In Canada, the remediation of contaminated federal land is likely to trigger an environmental assessment under the Canadian Environmental Assessment Act (CEAA). The environmental assessment identifies potential environmental effects of a project or physical activity, and develops feasible measures that would mitigate adverse environmental effects.

From a contaminated site risk management perspective, an environmental assessment is an opportunity to address the effects of the remediation technologies on human health. It is a strategic tool designed to identify potential impacts before they occur and therefore avoid or mitigate potential impacts by improving the risk management plan.

In general, contaminated site remediation technologies are used to minimize the human health and environmental risks associated with the land contaminated with hazardous chemicals. However, one must understand that there may be adverse health effects directly related to the use of remediation technologies. The overall long-term risks associated with leaving the contamination in the land are typically far greater than the risk associated with the remediation operation itself. Nevertheless, these health impacts need to be addressed when performing human health risk and impact assessments for contaminated site remediation projects.

Health Canada has developed a guidance document entitled “Human Health Impacts Related to Contaminated Sites Remediation Technologies” to assist assessors with identification and mitigation of health impacts related to site remediation. The guidance document includes a proposed approach for the compilation of relevant data in support of the determination of the significance of impacts associated with remediation. The document also includes a sample worksheet for data compilation.

This tool provides a means of weighing technology risks against site risks and the ability to balance risks that exist against those that could inadvertently be created through clean-up.