

Site Risk Classification Update

On June 1, 2010, the Land Remediation Section introduced [Protocol 12, "Site Risk Classification, Reclassification and Reporting"](#) under the *Environmental Management Act*. For a detailed overview of the site risk classification process, please refer to the Land Remediation Section's [key topic section on Site Risk Classification](#).

Protocol 12 submission statistics

Between June 1, 2010 and June 1, 2012, 685 sites were classified under Protocol 12. Of these, 50 were high risk sites (7%), 615 were non-high risk sites (90%) and the remaining 20 were pending classification (3%).

For those sites pending classification the ministry required the site owners to either submit a schedule for completion of a site investigation in order to determine a site risk classification, or to indicate that the remediation of high risk site conditions under independent remediation would be completed within 90 days.

SRCR Submission Trigger	Number	Percentage of Total
Notification of Independent Remediation	359	53%
Notification of Migration	145	21%
Submission of investigation report required by director	29	4%
Contaminated Sites Service Application	144	21%
SRCR required by a director	8	1%
High risk conditions at a neighbouring parcel	0	0

The adjacent table shows the breakdown of Site Risk Classification Report (SRCR) submissions for each of the six triggers.

High risk sites

Of the 50 sites classified as high risk, 27 were classified based on exceedences of upper cap concentrations and complete exposure pathways, 10 were classified based on the presence of mobile nonaqueous phase liquids (NAPL), and 13 sites had both of these high risk site conditions.

Commercial and industrial uses associated with the high risk site conditions include petroleum operations (20 sites), dry cleaners (10 sites), shipyards (3 sites), suspected spills (3 sites), chemical manufacturing (3 sites), smelters/ metal foundries (3 sites), mining (2 sites), shooting ranges (2 sites), a sawmill (1 site), a wood preservation facility (1 site), an electrical substation (1 site) and a municipal landfill (1 site).

The ministry has undertaken varying degrees of involvement in the 50 sites classified as high risk. Most are now being investigated or remediated under the oversight of qualified or Approved Professionals.

Site risk reclassification

Section 6.0 of Protocol 12 outlines the submission requirements for sites that qualify for a site risk reclassification. Sites that are high risk can either be reclassified as non-high risk (where high risk conditions have been removed) or risk-managed high risk (where exposure

pathway controls are required to manage high risk conditions). To date, four high risk sites have been reclassified as non-high risk sites. As of June 1, 2012, there have been no sites classified or reclassified as risk-managed high risk.

Risk classification audit summary

The ministry audits 1 in 20 Protocol 12 submissions received. 34 site risk classification reports were audited between June 1, 2010 and June 1, 2012. As an outcome of these audits, 29 were closed and determined to be non-high risk after a ministry review of site conditions and 5 audit submissions remain open. For the latter cases, the ministry has determined that further investigation is required in order to confirm the site risk classification. Common reasons behind the ministry requiring further site investigation in order to confirm a risk classification have been:

- insufficient investigation of affected parcels to confirm NAPL mobility or proximity of contamination to exposure pathways; and
- insufficient characterization of source parcel conditions (e.g., inadequate vertical delineation of dense nonaqueous phase liquids [DNAPL])

Audits completed to date have resulted in no changes to a site's risk classification.

Common mistakes in site risk classification

- The most common mistake for high risk sites is that the initial submission to the ministry is incomplete or insufficient.
- Often, when reporting under the "initiation of independent remediation trigger", applicants do not provide a schedule and summary of remedial methods.

Complete reporting requirements can be found in [Tables 2 and 3 of Protocol 12](#).

The ministry has also observed several common mistakes with SRCR and the Exposure Pathway Questionnaire (EPQ) submissions.

Site Risk Classification Report mistakes

- A SRCR is not submitted as required when triggered under Protocol 12.
- If site investigation information is insufficient to determine site risk, in Part 3 of the form, dates are not provided for the completion of site investigations and submission of a revised SRCR. Schedules should include days and/or months (e.g., providing an investigation completion date of "2014" is not acceptable).
- The "Signatures" section (Part 6 of the form) is not complete – it requires two signatures, a printed name and date.

Exposure Pathway Questionnaire mistakes

- An EPQ is not submitted as required for a site with upper cap concentration exceedances (whether or not the site is classified as high risk).
- A separate EPQ is not submitted for each source and affected parcel with upper cap concentration exceedances.

Request for comments on Protocol 12 and supporting procedure

The ministry has recently released a number of draft documents for public review and comment. Included in these draft documents are the updated version of Protocol 12 and Procedure 16, "Procedures for Administering Site Risk Classification".

The ministry encourages interested parties to view the "[Comments Requests](#)" section on the Land Remediation Section's website to review and comment on these site risk classification documents by September 30, 2012.

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 on Protocol 12, contact the Environmental Management Branch at siteclassification@gov.bc.ca.