

APPENDIX

CONTAMINATED SITES REGULATION KEY STAGE 2 AMENDMENTS AND SUPPORTING RATIONALE

1) WIDE AREA SITES RISK-BASED STANDARDS

The Amendments

A new section in Part 6 of the regulation dealing with remediation standards for wide area sites has been added. It allows, on request, that the cleanup of a wide area site be certified by the director of waste management, with reference to advice from a medical health officer, provided that:

- The medical health officer's advice is endorsed by the Provincial Health Officer.
- Adequate rationale is provided to support and justify the request.
- A public community-based consultation process acceptable to the medical health officer is conducted.
- An environmental impact report is also provided to the ministry.

Rationale

Wide area sites are sites which a regional Environmental Management manager may designate if they cover an extensive geographic area and have individual properties containing specified contaminants from specified sources. To date, there have been no wide area site declarations, and if they are made in the future, a wide area site would be designated only after careful consultation with affected parties.

Originally the wide area site provisions were created in response to requests from stakeholders concerned about contamination from the Cominco smelting operations in Trail. The impacts of lead on human health in Trail have been assessed for a number of years based on blood lead levels in children. Canadian government health officials have adopted standards for acceptable levels of lead in blood.

These amendments allow, with appropriate justification, the ministry to certify a site as meeting the risk-based standards in the regulation by introducing biological measures of substances as legal reference standards. For example, they would allow the ministry to certify that the remediation of contamination in Trail was complete, if certain blood lead levels in children were achieved. The provisions closely parallel those of Section 18 of the regulation, which allow medical health officers to recommend alternate risk values as standards.

2) NOTICE OF INDEPENDENT REMEDIATION AND OF THE MIGRATION OF SUBSTANCES CONTAMINATING NEIGHBOURING SITES

The Amendments

In Section 57, the requirement for notification of a ministry manager on commencement of independent remediation of a site has been streamlined by deleting the requirement for verbal notification. The requirement for written notification remains unchanged. Also in Section 57 and new Section 60.1, a requirement has been added for a person to notify the manager and the owner of a neighbouring site if substances are migrating or likely migrating onto a neighbour's site and causing, or likely causing contamination.

Rationale

Formerly, the regulation contained requirements for both verbal and written notification of the ministry when a person begins and completes site remediation independent of the ministry. Four years' experience with the notification provisions for independent remediation have revealed that there was little need for this duplication of notice to managers. These

amendments streamline the system for site owners cleaning up their own sites, while still providing adequate notice to the ministry.

In earlier versions of the regulation, there were no provisions requiring a site owner to notify his or her neighbours if it was discovered that substances were migrating onto a neighbour's site and causing contamination.

CSIC considered that owners of sites should be informed about the imminent or actual contamination of their land from neighbouring contaminated sites. These new provisions will help ensure that these affected neighbours are provided with the information they need.

3) CHANGES TO STANDARDS SCHEDULES 4 – 7

The Amendments

The amendments include:

- Reformatting and updating the generic numerical soil standards in Schedule 4.
- Updating the generic numerical water standards of Schedule 6.
- Updating the matrix numerical soil standards in Schedule 5 for arsenic, benzene, cadmium, chromium, ethylbenzene, toluene and zinc.
- Adding matrix numerical soil standards for ethylene glycol, DDT and mercury to Schedule 5.
- Updating the Standards Triggering Contaminated Soil Relocation Agreements in Schedule 7 to reflect amendments in Schedules 4 and 5.

Rationale

Ministry policies for contaminated sites require that soil and water quality standards in the regulation reflect current science. To ensure that they are up to date, annual amendments of the standards in the regulation are planned.

The generic numerical water standards in Schedule 6 are based on water quality guidelines approved by the ministry. These guidelines are revised regularly, necessitating regular updates of the generic numerical

water standards in this regulation, as well as those of the matrix numerical soil standards in Schedule 5, some of which are derived using water quality guidelines as their basis.

As well, enough scientific data is now available to develop matrix numerical soil standards for DDT, ethylene glycol and mercury so matrices for these three substances have been added to Schedule 5.

The standards triggering Contaminated Soil Relocation Agreements in Schedule 7 are derived from the numerical soil quality standards of Schedules 4 and 5. Revisions of those standards required that the standards in Schedule 7 also be updated.

4) NEW ROSTERED PROFESSIONAL FUNCTIONS

The Amendments

These amendments add provisions enabling ministry officials to rely on the advice of persons on the roster of professional experts for two new functions under the regulation :

- Section 15 provides procedures for ministry staff in adjudicating applications for determining if sites are contaminated, and
- Section 43 describes the application process for a Contaminated Soil Relocation Agreement.

They also provide ministry fees in Schedule 3 one tenth lower than those fees where rostered experts are not involved in performing these functions.

Rationale

In July 1999, the first stage amendment to the regulation provided a new way to streamline the issuance of approvals of site cleanup plans and of certificates indicating that sites had been cleaned up to standards in the regulation. These were included to reduce delays that clients had been experiencing. Highlights include:

- a simpler approval process for low to moderate risk sites.

- authorization to allow ministry officials to rely on the advice of specified private sector professionals in adjudicating applications for approvals and certificates.
- stringent exams and qualification requirements before placement on the roster.
- rostered professionals licenced by the Association of Professional Engineers and Geoscientists of BC or the BC Institute of Agrologists.
- much lower ministry fees for reviews of reports and plans, where staff rely on the advice of rostered professionals.

With nearly two years experience with this system, the ministry and our clients have concluded that it has worked reasonably well.

Stakeholders requested that the functions upon which a regional Environmental Management manager may rely on the advice of rostered professional experts be expanded to include determinations that a site is, or is not contaminated, and the approval of Contaminated Soil Relocation Agreements.

5) IMPROVE THE SITE PROFILE PROVISIONS

The Amendments

- Deferral of the requirement for a local government to submit a site profile, for those local governments which own land they are zoning or rezoning, and do not intend to develop at the time the land is zoned or rezoned, in subsection 4 (6).
- An exemption from the requirement to submit a site profile, for persons engaging in demolition which does not disturb soil other than that incidental to the demolition, in subsection 4 (9).
- Inclusion of a new question about existing contamination from the migration of substances from other properties in the site profile form in Schedule 1.
- Addition of dry cleaning facilities, sawmills, and sites affected by the migration of contaminants from other sites, to the list of commercial and industrial activities and purposes in Schedule 2.

- Increase in the fee for a site profile submission to local government from \$50 to \$100.

Rationale

How Site Profiles Work

Site profiles are a screening form contained in Schedule 1 of the regulation. They are sent to government officials when applications are being made for development permits, zoning or rezoning, soil removal, and demolition permits. Consult Fact Sheet 20 for further details.

Site Profile Deferrals for Local Government Zoning or Rezoning and for Demolition

CSIC was informed during its deliberations that:

- under the provisions of the regulation, local governments which zoned or rezoned their own land were required to submit a site profile even if they were not proposing to develop the land, and
- site profiles were required if buildings were being demolished, even if there was no significant disturbance of the soil at a site.

In these two situations, some sites could have been dormant for months or years once zoned or after buildings had been demolished. Under the version of the regulation in effect at that time, a site investigation would often be required immediately, even though development of the site would not be occurring in the near future.

It is much more efficient and cost effective to investigate sites, and if necessary, clean them up just before their development or redevelopment. These amendments address this situation by ensuring that a site profile submission is deferred until just prior to development or redevelopment of a site.

Site Profile Instructions and Triggers

Several changes were made to:

- clarify how to complete a site profile,
- ensure that a site profile would be triggered if a site was contaminated by the migration of substances from a neighbouring site, and

- ensure that site profiles are submitted for sawmill and dry cleaning sites, as well as for sites subject to migration of substances from neighbouring properties.

Increase in Site Profile Fee to Local Government

The Union of British Columbia Municipalities has noted that the former \$50 fee for a site profile submission to local governments does not cover the processing costs local governments incur, so the fee has been increased to \$100.

6) CLARIFICATION OF SITE SIZE

The Amendments

A new subsection was added to Section 9 to provide a hierarchy of rules for determining the size of a site. Site size is now defined as:

- (a) first, the actual area of contamination, if known;
- (b) second, the manager's estimate of the area of contamination, if the actual area is unknown;
- (c) third, the total area of an affected legal parcel of land if the actual area is unknown and can't be estimated; and
- (d) fourth, for sites involving more than one legal parcel, the areas of contamination for each legal parcel as determined for (a), (b) or (c).

Rationale

Persons who request that the ministry review reports and plans for their sites are required to pay fees under Section 9 of the regulation. The fees vary depending on the type of request, the complexity of the contamination and the size of the site. Stakeholders have requested that to the extent feasible, the fees be related to the actual area of contamination of a site, and not to the entire area of a legal parcel, because in many cases a whole legal parcel may not be contaminated.

These amendments instruct regional Environmental Management managers to determine the size of a site based on the area of contamination, and only if that

information is not available, on the entire area of a legal parcel.

7) AMENDMENTS TO CLARIFY WORDING, INSTRUCTIONS AND APPLICABILITY OF FEES

The Amendments

A number of minor errors, inconsistencies and omissions have been corrected.

Rationale

The regulation contained a number of transcription errors, inconsistencies, instances of lack of clarity, incorrect or inappropriate references, and errors of omission which needed to be addressed.