



Ministry of
Environment

PROTOCOL 6 **FOR CONTAMINATED SITES**

Eligibility of Applications for Review by Approved Professionals

Prepared pursuant to Section 64 of the
Environmental Management Act

Approved: _____
Director of Waste Management

Date

Effective Date: October 1, 2008

1.0 Introduction

Under the *Environmental Management Act* (the Act), a Director of Waste Management is authorized to rely on the recommendation or advice of Approved Professionals in the performance of specific contaminated sites functions. This protocol specifies when applications for specific contaminated sites legal instruments must be supported by the recommendation of an Approved Professional.

2.0 Definitions

“**Approved Professional**” means a person who is named on a roster established under section 42 (2) of the *Environmental Management Act*.

3.0 Overview

Under the *Environmental Management Act* and Contaminated Sites Regulation (the Regulation), applicants may request:

- a Determination that a site is or is not contaminated;
- an Approval in Principle of a remediation plan;
- a Certificate of Compliance with the human health and environmental protection standards; or
- a Contaminated Soil Relocation Agreement.

Before a decision is made to issue one of these instruments, various reports and plans must be reviewed. For example, before a Director issues a Determination, a preliminary and/or detailed site investigation must be reviewed. Also, before issuing an Approval in Principle or a Certificate of Compliance, the Director must evaluate a remediation plan or confirmation of remediation report, respectively.

Section 42 (1) of the Act enables the Director to designate classes of persons that under a protocol may be required to be performed by an Approved Professional. The Regulation provides that Approved Professionals may make recommendations based on the numerical standards and criteria of the Regulation to a Director¹ relating to Determinations for all sites. For Approvals in Principle, Certificates of Compliance, or Contaminated Soil Relocation Agreements, Approved Professionals may recommend

¹ In accordance with sections 15, 43, 47, and 49 of the Regulation, a Director may endorse a Contaminated Soil Relocation Agreement or issue a Determination of Contaminated Site, Approval in Principle, or Certificate of Compliance based on the recommendation of an Approved Professional. Alternatively, the Director may decline to process any application incorporating a recommendation by an Approved Professional. However, if the Director does that, he or she must provide written reasons to the applicant and the professional association of which the Approved Professional is a member. This is a decision of the Director and may be appealed.

that an application be processed in the manner established for low and moderate risk sites.

4.0 Applications under the Approved Professional process

Table 1 specifies the situations in which applications must be processed in the manner established for low and moderate risk sites under the Roster of Approved Professionals process.

Table 1. Eligibility of applications for review by Approved Professionals^{1, 2}

Application Type	Remediation Standards Used		
	Numerical Standards ³	Local Background Concentration ⁴	Risk-based Standards ^{5, 6, 7, 8}
Determination that a site is not contaminated	Eligible	Eligible	Not applicable
Determination that a site is contaminated	Eligible	Eligible	Not applicable
Approval in Principle ^{9, 10, 11}	Eligible ¹²	Eligible	Eligible ¹³
Certificate of Compliance ^{9,11}	Eligible	Eligible	Eligible ¹³
Contaminated Soil Relocation Agreement ¹⁴	Eligible	Eligible	Eligible ¹⁵

Notes

1. Applications for sites that are under active order under the *Act* are eligible for the Roster of Approved Professionals process at a Director's discretion.
2. Applications for sites relying on ministry Interim Guidance, "Site Vapour Assessment" and draft Director's Interim Criteria, "Air Concentration Criteria" are eligible for the Roster of Approved Professionals process.
3. Numerical standards include: generic numerical soil standards (Schedules 4 and 10), generic numerical water standards (Schedules 6 and 10), matrix numerical soil standards (Schedule 5), generic numerical sediment criteria (Schedule 9), Director's interim standards and criteria, and site-specific numerical standards.
4. Eligible if local background soil concentrations are adopted from regional background soil quality estimates in Table 1 of Protocol 4. Local background estimates by other means require ministry pre-approval.
5. Deterministic and screening level risk assessments that comply with the guidance requirements and data hierarchies of Technical Guidance on Contaminated Sites 7 "Supplemental Guidance for Risk Assessments," are eligible. Screening level risk assessments that comply with Protocol 13, "Screening Level Risk Assessment" are also eligible unless the site contains hazardous waste in which case ministry pre-approval of the risk assessment is required.
6. Ecological risk assessments that make use of the most stringent Ecological Benchmark (or TRV) from: US EPA, Eco-SSL, (<http://www.epa.gov/ecotox/ecossl/>), or Oak Ridge National Laboratory, Ecological Benchmarks, (http://risk.lsd.ornl.gov/cgi-bin/eco/ECO_select) are eligible.
7. Risk assessments that include the following are not eligible:
 - probabilistic analysis;
 - toxicity testing of materials (soil, water, sediment,), or organisms obtained at or from the site;

- modification of toxicity reference values;
 - food chain or other trophic transfer modelling;
 - application of wild land standards;
 - weight of evidence arguments; and
 - assessments of the offsite receiving environment.
8. Risk-based applications must be prepared and signed by risk-based standard professionals on the Roster of Approved Professionals with the exception of applications based solely on screening level risk assessments which may be prepared and signed by either by numerical standards professionals or risk-based standards professionals.
 9. Applications for a Determination, an Approval in Principle, a Certificate of Compliance, or a combination that covers the *entire extent* of contamination are eligible. Applications for an Approval in Principle or Certificate of Compliance for a parcel affected by contamination migrating from a source parcel are eligible for the Roster of Approved Professionals process. In these cases, if the entire extent of contamination is not covered by the Certificate of Compliance and/or Approval in Principle, then the Roster application must include the following written statements confirming that any measures necessary to prevent recontamination of the affected parcel have been, in the case of a Certificate of Compliance, or will be, in the case of an Approval in Principle, put in place:
 - by an Approved Professional, that the design of any works or implementation of other measures required in the opinion of the Approved Professional to prevent recontamination of the affected parcel from the source parcel will, if operated and maintained as specified by the Approved Professional, prevent recontamination of the affected parcel; and
 - by the current owner or operator of the source parcel, that any works or measures intended to prevent recontamination of the affected parcel will be implemented, operated, and maintained according to the Approved Professional's specifications and any requirements in a Certificate of Compliance or Approval in Principle issued for the source parcel.
 10. All necessary permits, authorizations, and approvals for conducting the remediation must be obtained from the appropriate regulatory agencies.
 11. When site monitoring objectives have been achieved or changes to monitoring requirements imposed by the ministry are desired, Approved Professionals may recommend that a Director amend an Approval in Principle or Certificate of Compliance.
 12. For any site being remediated to the numerical standards of the Contaminated Sites Regulation, the site must be able to meet applicable numerical standards or criteria within five years of issuance of an Approval in Principle. This provision applies to Approvals in Principle issued on or after April 15, 2004. For a site to be eligible under this provision, a schedule for remediation must have been provided to the Director's satisfaction pursuant to sections 47 (2) and 47 (5) of the Contaminated Sites Regulation.
 13. Risk assessments that include parcels affected with contamination that has migrated beyond a source parcel boundary are not eligible, unless the owner(s) of the parcel(s) affected by the migrated contamination agree in writing to the risk-based approach.
 14. All necessary permits, authorizations and approvals for conducting the soil relocation must be obtained from the appropriate regulatory agencies.
 15. Risk assessments that include soil relocation from one parcel to another parcel owned by a different owner(s) are not eligible, unless the owner(s) of the other parcel agrees to be a signatory to a soil relocation agreement authorizing the relocation.

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