

BC OGRIS Project Profile

Project Name:	Low Probability Receptor Analysis
Project Number:	EI-2017-02
Proponent:	Millennium EMS Solutions Ltd.
Funding Envelope:	Environmental Impacts
Timeframe:	November 1, 2016 – April 30, 2017

Project objectives

The objectives of this project are as follows:

1. Assess, using defined methodologies, the probability of future occurrence of select low probability receptors;
2. Quantify the benefits versus environmental impacts and costs of undertaking remediation to protect these receptors.

Project description

This project assesses the feasibility of incorporating the consideration of Low Probability Receptors (LPR) into the process of site remediation/ reclamation and the management of liabilities. The objective of an LPR approach is to ensure that site remediation and reclamation endpoints are not driven by an unnecessary requirement to protect human and environmental receptors which are not present at a site or have a low probability of occurrence in the future. The benefits of such an approach, if applied on a regional broad scale, would include not only reduced environmental impacts associated with remedial activities but also an anticipated reduction in site remediation and reclamation costs, enabling a greater number of sites to progress to closure.

This project builds on a similar project underway in Alberta.

Project Approach

The project approach includes the following activities:

- A review of selected available files with a view to selecting representative sites for evaluation of the LPR approach; and
- Determination of low probability receptors, validation of LPR benefits and preparation of a cost estimate to bring the selected sites to regulatory closure under the following scenarios:

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- Application of current CoR process including remediation to meet either the numerical or risk-based standards of the CSR; and
- Application of modified approach that considers low probability receptors in determining remediation requirements.

Project deliverables

The deliverables from this project include the following:

1. Final report describing the quantification of benefits versus environmental impacts and costs of undertaking remediation to protect low probability future receptors.