

72 FACTS ON CONTAMINATED SITES

August 2005

Highlights for the Mining Industry

In developing the BC's contaminated sites regime in the mid-1990s, close consultations were held with the mining industry to listen to its ideas and concerns. Industry stakeholders said they would like to see contaminated sites legislation that included:

- opportunities for settling liability;
- flexible and practical cleanup standards;
- a requirement that only high priority sites be remediated; and
- consistency in regulatory approaches under the *Mines Act* and then *Waste Management Act*.

Experiences in regulating mines

Since the original contaminated sites provisions for mines were adopted, experience with the system revealed a number of problems.

In BC, the regulation of the restoration and remediation of mines was subject to two different legal regimes, administered by two ministries. This resulted in duplicate and sometimes conflicting requirements. In addition, imposing liability on past owners and operators of mines under the *Waste Management Act* produced disincentives to sell mines and reopen former mines.

Legislative amendments

A number of issues were resolved by amendments to the *Waste Management Act* made in May 2002. These changes now form Part 5 of the *Environmental Management Act*.

How do the provisions for mines work?

The amendments removed mines – in a number of specified circumstances – from the application of key contaminated sites provisions of the legislation. A single window was established for cleaning up those contaminated mine sites under a *Mines Act* permit, to be administered by the Ministry of Engergy, Mines and Petroleum Resouces.

The amendments address four areas:

- liability for remediation of contamination;
- powers of ministry officials to issue orders;
- powers of ministry officials to require security; and
- payment of fees.

These vary depending on the type of mine site involved, and must be considered together with Part 4 of the *Environmental Management Act* for a full understanding of how the contaminated sites regime works for mines. The key features of the amended contaminated sites regime as they apply to mines are explained below.

Types of mine sites

The Act defines four types of mine sites:

- exploration sites where mineral or coal exploration has been carried out, no bulk samples have been taken, and no bedrock has been excavated for mine development;
- advanced exploration sites where mineral or coal exploration has been carried out, and bulk samples have been removed, or bedrock

or coal has been excavated for mine development;

- producing or past producing mines where a mine is subject to a Mines Act permit, and the mine has produced or is producing more than 1,000 tonnes of mineral containing bedrock, more than 50,000 tonnes of coal, or more than 200,000 tonnes of total material including coal; and
- historic mine sites where the ground has been disturbed or excavated to produce minerals or coal, but there is no permit under the Mines Act for the operation, and no owner or operator is taking responsibility for contamination at the site.

In addition, different parts of a mine site may be addressed in different ways, depending on the use of the site. The *Environmental Management Act* defines:

- core areas as those areas at an advanced exploration site, or producing or past producing mine site, where waste rock and mine tailings are placed, where the ground is disturbed by mechanical means, or where there are or have been access roads; and
- non-core areas as including all other areas at an advanced exploration site, or producing or past producing mine site, such as places where processing and storage facilities are located.

Opportunities for managing liability

In general, the contaminated sites regime provides several opportunities for companies to determine, manage, and limit their liability. For example, a company may:

- enter into a Voluntary Remediation
 Agreement to schedule remediation and to set
 limits on its liability;
- clean up a site to numerical standards and then obtain and use a Certificate of

- Compliance as a defence in private cost recovery lawsuits.
- undertake onsite risk management (which does not involve remediation to numerical
- standards) and then obtain a Certificate of Compliance, which could be used to provide assurance to lenders about the status of a site; and
- obtain a minor contributor status ruling if the company has contributed to only a small portion of a site's contamination. This will cap the company's statutory and civil liability for contamination.

How do the remediation liability provisions apply to mine sites in particular?

The provisions in the section above apply to many types of sites in the province. However, the *Environmental Management Act* contains specific rules for owners and operators of mines regarding liability:

- At *exploration sites*, previous owners and operators, as well as current owners and operators who hold a valid bond under the *Mines Act* for the site, are exempt from liability for site cleanups. Current owners and operators without a valid bond are not exempt.
- At advanced exploration and producing or past producing mine sites, a previous but not current owner or operator is exempt from liability for site cleanup, if this is conferred through:
 - a *Mines Act* permit transfer agreement signed by the two ministries, or
 - indemnification provided under the *Financial Administration Act* (FAA).

Note that the two ministries have signed a protocol for the administration of FAA

indemnifications for mines, and expect to be developing an agreement for indemnification as part of the process of transferring *Mines Act* permits to new mine owners.

- At *historic mine sites*, exemptions from remediation liability exist for two cases:
 - if indemnification is provided under the FAA; or
 - if the person has acquired the mineral or coal rights at the site to undertake mineral or coal exploration activities and the exploration activities have not exacerbated any contamination that existed at the site.

Order powers of ministry officials at mine sites in BC

- At exploration sites, order powers of a Director of Waste Management are restricted to pollution prevention and pollution abatement orders issued to current owners and operators. Ministry officials may not issue remediation orders or pollution prevention and pollution abatement orders to previous owners and operators of these sites.
- At *advanced exploration sites*, a Director may not issue a remediation order to a current or previous owner of the core area of such a site, although a Director could issue a remediation order for a non-core area. Also, a Director may issue a pollution prevention or pollution abatement order to a current or previous owner or operator of the site.
- At producing or past producing mine sites, a
 Director is prohibited from issuing a
 remediation order to a current or previous
 owner of the core area, unless this is:
 - requested by the Chief Inspector of Mines;

- required in a dispute resolution agreement between the two ministries; or
- necessitated by a formal change in the land or water uses at the site from those in the mine reclamation plan.

However, a Director may issue a remediation order for a non-core area at a producing or past producing mine site, and could issue a pollution prevention or pollution abatement order to a current or previous owner or operator of the site.

• For *historic mine sites*, a Director may issue remediation, pollution prevention, and pollution abatement orders.

Security

At exploration, advanced exploration, and producing or past producing mine sites, security may only be obtained under the Mines Act and not under the Environmental Management Act. A Director has full authority under the Environmental Management Act to require security for historic mine sites.

Fees

Fees under the Contaminated Sites Regulation apply at mine sites as follows:

- at *exploration sites*, fees may only be collected in relation to the cleanup of spills;
- for both core and non-core areas of an advanced exploration site, fees may be assessed in relation to spills, and they may be assessed in relation to remediation orders for non-core areas;
- at *producing or past producing mine sites, f*ees may be assessed in four situations:
 - for the cleanup of spills;
 - for the administration of a *Mines Act* permit transfer agreement between the two ministries involving a core mine area;

- for a remediation order issued for a noncore area;
- when a formal change in land use is made from that allowed by the *Mines Act* permit; and
- at *historic mine sites*, the requirements for fees are not specifically restricted.

Setting priorities

The contaminated sites provisions recognize that not all sites pose serious human health or environmental problems that require immediate attention. The *Environmental Management Act* provides a number of procedures that compel a Director to set priorities:

- When considering a remediation order, the need and timing will depend on the severity of the actual or potential impacts on human health or the environment, not just on the fact that a site qualifies as a contaminated site.
- Remediation orders or voluntary remediation agreements may defer remediation to a future date, if a site does not pose a serious problem.
- Remediation alternatives are weighed in terms of economic costs and benefits.

Flexible, practical standards

The legislation sets out a framework of numerical and risk-based standards to assist the ministry and others working on behalf of it or industry in determining if a site is contaminated, if cleanup is needed, and if a site has been remediated to the satisfaction of the ministry.

As well, the legislation includes several important provisions for mines that have naturally occurring substances of concern. A site containing concentrations of substances at less than local background levels (as described in

Protocol 4: "Determining Background Soil Quality") is not considered to be a contaminated site. Also, the human health and environmental protection standards of the contaminated sites regime are the same for mine sites as for other sites, although the way they are applied to mine sites through orders differs.

The ministry has developed a number of practical options for determining site remediation requirements, and these are described in Fact Sheet 13, "Environmental Quality Standards."

Requirements for discharges and spills

Directors continue to have a duty to issue and enforce permits for discharges associated with mines, and to deal with spills.

Site profile requirements for mines

Site profile submissions are not required as part of the mining process in BC.

Note: This summary is solely for the convenience of the reader. The current legislation and regulations should be consulted for complete information.

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