Environmental Services

HCL is a leading provider of surface and groundwater management services with specialized expertise in hydrogeology, geology, biology, environmental engineering, and soil and water chemistry. Our knowledgeable professional team has a track record stretching back more than 45 years.

HCL serves clients in a wide range of sectors, including:

- Energy and natural resources (oil and gas, mining)
- Service (engineering, environment, law)
- Municipal (drinking water, storm water, landfills)
- Private sector (commercial water, aquaculture, agriculture)
- Finance (real estate, financial institutions)

Assessing contaminated sites

HCL's environmental site assessments (ESAs) cover everything from site characterization to environmental monitoring, providing you with the specialized personnel and technical resources you need to strategically tackle environmental issues and meet your regulatory obligations.

Environmental Site Assessment (ESA)

Phase 1

General environmental assessment

- **Purpose:** Determine environmental liabilities arising from current and previous activities on a given property.
- **Process:** Establish the environmental status of both the soil and groundwater, identify any concerns, and recommend preliminary characterization (Phase 2) if necessary.

Phase 2

Preliminary characterization

- Purpose: Confirm or invalidate concerns identified in Phase 1.
- **Process:** Conduct preliminary site characterization through field sampling, laboratory analysis and possible field testing. Identify the type of contaminants and provide enough information to recommend, if necessary, an in-depth site characterization program (Phase 3).

Phase 3

Comprehensive characterization

- **Purpose:** Refine Phase 2 findings by way of a comprehensive site characterization.
- **Process:** Determine the level and extent of the contamination, potential displacement, and costs of remediation or mitigation.





Environmental Impact Assessment (EIA)

Environmental impact assessments (EIAs) are required when a proposed project creates uncertainty about the nature of its environmental impacts or has the potential to engender significant adverse environmental effects. The EIA process allows proponents, decision makers and regulators to examine the effects that a proposed project may have on the environment.

There are several steps involved:

- Define the study area in keeping with the extent of the potential impacts for a given project.
- Assess the impact scenarios to identify impact sources, pathways and outcomes.
- Identify ways to mitigate the impacts, temporary or permanent, to an acceptable regulatory level.

HCL will tailor your EIA to the level required for your project. Our specialized personnel and technical resources will ensure your comprehensive EIA is completed on time and on budget.

Environmental Monitoring Program

Industrial and municipal activities have impacts on the environment. Monitoring ensures that these impacts do not exceed regulatory requirements, notably with respect to water bodies and groundwater.

HCL provides technical and professional support for environmental impact monitoring programs at a wide variety of sites, including:

- Snow disposal sites
- Sanitary landfills
- High environmental risk sites
- Water storage works

Groundwater and Surface Water Solutions for a Changing Environment

HCLhydrogeological
consultants Itd.17740 - 118 Avenue NW, Edmonton, Alberta, CANADA T5S 2W3
780.483.7240 • 800.661.7972 • info@hcl.ca • hcl.ca