Definitions

The *Clean Environment Act* (CEA) define “contaminant” as,

any solid, liquid, gas, micro-organism, odour, heat, sound, vibration, radiation or combination of any of them, present in the environment, that

- is foreign to or in excess of the natural constituents of the environment,
- affects the natural, physical, chemical or biological quality or constitution of the environment,
- endangers the health, safety or comfort of a person or the health of animal life,
- causes damage to property or to plant life,
- interferes with visibility, the normal conduct of transport or business or the normal enjoyment of life or use or enjoyment of property, or
- is prescribed by regulation to be a contaminant.⁷⁶

4.1.2 Site Identification

The CEA prohibits the unauthorized release of a contaminant into the environment if the release could,

- endanger health, safety or comfort of a person or the health of an animal,
- cause damage to property or plant life,
- interfere with visibility or the normal conduct of transport or business, or
- interfere with the normal enjoyment of life or property.⁷⁷

There are no mandatory reporting requirements in place for the unauthorized release of a contaminant, unless the contaminant is a petroleum product. Any person who suspects that a petroleum product is leaking or has leaked from a storage tank system is required to report it to the Department of the Environment and Local Government.⁷⁸ Information regarding unauthorized releases of petroleum product leaks may be used to identify potentially contaminated sites.

4.1.3 Site Remediation

The Minister of the Environment and Local Government has the authority to order any person who releases a contaminant into the environment to clean up the contamination and remediate the site.⁷⁹ Most contaminated sites in New Brunswick are remediated in accordance with the *Guideline for the*

⁷⁵ The *Clean Environment Act* and the *Guideline for the Management of Contaminated Site* can be found in the electronic supplement.

⁷⁶ *Clean Environment Act*, s.1

⁷⁷ *Clean Environment Act*, s.5.3. Similar provisions are also found in the *Clean Air Act*.

⁷⁸ *Petroleum Product Storage and Handling Regulation*, s.43

⁷⁹ *Clean Environment Act*, s.5(1)

Management of Contaminated Sites. The Guideline reflects the RBCA process described above, generally relying on criteria determined through a risk assessment. If a site is successfully remediated the site professional and person(s) responsible prepare a record of site condition for submission to the relevant government department. Although the government authority does not “sign off” on the record of site condition, it serves as a certification by the site professional that the site has been remediated in accordance with applicable standards and criteria.

4.2 Newfoundland and Labrador⁸⁰

Environment Act, S.N. 1995, c.E-13.1

The Storage and Handling of Gasoline and Associated Products Regulations, CNR 775/96

Air Pollution Control Regulations, CNR 957/96

Contaminated Sites Clean-Up Criteria, PPD97-01 (1997, updated 1999)

4.2.1 Definitions

The *Environment Act* (EA) defines “pollution” as,

...an alteration of the physical, chemical, biological or aesthetic properties of air, soil or waters of the province, including a change of temperature, taste or odour, or the addition of a liquid, solid, radio-active, gaseous or other substance to the air, soil or waters, or the removal of those substances from the air, soil or waters, which will render or is likely to render the air, soil or waters of the province harmful to the public health, safety or welfare, or harmful or less useful for domestic, agricultural, industrial, power, municipal, navigational, recreational or other lawful uses, or for animals, birds, or aquatic life.⁸¹

Air contaminant is defined in the *Air Pollution Control Regulations*.

4.2.2 Site Identification

The EA does not define “contaminated site” and does not contain any provisions for the designation of contaminated sites. The EA does not contain any mandatory reporting requirements. However, *The Storage and Handling of Gasoline and Associated Products Regulations* require immediate reporting of a spill or leak of gasoline and associated products into the environment.⁸² As well, the *Air Pollution Control Regulations* require the reporting of any emission of an air contaminant in excess of levels outlined in the Regulation. These mandatory reporting requirements along with the voluntary process identified in the Atlantic RBCA are the primary means of identifying potentially contaminated sites in Newfoundland and Labrador.

4.2.3 Site Remediation

The EA does not contain any order-making powers to require a potentially responsible party to remediate a contaminated site. The Minister does have the power to prevent, control, eliminate or ameliorate pollution where the person responsible has failed to take appropriate actions. The costs incurred for that action are considered a debt to the crown.⁸³ Where there is a leak or spill of gasoline or associated products the operator must take steps to cleanup and restore the affected area to the satisfaction of the Department and within a specified time period.⁸⁴

⁸⁰ The *Environment Act* and the *Contaminated Sites Clean-Up Criteria* can be found in the electronic supplement.

⁸¹ *Environment Act*, s.2(h)

⁸² *Storage and Handling of Gasoline and Associated Products Regulations*, s.22

⁸³ *Environment Act*, s.21

⁸⁴ *Storage and Handling of Gasoline and Associated Products Regulations*, s.22

The *Contaminated Sites Clean-Up Criteria* contain guidelines regarding the approach to contaminated site remediation, however, they do not initiate the remediation process. Once remediation is completed, the *Clean-Up Criteria* require a certificate of compliance to be completed by a site professional. The certificate contains information on the remediation and site ownership. Based on the certificate the Department of Environment and Labour may determine that no further remediation is required.⁸⁵

4.3 Nova Scotia⁸⁶

Environment Act, S.N.S. 1994-95, c.1

Guidelines for Management of Contaminated Sites in Nova Scotia (1996)

Guidelines for the Designation of Contaminated Sites

4.3.1 Definitions

The *Environment Act* defines “contaminant” as, “... a substance that causes or may cause an adverse effect.” The term “adverse effect” means, “... an effect that impairs or damages the environment, including an adverse effect respecting the health of humans or the reasonable enjoyment of life or property.”⁸⁷

4.3.2 Site Identification

The *Environment Act* defines a contaminated site, as a site designated as a contaminated site by the Minister pursuant to the Act.⁸⁸ The Minister may designate a site as contaminated if he or she is of the opinion that a substance that may cause, is causing or has caused an adverse effect is present in an area of the environment. Prior to making this designation, the Minister must follow any standards, criteria or guidelines established or adopted by the Department.⁸⁹

The *Environment Act* (EA) requires any person responsible for the release of a substance that may cause an adverse effect to immediately report the release to a number of people including the owner of the substance, anyone affected by the release and the Department of Environment and Labour.⁹⁰ Also under the *Emergency Spills Regulation*, spills over a specified amount must be immediately reported to the Department of Environment and Labour.⁹¹ The information from these mandatory reporting requirements may be used to identify potentially contaminated sites.

The *Guidelines for Management of Contaminated Sites in Nova Scotia*, a voluntary management tool, state that any owner of a site who is aware that the site may be contaminated should carry out a site evaluation to evaluate the risks associated with the site. If the owner finds off-site impacts, unacceptable on-site impacts or risks to human health, safety or the environment, the owner must submit a contaminated site notification report to the Department.⁹²

⁸⁵ *Contaminated Sites Clean-Up Criteria*, p.6 and App A

⁸⁶ The *Guidelines* can be found in the electronic supplement. The *Environment Act* can be found at www.canadianenvironmental.ca.

⁸⁷ *Environment Act*, s.3

⁸⁸ *Environment Act*, s.3(1)

⁸⁹ *Environment Act*, s.87

⁹⁰ *Environment Act*, s.69

⁹¹ *Emergency Spills Regulations*, N.S. Reg. 59/95, s.5

⁹² *Guidelines for the Management of Contaminated Sites in Nova Scotia*, s.1.1 and 1.2

4.3.3 Site Remediation

The EA requires any person responsible for the release of a substance to take all reasonable measures to,

- (i) prevent, reduce and remedy the adverse effects of the substance,
- (ii) remove or otherwise dispose of the substance in such a manner as to minimize adverse effects, and
- (iii) rehabilitate the environment to a standard satisfactory to the Department.⁹³

The EA further provides that a person responsible for a contaminated site may prepare for the approval of the Minister a remedial action plan in respect of the contaminated site.⁹⁴ If, based on the risks identified, active remediation is required, the owner of the site must prepare and implement a remedial action plan.⁹⁵ Upon successful completion of remediation, the owner and site professional prepare a certificate of compliance and provide it to the Department of Environment and Labour. There are no provisions in the EA or Guidelines that require the Department to validate the certificate.

If voluntary remediation does not take place, the Minister has the power to issue a control order to require, among other things,

- tests, investigations and surveys to be undertaken,
- an expert to be hired to prepare a report for the Minister,
- remedial action to control, reduce, eliminate or mitigate an adverse effect to be undertaken,
- clean-up, site rehabilitation or management, site security and protection, to be carried out, and
- the use of the contaminated site or the use of any product from the site to be restricted or prohibited.⁹⁶

4.4 Prince Edward Island⁹⁷

Environmental Protection Act, R.S.P.E.I 1988, c. E-9
PEI Petroleum Contaminated Sites Remediation Guidelines (1999)

4.4.1. Definitions

The *Environmental Protection Act* (EPA) defines “contaminant” as,

...any solid, liquid, gas, waste, odour, vibration, radiation, sound, or a combination of them which is,

- foreign to or in excess of the natural constituents of the environment into which it is being introduced,
- or may adversely affect, either directly or indirectly, the natural, physical, chemical, or biological quality of the environment,
- or may be injurious to the health or safety of a person or be damaging to property or to plant or animal life,
- interferes with or is likely to interfere with the comfort, well-being, livelihood, or enjoyment of life of a person, or
- declared by regulation to be a contaminant.⁹⁸

⁹³ *Environment Act*, s.71

⁹⁴ *Environment Act*, s.89

⁹⁵ *Guidelines for the Management of Contaminated Sites in Nova Scotia*, s.2.2

⁹⁶ *Environment Act*, s.125

⁹⁷ The *Environmental Protection Act*, and *PEI Petroleum Contaminated Sites Remediation Guidelines* can be found in the electronic supplement.

⁹⁸ *Environmental Protection Act*, s.1(b)

4.4.2 Site Identification

The EPA does not define “contaminated site” and it does not contain any provision to designate a site as contaminated. Mandatory reporting requirements serve as the primary means of identifying a potentially contaminated site. The EPA requires every person who, without permission, discharges a contaminant into the environment, or who owns or has control of a contaminant that is discharged into the environment to immediately notify the Department. By this same provision, they must investigate and define the extent nature and impact of the contaminant.⁹⁹

The Minister has extensive powers to issue ministerial orders, where the Minister believes, on reasonable and probable grounds, that a contaminant has been, is being, or is going to be, discharged into the environment, and that it is necessary or advisable to issue an order to protect the environment, human life or health or property. The order may require testing, sampling or inspections, to determine the extent and effects of the contamination.¹⁰⁰

4.4.3 Site Remediation

The EPA requires every person who, without permission, discharges a contaminant into the environment, or who owns or has control of a contaminant which is discharged into the environment to repair, restore and remedy the environment or to confine or contain the effects of the contaminant. If the remediation is not completed and the discharge may cause a threat to the environment or environmental health, the Minister may apply to the Supreme Court for an injunction.¹⁰¹ The Minister also has the power to issue a ministerial order to require the person responsible for the unauthorized discharge to clean, repair, and restore an area affected by a contaminant or to take specified action to prevent or avoid danger to human life or health or damage to property.¹⁰²

The *PEI Petroleum Contaminated Sites Remediation Guidelines*, based on the Atlantic RBCA, provide guidance on the remediation process. Once a responsible party has engaged in the process of remediation, the Guidelines must be followed. This generally includes site evaluation, development and implementation of a remedial action plan and site closure. Site closure requires the responsible party and site professional to prepare a closure report to be forwarded to the Department. Upon receipt and acceptance of the Closure Report, the Department will conclude the Management Process by issuing a letter advising that no further remedial action is required.¹⁰³

⁹⁹ *Environmental Protection Act*, s.20

¹⁰⁰ *Environmental Protection Act*, s.7(3)

¹⁰¹ *Environmental Protection Act*, s.20

¹⁰² *Environmental Protection Act*, s.7

¹⁰³ *PEI Petroleum Contaminated Sites Remediation Guidelines*, step 6

Part II Liability Provisions

Determining who is liable for the cost of contaminated site remediation is a contentious issue. Each province and territory has its own approach to making this determination, based more or less on the CCME principles (see below). Those approaches range from simple joint and several liability to complex allocation schemes. Joint and several liability means that each potentially responsible person can be held liable for the entire cost of remediation, even where they are only a minor contributor. The provincial/territorial Minister or an appointed panel of experts may administer allocation schemes. In most instances, the parties are encouraged to come to a voluntary agreement before the formal allocation process is initiated.

Canadian Council of Ministers of the Environment (CCME)

In 1993 the CCME drafted the *Contaminated Sites Liability Report: Recommended Principles for a Consistent Approach Across Canada*, which established a set of principles to address contaminated site liability. The principles were established in order to provide provincial governments with a standard framework for the development of legislation on contaminated sites liability.¹⁰⁴ The key elements of the CCME principles provide direction on the identification of responsible persons and the allocation of liability for contaminated site remediation. The principles are based on the an open, fair and consistent approach, where the polluter or beneficiary pays for remediation. As demonstrated in this report, many provinces have designed legislation or guidelines based on the CCME principles.

Appendix B to this report provides a table that demonstrates the application of the CCME principles in each province and territory. A summary of the CCME principles is contained in Appendix A to the report.

1.0 Federal

1.1 Fisheries Act

Liability under the *Fisheries Act* extends to any person who,

- owns the deleterious substance,
- has the charge, management or control of the deleterious substance, or
- has caused or contributed to the deposit of the deleterious substance.

1.2 Canadian Environmental Protection Act

According to paragraphs 95(1)(a) and 212(1)(a) of CEPA regarding the release of toxic substance, the following persons may be considered liable:

Any person who,

- (1) owns the substance,
- (2) has the charge, management or control of the substance,
- (3) has caused or contributed to the release, or
- (4) owns property affected by the release.

¹⁰⁴ See Appendix A for a list of the CCME principles.

1.3 Canadian Environmental Assessment Act

Liability under CEAA is not directed at the remediation of a contaminated site, but rather at the requirement to have a potentially contaminated site undergo an environmental assessment. As stated above, an environmental assessment may be required where the proposed remediation falls within the definition of “project” and a federal authority is involved. The requirement to undergo an environmental assessment is directed at the proponent and the responsible authority.

1.4 Bankruptcy and Insolvency Act

Bankruptcy and Insolvency Act, R.S. 1985, c.B-3.

Amendments to the *Bankruptcy and Insolvency Act* in 1992 and 1997 have provided protection from environmental liability to receivers and trustees. Prior to the amendments, receivers and trustees engaged in administering properties with environmental liabilities were responsible for carrying out remediation orders issued by provincial authorities, regardless of the cost associated with those orders. Receivers and trustees are now only liable if they are grossly or willfully negligent in carrying out their duties. Section 14.06(2) states:

- (2) Notwithstanding anything in any federal or provincial law, a trustee is not personally liable in that position for any environmental condition that arose or environmental damage that occurred
 - (a) before the trustee's appointment; or
 - (b) after the trustee's appointment unless it is established that the condition arose or the damage occurred as a result of the trustee's gross negligence or willful misconduct.¹⁰⁵

The relevant provisions of the *Bankruptcy and Insolvency Act* can be found in the electronic supplement.

2.0 Western Region

2.1 Alberta

2.1.1 Identifying Responsible Persons

The *Environmental Protection and Enhancement Act* (EPEA) provides a broad definition of “person responsible for the contaminated site” including,

- a person responsible for the substance that is in, on or under the contaminated site,
- any other person who the Director considers caused or contributed to the release of the substance,
- the owner of the contaminated site,
- any previous owner of the contaminated site who was the owner at any time when the substance was in, on or under the contaminated site,
- a successor, assignee, executor, administrator, receiver, receiver-manager, trustee, agent or principal of any of the persons listed above.

¹⁰⁵ Subsection 14.06 (1.1) states that, in subsections (1.2) to (6), a reference to a trustee means a trustee in a bankruptcy or proposal and includes an interim receiver or a receiver within the meaning of subsection 243(2).

EPEA specifically excludes from the list of persons responsible,

- a municipality that takes possession only because of tax arrears, and has not contributed to the contamination, and
- a person who investigates or tests a parcel of land for the purpose of determining the environmental condition, and has not contributed to the contamination.¹⁰⁶

2.1.2 Allocation of Liability

A Director, under the EPEA, has the power to apportion the cost of remediation through an environmental protection order. The Director is guided by a number of fairness-based criteria when making the cost allocation.¹⁰⁷ The *Guideline for the Designation of Contaminated Sites under the Environmental Protection and Enhancement Act*, states that the Director can refer unresolved allocation to an expert panel, before issuing an order. However, once an order has been issued, any person named in the order who fails to comply is jointly and severally liable for all costs necessary to carry out the order. The liability of executors, administrators, receivers, receiver-managers and trustees, is limited to the value of the assets that they are administering unless they contributed to the contamination by gross negligence or willful misconduct.¹⁰⁸

A person responsible for a contaminated site may enter into an agreement with the Director or with other responsible persons to prepare a remedial action plan.¹⁰⁹ The Guideline outlines opportunities for the responsible parties to reach a voluntary agreement, including the option of choosing a mediator to assist them in reaching that agreement. If they are able to reach an agreement, acceptable to the Director, an environmental protection order will not be issued.

2.2 British Columbia

2.2.1 Identifying Responsible Persons

The *Waste Management Act* (WMA) includes a broad list of persons who may be considered responsible for the remediation of a contaminated site. The list includes:

- a current owner or operator of the site;
- a previous owner or operator of the site;
- a person who produced a substance, and caused the substance to be disposed of, handled or treated in a manner that caused the site to become a contaminated site;
- a person who transported or arranged for transport of a substance, and caused the substance to be disposed of, handled or treated in a manner that caused the site to become a contaminated site;
- a person who is in a class designated in the regulations as responsible for remediation,
- any of the above persons if the site was contaminated by migration of a substance,
- secured creditors who meet specific criteria¹¹⁰

Based on the principle of fairness, the WMA and *Contaminated Sites Regulation* (CSR) provide a detailed scheme to reduce or eliminate liability for potentially responsible persons.

¹⁰⁶ *Environmental Protection and Enhancement Act*, s.96(1)(c)

¹⁰⁷ *Environmental Protection and Enhancement Act*, s.114

¹⁰⁸ *Environmental Protection and Enhancement Act*, s. 205 and 226.

¹⁰⁹ *Environmental Protection and Enhancement Act*, s. 113

¹¹⁰ *Waste Management Act*, s.26.5

Following is a list of examples, taken from the *Waste Management Act*:

- A person is not responsible for a contaminated site that became contaminated owing to an act of God, an act of war, or an act or omission of a third party (other than an employee, agent or contractor), where the potentially responsible person exercised due diligence with respect to the contaminating substance.
- An owner or operator who became responsible for the site after it was contaminated and had no knowledge or reason to suspect that it was contaminated and made appropriate inquiries to determine if the site was contaminated. As well, the owner/operator did not do anything to contribute to the contamination of the site, and did not transfer any interest in the site without disclosing any known contamination.
- An owner or operator who can demonstrate that he or she did nothing to cause the site to become contaminated.
- A government body that involuntarily acquires ownership of a site and did not cause or contribute to the contamination.
- A person who provides assistance or advice respecting remediation work at a contaminated site and did not cause or contribute to the contamination.
- A person who owns or operates a contaminated site that was contaminated only by the migration of a substance from another site.
- An owner or operator of a contaminated site that was contaminated by a naturally occurring substance.
- A person who is in a class designated in the regulations as not responsible for remediation.¹¹¹

The *Contaminated Sites Regulation* includes fourteen provisions that specifically identify individuals and circumstances where liability for contaminated site remediation is reduced or eliminated. The provisions cover the following groups:

- transporters and arrangers,
- sureties,
- insurers and insurance brokers,
- certain owners,
- producers arranging for transportation,
- construction on contaminated sites,
- secured creditors,
- receivers, receiver managers and bankruptcy trustees,
- trustees, executors, administrators and other fiduciaries,
- innocent acquisitions,
- lessors,
- municipalities,
- transporters of contaminated soil.¹¹²

2.2.2 Allocation of Liability

Pollution prevention managers in British Columbia have extensive authority to make decisions regarding the allocation of liability. Ultimately, liability for the cleanup of a contaminated site is joint and several.¹¹³ However, responsible persons have the opportunity to enter into private agreements on remediation and these agreements must be considered by the manager when issuing a remediation order.¹¹⁴ Individual responsible persons can apply to the pollution prevention manager for status as a “minor contributor”, where the liability of the minor contributor would be capped at a pre-determined amount.¹¹⁵ Where the

¹¹¹ *Waste Management Act*, s.26.6

¹¹² *Contaminated Sites Regulation*, s.19-33

¹¹³ *Waste Management Act*, s. 27

¹¹⁴ *Waste Management Act*, s.27.1

¹¹⁵ *Waste Management Act*, s.27.3

parties fail to reach a voluntary agreement, the manager can issue a remediation order to each responsible person. The manager can allocate responsibility based on the involvement of the party in the contamination, the extent of due diligence exercised by the party and a variety of other considerations. To assist the manager, the Minister may appoint an allocation panel to provide an opinion on liability allocation.¹¹⁶

2.3 Manitoba

2.3.1 Identifying Responsible Persons

A remedial order issued under the *Dangerous Goods Handling and Transportation Act* may be directed to the person who owns or occupies the affected area, and any person who owns or has possession, charge or control of the contaminant.¹¹⁷

The *Contaminated Sites Remediation Act* (CSRA) provides a list of persons potentially responsible for remediation. The list is very broad and includes,

- an owner or occupier of the site,
- a previous owner or occupier of the site when the contamination occurred or after it occurred,
- a person who owns or has possession, charge or control of a contaminant on the site,
- a person who owned or had possession, charge or control of a contaminant of the site immediately before or at the time of its release,
- a person who contaminated the site or directed someone else to contaminate the site,
- a creditor of a person listed above, with respect to the site, if they contributed to the contamination,
- a director or officer, where the person listed above is a corporation, where they were a director or officer at the time of the release of the contaminant,
- a trustee, receiver or manager of a person listed above (liability is limited to the property under his or her administration),¹¹⁸
- a principal, a corporation or a partnership that had influence or control over the contamination, and
- any person designated in the regulations.¹¹⁹

The CSRA includes a number of provisions to specifically exempt potentially responsible persons from the list. Subsection 9(2) of the Act exempts,

- a director or officer who demonstrates due diligence,
- a municipality that became the site owner as the result of a tax sale,
- a person who acquired the land under the *Expropriation Act*,
- an owner or occupier whose land is contaminated only by migration from another property,
- an owner or occupier whose land was contaminated before they took possession and could not reasonably have been aware of the contamination,
- a person who provided advice or assistance regarding the site, and exercised due diligence,
- a creditor who engaged in specified practices and exercised due diligence, and
- an innocent transporter.

The CSRA relies on the “beneficiary pays” principle to exempt present and former owner/occupiers who can demonstrate that they contributed only an insignificant amount to the contamination and that they did not benefit from the contamination.¹²⁰

¹¹⁶ *Waste Management Act*, s.27.2

¹¹⁷ *Dangerous Goods Handling and Transportation Act*, s.16

¹¹⁸ *Contaminated Sites Remediation Act*, s.28

¹¹⁹ *Contaminated Sites Remediation Act*, s.9(1)

¹²⁰ *Contaminated Sites Remediation Act*, s.9(3)

It is ultimately up to the Director to designate, by written order, those persons who are potentially responsible for a contaminated site.

2.3.2 Allocation of Liability

The Director, under the CSRA, has the authority to issue a remediation order and in that order require potentially responsible persons to contribute financially to the costs of remediation.¹²¹ Potentially responsible persons may reach a voluntary agreement regarding the apportionment of these costs. If the parties unanimously choose the Director will appoint a mediator to assist them in reaching an agreement. The Director, who is required to consider numerous principles before making a determination, must approve voluntary apportionment agreements¹²²

The Director must refer the matter to the clean environment commission, if the potentially responsible persons fail to reach a voluntary agreement acceptable to the Director or one or more of the potentially responsible persons request that the apportionment of costs be referred to the commission. The commission will hold hearings within 30 days and will issue an apportionment order within 60 days of the hearings.¹²³

Despite the terms of any apportionment order or agreement any person in default of their obligations under a remediation order is jointly and severally liable for all amounts that are due and payable by any of them in respect of the site.¹²⁴

2.4 Saskatchewan

2.4.1 Identifying Responsible Persons

The *Environmental Management and Protection Act* (EMPA) does not include provisions to identify persons responsible for a contaminated site. An order issued under section 4 of the Act can be directed to the owner of the pollutant, the person having control of the pollutant or the person determined by the Minister to be responsible for the presence of the pollutant. The “owner of the pollutant” is defined in the EMPA to mean, “...the owner immediately before the first discharge, including successor, assignee, executor or administrator of the owner.”¹²⁵ Any person who took all reasonable steps to prevent the discharge and any discharge that was caused by an act of war or natural phenomenon is exempt.¹²⁶

The *Environmental Liability and Contaminated Site Management* (Policy) provides a list of parties potentially responsible for the remediation of a contaminated site. The list includes,

- any party who owned, controlled or managed the substance or the operation that gave rise to the contamination immediately before or during the release, and
- any party who caused or authorized the acts that gave rise to the contamination immediately before or during the contamination.

The Policy includes exemptions from responsibility for,

- innocent purchasers and municipalities,
- manufacturers, suppliers, and transporters not contributing to the contamination,
- owners whose property is contaminated through migration, act of God, war or insurrection,

¹²¹ *Contaminated Sites Remediation Act*, s.17

¹²² *Contaminated Sites Remediation Act*, s.21 and 22

¹²³ *Contaminated Sites Remediation Acts*. 23-27

¹²⁴ *Contaminated Sites Remediation Act*, s.30

¹²⁵ *Environmental Management and Protection Act*, s.2(r)

¹²⁶ *Environmental Management and Protection Act*, s.13(4)

- shareholders, and
- lessors under the *Surface Rights and Compensation Act*.¹²⁷

2.4.2 Allocation of Liability

Potentially responsible parties are invited to voluntarily propose a remediation plan and cost agreement. If the parties fail to reach an agreement they may enter a mediated process. Where the voluntary and mediated processes are not successful the Minister has the power to apportion costs under a ministerial order.¹²⁸ There are no provisions in the EMPA or the Policy that specifically address joint and several liability, however the EMPA refers to the joint and several liability provisions of *The Contributory Negligence Act*.¹²⁹

3.0 Central and Northern Regions

3.1 Ontario

3.1.1 Identifying Responsible Parties

The *Environmental Protection Act* (EPA) provides a definition of “person responsible” which includes the owner or the person in occupation or the person who has charge, management or control of a source of contaminant.¹³⁰ The EPA provides broad order making powers to the Director, which have application to the “person responsible” and other associated with contaminants. For example, the Director may issue a stop or control order respecting the discharge of a contaminant under the EPA to any of the following persons:

- (a) an owner or previous owner of the source of contaminant;
- (b) a person who is or was in occupation of the source of contaminant; or
- (c) a person who has, or has had, the charge, management or control of the source of contaminant.¹³¹

The Director also has the power to issue an order to *any person who causes or permits the discharge* of a contaminant into the natural environment where injury or damage may be caused.¹³² In summary, depending on the circumstances and the order powers invoked, the following persons may be identified as “responsible” for contamination:

- owner of the source of contaminant,
- person in occupation of the source or contaminant,
- person who has charge, management or control of a source of contaminant,
- previous owner of the source of contaminant,
- person who was in occupation of the source of contaminant,
- person who has had the charge, management or control of the source of contaminant,
- person who causes or permits the discharge of a contaminant into the natural environment where injury or damage may be caused.

¹²⁷ *Environmental Liability and Contaminated Site Policy*, 2.2 (Step2)

¹²⁸ *Environmental Liability and Contaminated Site Policy*, 2.2 (Step 3), and *Environmental Management and Protection Act*, s.7 and s.8

¹²⁹ *Environmental Management and Protection Act*, s.13(8)

¹³⁰ *Environmental Protection Act*, s. 1(1)

¹³¹ *Environmental Protection Act*, s.7

¹³² *Environmental Protection Act*, s.17

3.1.2 Allocation of Liability

The EPA does not contain any provisions to address the allocation of liability or the apportionment of costs associated with the remediation of contaminated sites. Civil liability for compensation owing to loss or damage resulting from the spill of a pollutant is joint and several.¹³³

3.2 Québec

3.2.1 Identifying Responsible Parties

Remedial orders issued following the release of a contaminant may be directed at any person who has emitted, deposited, released or discharged the contaminant.¹³⁴ If the Minister determines urgent action is required, he or she may issue an order to any person or municipality that owns or has control of the contaminants.¹³⁵

The only other guidance provided for the identification of parties responsible for the remediation of contaminated sites in Québec is through the principle espoused in the *Soil Protection and Contaminated Sites Rehabilitation Policy*. The Policy describes the polluter-pays principle and the fairness principle as two of the key principles underlying the Policy.

Each person is responsible for the consequences of any action that affects a common asset. With respect to contaminated sites, this concept is expressed by the polluter-pays principle. The polluter -pays principle establishes that the polluter is liable for the contamination he has caused and the impact it may have, including the costs of characterizing and restoring the sites he has damaged. The application of the polluter-pays principle, which means that environmental costs must be borne internally, allows society to hold the polluter responsible and to ensure that soils and sites regain their functions.

The fairness principle presupposes that the rehabilitation of a contaminated site is first and foremost the responsibility of those who are profiting or have profited from the failure to protect it. From another point of view, it means that an individual or a business that in good faith applies MEF policies and directives to prevent the contamination of its site or to rehabilitate it must not be placed at a disadvantage with respect to those who fail to do so. This means that the action required from all owners in the same situation facing the same problems must be similar and apply equally to all at the same time, so that no one gains any advantage over his competitors by ignoring his responsibilities or making do with half-measures.¹³⁶

The province of Québec is planning modifications to the EQA during the fall of 2001 that will change the existing situation, creating a broader net of potentially responsible parties.

3.2.2 Allocation of Liability

The Policy and the EQA do not contain provisions to address the allocation of liability or the apportionment of costs associated with the remediation of contaminated sites. Joint and several liability is not mentioned in the EQA or the Policy.

¹³³ *Environmental Protection Act*, s.99(8)

¹³⁴ *Environmental Quality Act*, s..31.42

¹³⁵ *Environmental Quality Act*, s.114.1

¹³⁶ *Soil Protection and Contaminated Sites Rehabilitation Policy*, part 3.

3.3 Northwest Territories

3.3.1 Identifying Responsible Parties

A remedial order, issued as a result of a contaminant spill, can be directed to a person who discharges or permits the discharge of the contaminant.

An order to stop a discharge can be issued to the following persons,

- the person who causes or contributes to the discharge,
- the owner of the contaminant,
- the person in charge, management or control of the contaminant.¹³⁷

There are no further provisions in the *Environmental Protection Act* (EPA) or the Guideline that identify persons potentially responsible for a contaminated site.

3.3.2 Allocation of Liability

The Guideline and the EPA do not contain provisions to address the allocation of liability or the apportionment of costs associated with the remediation of contaminated sites. Where the government may claim and recover costs from more than one person, the costs may be recovered jointly and severally from those persons.¹³⁸

3.4 Nunavut

For information on Nunavut please refer to section 3.3 on the Northwest Territories. Nunavut shares the relevant legislation and guidelines with the Northwest Territories.

3.5 Yukon

3.5.1 Identifying Responsible Parties

The *Environment Act* (EA) defines “responsible party” as “...the person who had possession, charge or control of the contaminant at the time of its release into the natural environment.”¹³⁹

3.5.2 Allocation of Liability

Prior to issuing an order to require site restoration and naming responsible parties in the order, the Minister may appoint a person or persons to render an opinion as to whether a party is a responsible party and the share of liability of the responsible party. The Minister is not bound by the advice provided.¹⁴⁰

The following factors must be considered when making a determination regarding the identification and share of liability of a responsible party:

- the condition of the contaminated site at the time a party (i) became an owner or operator at the site, or (ii) had possession, charge or control of a contaminant found on the site;
- any activities and land uses undertaken by a party while located at the site;
- the nature and quantity of contamination at the site attributable to a party;
- all measures taken by a party to prevent contamination or to restore a contaminated site;

¹³⁷ *Environmental Protection Act*, s. 6 and 7(1)

¹³⁸ *Environmental Protection Act*, s.16(2)

¹³⁹ *Environment Act*, s.111

¹⁴⁰ *Contaminated Sites Regulations*, s.12(1)

- the amount of contamination on the site or released from the site which is attributable to (i) a party, and (ii) other parties or responsible parties at the site;
- a site investigation, a site assessment, a plan of restoration;
- an estimate of the total cost of restoration;
- an estimate of a party's share of the total cost of restoration and justification for the estimate; and
- names of other parties who might be responsible parties.¹⁴¹

Joint and several liability is not mentioned in the EA.

4.0 Eastern Region

4.1 New Brunswick

4.1.1 Identifying Responsible Parties

Legislation in the province of New Brunswick does not define “responsible person” or provide any clear direction on the identification of responsible parties. Provisions in the *Clean Environment Act* and the *Clean Air Act* provide some information on who may be considered responsible for the results of an unauthorized release of a contaminant.

A ministerial order that requires the cleanup and rehabilitation of a site affected by the unauthorized release of a contaminant may be directed to any person the Minister names in the order. The order is binding on that person and their heirs, successors, executors, administrators and assigns.¹⁴²

Under the *Clean Air Act* a ministerial order directing the clean-up, rehabilitation or restoration of an area contaminated by the release of an air contaminant may be directed to any of the following:

- the owner of the contaminant;
- the person having control of the contaminant;
- the person who cause the release of the contaminant; and
- the person who owns, leases, manages or has charge or control of land that has been, is being or may be affected by the release.

The *Guideline for the Management of Contaminated Sites* indicates that the Minister, subject to specific legislative provisions, may determine a responsible party, from “...anyone whose conduct or failure to act caused or contributed to the contamination.”¹⁴³ According to the Guideline, once the Minister has selected responsible parties, they are required to carry out a number of activities including:

- satisfactory remediation of the site and completion of the Management Process,
- taking appropriate action to ensure that the environment and human health are protected during the Management Process,
- ensuring that third parties are notified about the contamination,
- compliance with all applicable legislation,
- remaining informed about all activities, progress and significant decisions during the Management Process,
- ensuring that the Record of Site Condition is signed by a person who meets the qualifications of a Site Professional,
- providing the Record of Site Condition as completed by the Site Professional to the provincial Department of the Environment.¹⁴⁴

¹⁴¹ *Contaminated Sites Regulations*, s.12(2)

¹⁴² *Clean Environment Act*, s.5

¹⁴³ *Guideline for the Management of Contaminated Sites*, s.2.0

¹⁴⁴ *Guideline for the Management of Contaminated Sites*, s.4.0

4.1.2 Allocation of Liability

There are no legislative provisions that address the allocation of liability among potentially responsible parties in New Brunswick. The Guideline specifically states that the Minister cannot determine or apportion liability. In New Brunswick this matter is left to civil proceedings among the responsible parties.¹⁴⁵ Under the CEA if two or more persons fail or refuse to comply with a ministerial order they are jointly and severally liable.¹⁴⁶

4.2 Newfoundland and Labrador

4.2.1 Identifying Responsible Parties

There are no legislative provisions in place that specifically identify parties responsible for the remediation of contaminated sites in Newfoundland and Labrador. The Minister has the power to take action where any person or municipal authority that the Minister considers responsible fails to take appropriate steps to prevent, control, eliminate or ameliorate pollution.¹⁴⁷ Under the *Storage and Handling of Gasoline and Associated Products Regulations* the operator of a vehicle, pipeline or storage tank is responsible to cleanup any spill or leak of gasoline and associated products.¹⁴⁸ The *Contaminated Sites Clean-Up Criteria* provides no further direction on the identification of responsible parties. It would appear that the matter of identification is wholly within the discretion of the Minister.

4.2.2 Allocation of Liability

There are no legislative provisions that address the allocation of liability among potentially responsible parties in Newfoundland and Labrador.

4.3 Nova Scotia

4.3.1 Identifying Responsible Parties

The *Environment Act* (EA) defines “person responsible for a contaminated site” as,

- a person responsible for a substance that is over, in, on or under the contaminated site,
- any other person whom the Minister considers to be responsible for causing or contributing to the release of a substance into the environment,
- the owner or occupier of, or an operator on, the contaminated site,
- any previous owner, occupier or operator of the contaminated site who was the owner, occupier or operator at any time when the substance was released over, in, on or under the contaminated site,
- a successor, assignee, executor, administrator, receiver, receiver manager or trustee of a person referred to above, or
- a person who acts as the principal or agent of a person referred to above.¹⁴⁹

¹⁴⁵ *Guideline for the Management of Contaminated Sites*, s.2.0

¹⁴⁶ *Clean Environment Act*, s. 5.2(2)

¹⁴⁷ *Environment Act*, s.21

¹⁴⁸ *Storage and Handling of Gasoline and Associated Products Regulations*, s.22

¹⁴⁹ *Environment Act*, s.3(al)

4.3.2 Allocation of Liability

A person responsible for a contaminated site can enter into written agreements with the Minister and other responsible persons regarding remediation and apportionment of costs. If an agreement cannot be reached the Minister may refer the issue to mediation. If mediation is not successful, the Minister has the power to issue an order to require remediation.¹⁵⁰ A ministerial order is binding on all persons named in the order and their heirs, successors, executors, administrators, trustees, receivers, receiver-managers, and assigns.¹⁵¹ Liability for failure to comply with an order under the EA is joint and several.

Liability for the rehabilitation of a contaminated site is limited for receivers, receiver managers, trustees, executors or administrators of a person responsible, and their agents and employees. These individuals are not liable for any amount beyond the value of the assets they are administering, unless they fail to exercise due diligence in the administration. Municipalities that acquire property through a tax sale are also exempt from liability, based on a 1996 Nova Scotia Department of the Environment Policy.¹⁵²

Secured creditors are only liable for rehabilitation of a contaminated site if they exercised care, management or control of the site or imposed requirements that contributed to the contamination or the secured creditor becomes the registered owner of the site. If responsible, the liability of the secured creditor is limited to the value of the assets the secured creditor is administering. A secured creditor is not responsible for rehabilitation where it acts only to protect its security interest.¹⁵³

4.4 Prince Edward Island

4.4.1 Identifying Responsible Parties

A ministerial order issued under section 7 of the *Environmental Protection Act* (EPA) to require testing, investigations, remediation and other activities related to site contamination can be issued to any of the following:

- the owner or previous owner of the contaminant or the source of the contaminant;
- the person who is or was in occupation of the contaminant or the source of the contaminant;
- the person who has, or had, the charge, management, or control of the contaminant or the source of the contaminant;
- the natural person whose act or omission may contravene the EPA or the regulations or otherwise be a threat to the environment or environmental health; or
- one or more of the above persons.¹⁵⁴

Under section 20 of the EPA the Minister can direct anyone who discharges a contaminant or who is the owner or person in control of the contaminant, to investigate, repair, restore and remedy the environment.¹⁵⁵

The *PEI Petroleum Contaminated Sites Remediation Guidelines* define “responsible party” as,

In most cases, the Responsible Party is a person whose conduct or failure to act has caused or contributed to the contamination of property and who, in the opinion of the Minister, is responsible for remediation of a contaminated site. However, in some cases,

¹⁵⁰ *Environment Act*, s.89

¹⁵¹ *Environment Act*, s.130

¹⁵² The full title of the policy is *Policy -Contaminated Sites – Persons Responsible (Municipalities)*. It can be found in the electronic supplement.

¹⁵³ *Environment Act*, s.165

¹⁵⁴ *Environmental Protection Act*, s.7

¹⁵⁵ *Environmental Protection Act*, s.20

the persons among whom the Minister may choose to remediate the site are specifically listed in an Act or regulation, and may include, for example, the owner or the persons having the charge of a storage tank system.

4.4.2 Allocation of Liability

There are no legislative provisions that address the allocation of liability among potentially responsible parties in Prince Edward Island.

Part III Comparative Legislative Analysis

1.0 Introduction

There is significant variation in the legislative frameworks for the management of contaminated sites across Canada. The various approaches range from comprehensive statute-based programs to simple remediation policies. The following comparative analysis is based on the answers to five key questions, used to identify the potential effectiveness of the contaminated site framework in each jurisdiction. It is important to note that the success of a particular approach is dependent on many factors, however, this analysis focuses only on the legal or policy tools that provide documented guidance for the management program.

The following questions are addressed in the analysis:

- Does the legislative or policy framework provide a comprehensive approach to the management of contaminated sites?
- Is there an effective means to ensure that contaminating events are reported?
- How are decisions regarding the designation of contaminated sites made?
- Is information on contaminated sites available to the public?
- Is there a fair and reliable process to determine who is responsible for remediation of the site?

2.0 Key Questions

2.1 Legislative Framework: Does the legislative or policy framework provide a comprehensive approach to the management of contaminated sites?

Alberta, British Columbia, Manitoba, the Yukon and Nova Scotia, provide clear direction on the identification and management of contaminated sites through either their primary provincial environmental statute (Alberta, Nova Scotia) or a specific contaminated site statute or regulation (British Columbia, Manitoba, Yukon). The provinces of Alberta, Manitoba, and Nova Scotia also have guidelines in place, these guidelines include further detail and clarification of the legislative provisions. It should be noted that the authority to address key management issues in the Yukon and Nova Scotia is not triggered until the site is “designated” a contaminated sites, and designation is discretionary.

All of the remaining jurisdictions combine a general environmental statute with one or more sets of guidelines, policy or other criteria that specifically address the management of contaminated sites. In all cases the environmental statutes provide standard environmental protections, including a prohibition against contamination and the authority to require cleanup of polluted areas. These provisions may be used to initiate remediation, but the statutes do not specifically address contaminated sites.

The following jurisdictions, Ontario, New Brunswick and Prince Edward Island, Northwest Territories and Nunavut combine the environmental statute with a guideline. The guidelines for each jurisdiction vary somewhat, but for the most part all of the approaches address the remediation process, providing very little direction on site identification, public participation or the allocation of liability. This is particularly true of the provinces of New Brunswick and Prince Edward Island that have virtually identical guidelines. The Ontario guideline includes information on requirements for public notification and communication.

Saskatchewan and Quebec use an approach that combines provincial environmental legislation with a policy on contaminated sites. The policy framework in Saskatchewan is comprehensive, providing opportunities for public input, site designation and requirements for liability allocation. The Quebec policy is less comprehensive, and provides little direction on site identification or procedures for liability allocation. In both provinces the lack of a comprehensive legislative framework means that the process for the management of contaminated sites is less formal and more to change.

The province of Newfoundland and Labrador combines an environmental statute that has minimal authority to address site contamination with cleanup criteria that only provide remediation guidance.

2.2 Requirement to Report: Is there an effective means to ensure that contaminating events are reported?

There are a number of ways to identify potentially contaminated sites, including real estate transactions and municipal requirements. However, in most provincial and territorial jurisdictions the primary means of identifying a site as potentially contaminated is through reporting requirements associated with the past or ongoing release of a contaminant. Every province and territory has some means of regulating the spill or release of substances that may have an adverse effect on human health or the environment. Many jurisdictions also require that any unauthorized release be reported to the Minister of the Environment. Spill reporting provisions are similar in most provinces; however, there are differing interpretations by provincial officials regarding the application of these provisions to historical spills. In any event, the information obtained through these reports may trigger a decision by provincial authorities to initiate an investigation of the site. It is sometimes argued that mandatory reporting requirements deter voluntary reporting of contaminated sites. Although this may be true, from a legal perspective mandatory reporting is the only enforceable means of ensuring that information on contaminant release is available.

The environmental legislation in the following jurisdictions, Alberta, British Columbia, Manitoba¹⁵⁶, Ontario, Quebec, Northwest Territories, Nunavut, Yukon, Nova Scotia, Prince Edward Island include mandatory reporting of an unauthorized release of a contaminant or pollutant.

In the province of Saskatchewan mandatory reporting is not required, unless the Minister or a designate specifically requests a report.

In the provinces of New Brunswick and Newfoundland and Labrador, mandatory reporting is only required for the unauthorized release of petroleum and its associated products.

2.3 Decision-making: How are decisions regarding the designation of contaminated sites made?

A clear understanding of how decisions will be made is key to a successful management framework. It is important that the decision-maker has sufficient authority to issue orders and allocate liability, while at the same time not suffer from extensive political interference. Generally speaking, decision-making frameworks that identify the Minister as the primary decision-maker and provide broad discretionary powers often experience the longest delays and most significant interference. However, these processes do not suffer from a lack of authority and have inherent flexibility to address financial and political considerations. Decision-making frameworks that clearly designate a decision-maker, such as a director or manager, and tend toward mandatory decisions are generally more reliable and offer the more stringent environmental protections. In most instances, the jurisdictions with the most comprehensive management frameworks also have the most effective decision making processes. Manitoba, however, is the only province that combines clearly delegated authority with a mandatory decision-making process.

The jurisdictions of Alberta, British Columbia, Manitoba, the Yukon and Nova Scotia contain specific authority in the relevant legislation to designate a site as contaminated. In Alberta, British Columbia and Manitoba the decision is made by a director or manager, designated by the Minister, under the statute. In the Yukon Territory and Nova Scotia the decision to designate is made by the Minister. As mentioned above, the province of Manitoba requires a director who determines that a site meets certain conditions to designate the site as contaminated. British Columbia and the Yukon Territory include a definition of “contaminated site” indicating that a site meeting the definitional criteria would be considered

¹⁵⁶ Reporting requirements are found in the *Dangerous Goods Handling and Transportation Act* and not in the *Environment Act* or the *Contaminated Site Remediation Act*.

contaminated. However, the actual designation of a site as contaminated is a discretionary decision. Site designation in Alberta and Nova Scotia is completely discretionary.

The province of Saskatchewan includes a site designation process in their contaminated site policy. The process is carried out by department officials and is discretionary in nature.

The following jurisdictions, Ontario, Quebec, Northwest Territories, Nunavut, New Brunswick, Newfoundland and Labrador, and Prince Edward Island provide no specific authority to designate contaminated sites.

2.4 Public Information: Is information on contaminated sites available to the public?

The impact of contamination is felt not only by those directly involved but also by many others who may come into contact with the property. Comprehensive management frameworks must balance effective communication with the public and efficient cleanup of the site. The ever increasing trend toward risk managed sites makes the commitment to consulting the public ever more critical. The jurisdictions that include a public registry or some other means of providing contaminated site information in their management framework and a means of ensuring that the information is effectively communicated demonstrate a more sophisticated level of management and decision-making.

Every jurisdiction, with the exception of Newfoundland and Labrador and Prince Edward Island, includes some form of public information on environmental conditions through their primary environmental legislation. The provinces of British Columbia, Manitoba, Quebec, New Brunswick and Nova Scotia require the Environment Minister to maintain a public registry with information on environmental conditions. Legislation in the jurisdictions of Saskatchewan, Northwest Territories and Nunavut state that environmental information must be available to the public, but do not specify that the information be provided through a registry.

Every jurisdiction, with the exception of the Northwest Territories, Nunavut, Newfoundland and Labrador and Prince Edward Island, includes requirements in legislation, guideline or policy that relate directly to the provision of information on contaminated sites. In most instances the requirements relate only to those that are directly affected by the contaminated site. Broader public consultation requirements can be found in Alberta, Manitoba, Ontario, and Quebec during site remediation, particularly where a risk-based approach is undertaken. In the province of Nova Scotia and the Yukon Territory, the Minister is required to consult the public before officially designating a site as contaminated.

2.5 Responsibility: Is there a fair and reliable process to determine who is responsible for remediation of the site?

The process to determine the parties responsible for a contaminated site and allocating liability for remediation of the site is the most complicated and contentious aspect of remediation. In 1993, the Canadian Council of Ministers of the Environment recommended a “broad net” approach together with fairness based criteria to determine potentially responsible parties. Implementing this approach is expensive and time consuming, however, from a legal perspective it is the only means available to ensure that the costs of site remediation are not born solely by the government or a fraction of the responsible parties.

The provinces of Alberta, British Columbia, Manitoba and Nova Scotia include the broad net approach as part of the legislative framework. These provinces also provide specific exemptions and fairness criteria that must be met before the Minister or designate can allocate liability for site remediation. These provinces provide the most comprehensive approach to allocating liability and on the face the approach would appear to be fair and reliable. It is, however, very difficult to determine if the approach is consistently fair and reliable as there is significant discretionary decision making throughout the allocation process. In all cases the responsible parties are provided with the opportunity to reach a voluntary

agreement on the allocation of responsibility and have at their disposal resources, such as mediators, allocation panels, etc., to assist them in reaching an agreement.

The jurisdictions of Saskatchewan, Ontario and the Yukon provide a much narrower approach to potentially responsible parties, generally restricted to those in control of the substance or involved in its release. Remediation agreements reached by responsible parties are made without the assistance of government, except in the case of the Yukon where a mediator may be appointed.

Quebec, Northwest Territories, Nunavut, New Brunswick, Newfoundland and Labrador, and Prince Edward Island have virtually no mechanisms in place to identify responsible parties, other than those directly involved in the contaminating event. As well, there is no direction provided on the allocation of liability or a process for parties to reach a voluntary agreement.

3.0 Summary

The assessment, based on the five key questions posed above, indicates that the provinces of Alberta, British Columbia, Manitoba and Nova Scotia provide the most comprehensive legislative framework for the management of contaminated sites. These jurisdictions all provide direction on the designation and remediation of contaminated sites through clear legal tools. The same jurisdictions include a step-wise process for identifying potentially responsible parties and fairness based criteria for the determination of ultimate responsibility. As discussed above, significant portions of the decision-making process are discretionary making it difficult to determine the relative success of each approach. Part IV, below, describes management activities in each jurisdiction. It is noted from the outline of those activities that the province of Nova Scotia, for example, has very little in place to actively address issues associated with contaminated sites. This would indicate that the province's comprehensive legislative approach has not necessarily resulted in effective management of contaminated sites relative to some of the other jurisdictions, such as the province of Quebec.

The remaining jurisdictions provide a mixed bag of legislative requirements that may be used to guide the management of contaminated sites. It is, however, important to recognize that in most instances the regulatory requirements are directed at the release of a contaminant and therefore may not be effectively used for the remediation of historical sites. This is an area of some debate among those drafting and interpreting environmental legislation.

On a regional basis it would appear that the west has invested the most time and resources into the development of legal tools to regulate the management of contaminated sites. The central and northern regions have made investments in terms of actual management activities, see Part IV below, but have taken minimal steps to incorporate specific legal tools to govern those activities. The Atlantic Risk Based Corrective Action (RBCA) program indicates an effort on the part of the Eastern region to combine resources in the area of contaminated site management. However, with the exception of Nova Scotia, that region has not selected to provide a strong regulatory foundation for the management program.

Part IV Management Framework

See Table C for a summary of management activities for each jurisdiction.

1.0 Federal

The Canadian Council of Ministers of the Environment (CCME) has established many guidelines with risk-based foundations. Canadian Soil Quality Guidelines have been developed for various substances. Under the Canada-Wide Accord on Environmental Harmonization and through CCME, Canada-wide environmental standards are developed. An example of these standards is the Canada-wide standard for petroleum hydrocarbons in soil. Guidance for setting site-specific soil quality objectives (1996) and the general guidance for ecological risk assessment (1996) are also available. There is also a national classification system set out for contaminated sites to determine their level of risk. While CCME protocols consider some levels of risk and protection goals associated with different resource uses, the soil protocol has been extended to include specific exposure pathways and receptors.

Public consultation is encouraged on the federal level. The *Canadian Environmental Protection Act, 1999*, (CEPA) Environmental Registry is a comprehensive source of public information relating to activities under CEPA. In addition to providing up-to-date copies of current CEPA instruments, the primary objective of the Environmental Registry is to encourage and support public participation in environmental decision-making, by facilitating access to documents arising from the administration of the Act. Public input was also a specific part of the development of Canadian wide standards. Public consultations were also a noted part of the formation of the Toxic Substances Management Policy.

The federal government offers many other additional programs aiding in the management of contaminated sites with redevelopment as a component, although not the focus, of the contaminated sites tools. The Contaminated Sites Management Working Group (CSMWG) is an interdepartmental committee established to develop a common federal approach to, and exchange information on, the management of contaminated sites under federal custody. Development and implementation of a plan for the phase-out, storage and ultimate destruction of industrial PCBs in Canada has also been formatted by the federal government. A variety of guidance documents on a variety of municipal and hazardous waste topics, including: composting; solid, hazardous, or biomedical waste incinerators; supplementary fuels in cement kilns; and recycling lubricating oils are offered. Principles for contaminated site liability, developed in conjunction with stakeholders, derived by federal initiatives have been incorporated into legislation in several jurisdictions. The CCME guidelines for managing wastes containing PCBs are used in most jurisdictions as well.

There are a number of broad funding programs offered by the federal government, however, these programs do not specifically target the management of contaminated sites.

2.0 Western Region

2.1 Alberta

The province of Alberta has an extensive and well-documented approach to risk-based assessment. It follows a well-designed two-tier approach to contaminated sites management and soil standards. Tier I values are generic and approximate acceptable concentrations of soil contaminants for all site conditions and land uses without defining actual risk. In contrast, Tier II criteria are site-specific concerning protection of human health and the environment and are developed by the proponent who must provide credible risk-based scientific documentation in support of their criteria, and be willing to defend them before the public and Alberta Environment. Redevelopment initiatives are not prominent but guides establishing standards and protocols such as the Conservation and Reclamation Guide for Alberta and the reclamation criteria for railways, pipelines and wells are available. Provincial programs such as

Contaminated Sites: Implementation Advisory Group and the Soil Monitoring Directive act to aid in the management and direction of contaminated site remediation.

2.2 British Columbia

The Contaminated Sites Soil Task Group (CSST) was formed in November of 1994 demonstrating the province's commitment to risk-based management. The members of CSST represent health and environment experts providing assistance to the Ministry of Water, Land and Air Protection in the derivation of appropriate soil quality standards for use at contaminated sites. Several Protocols implemented by the province follow risk-based guidance.

British Columbia has a site registry allowing the public to access information on contaminated sites and cleanup and also an electronic mail subscription service to inform stakeholders about new developments. The Contaminated Sites Implementation Committee (CSIC) was established in January 1997 to advise the ministry on the implementation of the Contaminated Sites Regulation, and assist in streamlining and improving implementation efficiencies. The concept of this committee is to provide stakeholders most affected by the implementation of the Contaminated Sites Regulation an opportunity to have input in how the regulation operates, in setting work priorities, in identifying and resolving problems and issues and in recommending changes to the Regulation.

There are no specific redevelopment programs in place in the province. Staff's training programs and workshops have been implemented and the Contaminated Sites Program acts as the supervisor/administrator of contaminated sites initiatives.

2.3 Manitoba

The province of Manitoba has a very detailed risk assessment strategy. It implements a three-tier evaluation component to designate and manage contaminated sites in the province. Sites are assessed, designated and remediation criteria decided for the particular site based on site conditions. The Manitoba Clean Environment Commission is an independent body appointed by the Government to provide advice and recommendations on environmental issues and licensing matters and provides an opportunity for the public to participate in the environmental decision-making process through the convening of public hearings and mediation exercises.

Funding appears to exist for contaminated site management but has not been set-aside in discrete funds. In an indirect funding initiative that may act to benefit contaminated sites management, The Manitoba Round Table for Sustainable Development has established an annual scholarship to assist post-secondary students in Manitoba who pursue studies and undertake research that embraces the spirit and principles of sustainable development.

2.4 Saskatchewan

Through policy revisions and other actions, such as recognition of risk-based remediation, the province of Saskatchewan has recognized the risk-based management potential. The province is currently monitoring how the strategic approach works and will make changes to the policy or to legislation if observations indicate that they are required. Funding is not allocated specifically to remediation projects particularly but has been put towards several management initiatives and remediation organization. For example, the Centenary Fund Program provides funding for the cleanup of some larger contaminated sites in the province, including landfills, mine sites and industrial sites, as well as orphaned service stations.

3.0 Central and Northern Regions

3.1 Ontario

The province of Ontario addresses contaminated sites using generic and risk-based approaches with a goal of remediation and redevelopment. The *Guideline for Use at Contaminated Sites* includes tables of generic cleanup criteria and risk-based standards. The standard for contaminants based on proposed land use, acceptance of a site specific risk assessment by the Ministry of the Environment, and allowing conditions to be placed on the use of a property are all indicative of efforts made by the Ontario government towards site-specific management. These management tools do not, however, fall under one particular contaminated sites risk based program like the Atlantic RBCA.

Ontario has recently proposed legislation dealing with the promotion of brownfields development. This bill is currently in the legislative approvals procedure.

3.2 Québec

The province of Québec offers extensive funding initiatives and designates this funding specifically for contaminated site rehabilitation. The Urban Contaminated Sites Rehabilitation program is the most specific contaminated sites redevelopment plan found in this research effort. The Urban Contaminated Sites Rehabilitation Program provides for total financial assistance of \$90 million to be granted between 1998 and 2005 for the revitalization of contaminated sites in the territories of Montréal and Québec City. The Québec government's contribution to the program will take the form of direct grants, debt service subsidies or a debt service equivalent. The government's total budget for these projects is \$30 million for Montréal, \$10 million for Québec City and \$50 million for all other municipalities. Québec also has a policy framework specifically for contaminated sites rehabilitation unlike most other provinces.

The Soil Protection and Contaminated Sites Rehabilitation Policy provides guidance for remediation and rehabilitation. Another important component of the Québec management framework is the Contaminated Sites Management System, which is used to monitor and inventory contaminated sites. In July 2001, the province adopted the *Règlement sur l'enfouissement des sols contaminés*, which requires anyone wishing to landfill soils contaminated above certain levels to treat the soils prior to disposal.

3.3 Northwest Territories and Nunavut

The Northwest Territories have a military fuel spill remediation project called, *The North American Air Defence Modernization*, which acts to cleanup abandoned military sites common from the 1960s. The project focuses on remediation rather than ultimate redevelopment.

Prior to 1972, there were largely no rules or regulations in place to govern land use in the Arctic. While some of the resulting contaminated sites have been cleaned up in recent years, many federal government-funding sources are being affected by recent budgetary cutbacks and their continuation is currently uncertain. Solid waste disposal facilities in Arctic communities are often rudimentary as a result of the lack of staff and funds, climatic restrictions and the presence of permafrost thus forcing many communities to dispose of their wastes in open sites. The hazardous waste management program acts to cleanup spills, operate the 24-hour reporting line, discourage pesticide use and other non-sustainable practices, etc. No special funds exist for contaminated site management.

3.4 Nunavut

Nunavut has not established its own contaminated site management procedures, and therefore follows the Northwest Territories.

3.5 Yukon

Currently the Yukon does not have any risk-based management measures in place. Site specific numeric standards in situations where there are numerous contaminants or where other complicated factors are involved, are often applied. In terms of public consultation, efforts have been made to inform the public about contaminated sites and a public registry has been established. The government has created a series of fact sheets including the following titles: Contaminated Sites, Contaminated Site Regulation, and Demystifying Risk Assessment.

Although there are some federal funding programs in place to address the management of contaminated sites (federal) in the Yukon, there are no territorial funding programs for site clean up.

4.0 Eastern Region

4.1 New Brunswick

The province of New Brunswick has invested quite extensively in risk-based assessment. Public consultation is a key element of the remediation process in New Brunswick. There is some general funding available that could be used for remediation, however, there are no funds specifically for contaminated sites. New Brunswick's Orphan Sites Program is the only orphan sites fund noted at the provincial level in Canada.

4.2 Newfoundland and Labrador

Although Newfoundland and Labrador participate in the Atlantic RBCA program, provincial programs do not specifically address risk-based management. Public consultation programs are not particularly active in the province, although just this year public consultation was included in a report and policy on waste management. Funding is not separated into specialized programs or funding initiatives but has been a recognized component of the provincial budget over the last couple of decades with funds being allocated for the remediation of specified abandoned fuel drums and military sites throughout the province. Redevelopment has not been addressed in terms of these remediated sites.

4.3 Nova Scotia

Nova Scotia is part of the Atlantic RBCA program, but has no allocated funding programs, public consultation procedures (other than legislative requirements), risk-based management initiatives or programs encouraging redevelopment of the sites.

4.4 Prince Edward Island

PEI is also a member of Atlantic RBCA and receives risk-based guidance through this partnership. Public communication is part of the province's response to contaminated sites management, generally in the form of public instruction rather than consultation. No designated committee exists for public input as there is in New Brunswick. Remedial action is sometimes required, as decided by PEI Department of Technology and Environment (DOTE) staff, but not necessarily redevelopment. Site inspections, site professionals, a monitoring program, etc., are part of DOTE responsibilities and programs, but funding is not designated specifically for contaminated site remediation or redevelopment.

Appendix A - CCME: Summary of Recommended Principles

Information taken from the Canadian Council of Ministers of the Environment *Contaminated Sites Liability Report: Recommended Principles for a Consistent Approach Across Canada*.

1. The principle of "polluter pays" should be paramount in framing contaminated site remediation policy and legislation.
2. In framing contaminated site remediation policy and legislation, member governments should strive to satisfy the principle of "fairness".
3. The contaminated site remediation process should enshrine the three concepts of "openness, accessibility, and participation".
4. The principle of "beneficiary pays" should be supported in contaminated site remediation policy and legislation, based on the view that there should be no "unfair enrichment".
5. Government action in establishing contaminated site remediation policy and legislation should be based on the principles of "sustainable development", integrating environmental, human health and economic concerns.
6. There should be a broad net cast for the determination of potential responsible persons. However, prior to entering the actual liability-allocation stages of the process, the following persons should have a conditional "exemption" based upon clearly defined statutory exemptions: (a) Lenders; lenders who hold a security interest in the property of a borrower should be granted a pre-foreclosure exemption from liability, beyond the outstanding balance of the debt, unless the lender had actual involvement in the control or management of the business of the borrower; and (b) Receivers, Receiver-Managers, Trustees (including trustees acting in a fiduciary capacity); these persons should be exempt from personal liability for pre-existing contamination, and only be liable if they fail to take reasonable steps to prevent further contamination, or otherwise fail to satisfactorily address ongoing environmental concerns at the site.
7. Remediation legislation should provide the necessary authority and means to enable the recovery of public funds expended on the remediation of contaminated sites from those persons deemed to be responsible for such sites. Furthermore, member governments should strive to achieve environmental priority over all other claims or charges on an estate that has entered receivership or bankruptcy.
8. Member governments should pay particular attention to the design of a process, which will facilitate the efficient cleanup of sites and the fair allocation of liability. Further, this process should discourage excessive litigation to the maximum extent possible by promoting the use of alternative dispute resolution procedures.
9. A list of factors should be established for use in the liability-allocation process to allocate the liability of responsible persons depending upon the specific circumstances of their involvement, and in relation to the involvement of other responsible persons. The following list of "liability allocation factors" is suggested for use in cases where there is more than one responsible person to be considered in the allocation process. The list may not be exhaustive.

Liability Allocation factors:

- a) when the substance became present at the site;
- b) with respect to owners * or previous owners, including, but not limited to:
 - i) whether the substance was present at the site when he took ownership;

- ii) whether the owner ought to have reasonably known of the presence of the substance when he took ownership;
- iii) whether the presence of the substance ought to have been discovered by the owner when he took ownership, had he taken reasonable steps to determine the existence of contaminants at the site;
- iv) whether the presence of the substance was caused solely by the act or omission of an independent third person;
- v) the price the owner paid for the site and the relationship between that price and fair market value of the property had the substance not been present at the site at the time of purchase;
- c) with respect to a previous owner, whether that owner sold the property without disclosing the presence of the substance at the site to the purchaser;
- d) whether the person took reasonable steps to prevent the presence of the substance at the site;
- e) whether the person dealing with the substance followed the accepted industry standards and practices of the day;
- f) whether the person dealing with the substance followed the laws of the day;
- g) once the person became aware of the presence of the substance, did he contribute to further accumulation or the continued release of the substance;
- h) what steps did the person take on becoming aware of the presence of the substance, including immediate reporting to and cooperation with regulatory authorities;
- i) whether the person benefited from the activity resulting in the contamination, and what was the monetary value of their benefit;
- j) the degree of a person's contribution to the contamination, in relation to the contribution of other responsible persons; and
- k) the quantity and toxicity/degree of hazard of the substance that was discharged or otherwise released into the environment.

* Includes lessees and other occupiers.

10. Alternative Dispute Resolution (ADR) procedures should be made available by member governments as a means to resolve issues of liability for contaminated sites. For example, a four-step allocation process could be implemented as follows:

Step I - Voluntary allocation - Upon designation of a contaminated site, and designation of responsible persons, the affected persons should be given a reasonable time-bound opportunity to allocate the cost of cleanup among themselves.

Step 2- Mediated Allocation - Failing Step I, the persons will be required to enter into an allocation process whereby an independent person or body will mediate a settlement.

Step 3 - Directed Allocation - Failing Step 2, the persons will be required to enter into an allocation process whereby an independent person or body will make an arbitrated apportionment of liability based upon its findings.

Step 4 - Failing Steps 1, 2 and 3, liability will default to joint and several liability among all responsible persons.

11. Discretion should be retained by member governments to designate sites as contaminated sites; however, for the purposes of better predictability, governments should clarify their policies for determining which sites are to be designated, with a view to eventually harmonizing their site-designation processes. These site-designation policies should designate sites based upon (a) risk to human health; and (b) extent of environmental risk. In addition, there should be public input into the evaluation of significant sites being considered for designation, as well as public notice when a site designation occurs.

12. A "responsible person", who completes the cleanup of a contaminated site to the satisfaction of the regulatory authority, should be issued an official "certificate of compliance" by that authority, certifying that the site has been remediated to the required standards. These certificates, however, should expressly state that they are based on the condition of the contaminated site as at the date of issuance and that the remediation undertaken met the standards of the day; and that the responsible person may be liable for future cleanup ("prospective liability"), should further contamination subsequently be discovered.
13. Benchmarks should be developed for the remediation of contaminated sites, which will vary depending upon the land usage and site location of a particular site. The use of such benchmarks will allow remediation plans or orders to be tailored on a site-specific basis. There should be full public input into the development of these benchmarks.

Appendix B - List of Federal, Provincial and Territorial Contacts

Federal

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✓*review complete 05 Oct 01*

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✓*review complete 10 Sept 01*

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✓*review completed 18 Oct 01*

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✓ review complete 09 Sept 01

Central and Northern Regions

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✓ review completed 25 Sept.01

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✓review completed 8 Oct 01

Eastern Region

New Brunswick

Review was not completed

Newfoundland and Labrador

Review was not completed

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✓review completed 02 October 01

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✓review complete 10 Oct 01

Appendix C - Cover Letter

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27 August 2001

To whom it may concern;

Re: Environment Canada contaminated sites research project

LJM Environmental Consulting was recently hired by Environment Canada (National Capital Region) to carry out a survey on federal, provincial and territorial frameworks for contaminated sites management. The survey includes a review of applicable statutes and regulations, special legislative provisions addressing liability for contaminated site remediation and relevant management guidelines. The survey also includes a brief overview of management processes including (i) risk based approaches, (ii) public consultation processes, (iii) brownfields redevelopment initiatives, and (iii) funding programs and other resources.

Accompanying this letter you will find five attachments:

1. A portion of the draft contaminated sites report covering the topics described above and relevant to your province or territory.
2. A table that provides information on legislative provisions relevant to identifying and managing contaminated sites. The table is regional.
3. A table that provides information on liability provisions, comparing provinces/territories in your region to the 13 CCME liability principles.
4. A table that provides comparative information on contaminated sites management activities for each province/territory in your region.

The fifth and final attachment covers descriptions to be included in a separate report being developed by the company SAIC Canada. This report describes how each of the provincial and territorial contaminated site legislation and/or policy mechanisms present contaminated site cleanup values. Specifically, this report will compare the provincial and territorial values with the Canadian Council of Ministers of the Environment (CCME) Environmental Quality Guidelines (EQGs) for water, soil and sediments (i.e., the Canadian Soil Quality Guidelines (CSQGs), the Canadian Water Quality Guidelines (CWQGs) and the Canadian Sediment Quality Guidelines (CSedQGs).

The scope of this second study includes contamination to soil, sediment and groundwater. However, because of the manner in which the various jurisdictions present their water guidelines, in many cases the information presented goes beyond just contamination to groundwater to cover contamination to surface water as well. Drinking water guidelines (i.e., those intended for water treatment facilities) were not

included as part of this study; however, where contaminated sites guidelines included potable water values, these were included.

To ensure that the information gathered for this survey is correct and current we would sincerely appreciate your review of the attachments, your comments and any additional relevant information that you can provide. We would appreciate receiving your comments, by phone, fax or email, to the address above, on or before September 7, 2001.

As mentioned, this project is being completed for Environment Canada. If you have questions regarding the nature of the project as designed by Environment Canada. Please do not hesitate to contact Paula Jokuty at:

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Thank you.

Lisa J. Mitchell
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