BRITISH COLUMBIA
Ministry of Environment

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FACTS ON CONTAMINATED SITES

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Highlights of Legislation and Regulations

Comprehensive contaminated sites legislation was passed by the BC legislature in June 1993. It came into effect on April 1, 1997, after approval of contaminated sites regulations in December 1996. This fact sheet explains the scope, intent, and provisions of the contaminated sites regime provided in Parts 4 and 5 of the *Environmental Management Act* and the Contaminated Sites Regulation.

What are the goals of the legislation?

The legislation and regulations set out to:

- ensure environmental and human health protection;
- bring uniformity to the administration of contaminated sites;
- establish requirements for site remediation, assessment, and soil relocation;
- provide flexible standards to measure remediation efforts;
- focus ministry efforts on high risk sites while approved professionals advise the ministry on low and moderate risk sites;
- provide easy access to site information; and
- present clear and predictable circumstances for liability for site cleanup.

The legislation and regulations address all stages of management from site identification, through evaluation of remediation options to the confirmation and monitoring of remediation performance.

Five-part site management process

The *Environmental Management Act* provides a five-step process for managing contaminated sites. Every site need not proceed through each step. For example, many sites, once investigated, will be found not to be contaminated and require no further attention.

The five site management process steps are:

- screening
- investigation and determination/decision
- planning
- remediation
- evaluation/monitoring

Step 1. Screening for contamination

Site profiles are an important tool for identifying potentially contaminated sites. They contain readily available information and do not require the assistance of a consultant to be completed.

A site profile is usually necessary when a local government receives an application for subdivision, zoning, development, demolition of a structure or soil removal (at specific types of former commercial or industrial operations), or when a Director of Waste Management orders one. Usually they are assessed by a municipal official to determine if a site should be investigated further.

Step 2. Investigating sites

A preliminary site investigation and a detailed site investigation may be required. They may be prompted by a site profile or other information a Director of Waste Management may receive.

- Preliminary site investigations assess the probability of site contamination through
- archival records, site visits, and knowledge of historical activities conducted at a site.
- Detailed site investigations confirm or refute the potential of site contamination by sampling and chemical analysis of soils, sediments, surface water, and groundwater.

Comprehensive environmental quality standards

The Regulation provides numerical and risk-based standards to determine when cleanup is needed and satisfactorily completed. The numerical standards appear in Schedules 4, 5, and 10 for soil, 6 and 10 for water, and 9 for sediments. They also include site-specific and director's interim standards. A site is contaminated if substances in the soil, water, or sediment at the site exceed the numerical standards.

Legally determining if a site is contaminated

Provision is made for a formal ruling that a site is, or is not contaminated. The process involves a preliminary determination and final determination by a Director, with notification of liable parties at each stage. A determination of contaminated site is not required for every site, but a lack of a determination does not mean a site is not contaminated.

Step 3. Planning remediation

Determining liability – responsibility for remediation

Responsibility for remediation is stated very broadly in the *Environmental Management Act*. Directors have broad authority to order investigations and site remediation. The legislation brings clarity and predictability to liability issues, facilitating planning by site owners and developers for future costs.

The legislation first casts a relatively broad net of liability. Persons potentially responsible, for example, may include current or former owners of a contaminated site or a site from which contamination migrated. Persons potentially responsible may also include producers or transporters of substances.

To achieve fairness and to implement the "polluter pays" principle, the legislation also provides many exemptions from liability. Among those exemptions are:

- a government body involuntarily acquiring ownership of contaminated land;
- a person whose site is contaminated only by migration from another site; and
- secured creditors who act only to protect their financial interest and do not, in any way, cause or increase contamination.

Determining liability – minor contributors

The legislation allows a Director to confer "minor contributor" status on a person who contributed only a minor part of contamination at a site. When a person is ruled a minor contributor, this protects them in private lawsuits and ministry remediation orders.

General liability principles

The general liability principles parallel those already in place in the *Environmental Management Act* concerning pollution abatement orders. A responsible person can be absolutely, retroactively, or jointly and separately liable for site remediation.

Assessing the need for remediation orders

Criteria are provided to guide a Director in determining the need and priority for a remediation order. If a contaminated site needs to be remediated, the timing will depend on the severity of the actual or potential impacts. Most sites need not be cleaned up for years, or ever, so remediation orders are used infrequently.

Activating remediation

A Voluntary Remediation Agreement or a remediation order can be used to document responsibility and to set out conditions required to address contamination.

A Director may issue a remediation order if a person will not agree to responsibility or remediation requirements. Such an order deals with similar matters to a Voluntary Remediation Agreement.

Evaluating remediation options

Identification and investigation of a site may be followed by planning for remediation. Often there are several different remedial options to clean up a site, and one (or a combination) may be selected.

Approvals in Principle

Financing and local government development approvals of sites with contamination can be significantly impeded if a clear process for dealing with contamination is not in place. A local government or a lender may require assurance that a site has been adequately investigated and that acceptable plans have been developed for remediation.

To this end, the legislation provides an optional legal instrument known as an Approval in Principle. A Director can review investigation results, evaluate remediation options, assess any public consultation input and remediation plans, and, if satisfactory, issue an Approval in Principle with or without conditions.

Contaminated soil relocation

Excavation at a contaminated site may be required where underground facilities such as basements and parking lots are being developed. Relocating surplus soil, either to a landfill or for use as fill at another site, may in some cases be an acceptable remediation option.

For this reason, the legislation provides for Contaminated Soil Relocation Agreements to be set up. Information about the soil's quality and the conditions of the environment at a deposit site must be included in such a proposal.

Contaminated Soil Relocation Agreements provide a uniform system of managing the relocation of contaminated soil in BC.

Step 4. Implementing remediation

As defined in the legislation, remediation covers all stages of site management from preliminary investigations, through implementation of remediation procedures, to final monitoring. More commonly, however, remediation is viewed simply as the removal or treatment required to clean up or secure a site.

Two types of remediation and remediation standards

The legislation and regulations provide a framework for two general types of remediation. Contamination may be

- removed so that it no longer remains at a site – where the numerical standards for soil, water, and sediment apply, or
- contained and managed onsite – where the risk-based standards apply.

Step 5. Documenting the completion of remediation

A person may apply for a document certifying that these two types of remediation meet the applicable standards. Certificates of Compliance may be issued if either the numerical or risk-based standards in the Regulation have been satisfied. In both cases, financial guarantees or other security may be required.

If a Certificate of Compliance is to be issued, usually a confirmation of remediation report is required. If contamination is managed onsite, certain conditions must be adhered to. These are

necessary, for example, to ensure protection of the environment or notification of future site owners. Sometimes a restrictive covenant must be registered on the property title, but in many cases a Certificate of Compliance and notations on the Site Registry will suffice.

Other key features of the legal regime

Declaration of need for remediation

Some sites may require prompt action if they pose a serious threat to the environment or human health. The legislation authorizes the Minister to declare the need for remediation at a high risk orphan site or another site. Labour, services, materials, equipment, and entry onto land may be ordered. The legislation also provides access to funds for orphan site cleanup.

Part 5 – Remediation of mineral exploration sites and mines

The provisions in Part 5 of the *Environmental Management Act* were added to the legislation in 2002. Under those amendments, mines – in a number of specified circumstances – were exempted from key contaminated sites provisions of Part 4. The amendments established a single window for cleaning up contaminated mine sites subject to a *Mines Act* permit— to be administered by the Ministry of Energy, Mines and Petroleum Resources.

The provisions in Part 5 impose limitations in four areas:

- liability for remediation of contamination,
- powers of ministry officials to issue remediation orders,
- powers of ministry officials to require security under the *Environmental Management Act*, and
- payment of fees under the Regulation.

These new provisions vary depending on the type of mine site involved.

Notices of offsite migration

In 2003, provisions were incorporated into the Regulation requiring site owners to notify owners of neighbouring sites about actual or potential offsite migration of contaminants. This notice is required only in the context of a site investigation or independent remediation of a site.

Site Registry

The Site Registry provides easy access to information about sites in BC. Basic characteristics of a site, as well as legal events and milestones in the remediation process, are recorded. The Registry is used in due diligence searches as part of land transactions, and is a ready source of information for the general public. It is publicly accessible by computer through BC OnLine.

Four routes to site remediation

There are a number of ways in which the legislation allows sites to be cleaned up. They differ as to the extent of involvement of the ministry and of environmental consultants.

Sites remediated without ministry involvement

Independent remediation carried out in accordance with regulations is allowed under the legislation, provided the ministry is notified at the onset and at the completion of remediation. At many sites, remediation may be routine, the risks posed by the site low, and methods of treatment readily available. Such sites can be remediated with the assistance of capable engineering or environmental consultants and very little involvement of the ministry. With environmentally responsible care by site owners, independent site cleanups are practical and sensible.

Sites remediated with ministry involvement

There are three options by which a site can be cleaned up involving the ministry:

Option 1: Submission to ministry by approved professional

Most sites pose a low or moderate risk to human health and the environment. The ministry requires that applications for ministry services for low and moderate risk sites (such as providing a Certificate of Compliance) must be submitted by an approved professional.

Option 2: Submission to ministry requesting external contract review

Under this option, the ministry contracts report reviews to qualified consultants, as provided in the Regulation. The circumstances in which this option may be used are very limited.

Option 3: Submission to ministry for direct ministry review

The third option, review by the ministry directly, is generally reserved for high risk sites and sites where risk-based standards are used.

Interagency coordination

The contaminated sites legislation coordinates government activities by delegating specific functions to local governments and to other provincial agencies such as the Oil and Gas Commission and the Ministry of Energy, Mines and Petroleum Resources. It provides immunity for local governments and other ministries carrying out these administrative functions.

Also, a number of other statutes contain provisions relating to the site profile provisions in the *Environmental Management Act* including the:

- *Islands Trust Act*
- *Land Title Act*
- *Local Government Act*
- *Petroleum and Natural Gas Act*
- *Property Law Act*
- *Vancouver Charter*

Fees

The legislation and regulations provide for cost recovery service fees to offset the costs of regulating and administrating contaminated sites. The fees vary with the type of service provided, and may be in the form of a lump sum or hourly fees.

For more information, contact the Environmental Management Branch at site@gov.bc.ca