



Contaminated Sites Management

Millennium EMS Solutions Ltd. (MEMS) provides contaminated sites services through a complementary mix of in-house expertise and external alliance partnerships providing guidance respecting hydrogeology, soil science, risk assessment / risk management and environmental engineering. Our clients appreciate this approach to contaminant management through all facets of the process including:

- Project planning and establishment of objectives;
- Initial and detailed site assessments and characterization;
- Criteria review and development of site specific criteria, if appropriate;
- Remediation options planning including an assessment of risk management opportunities; and
- Implementation of the preferred remedial alternative or development of liabilities assessments, as appropriate.

Site Characterization

MEMS is experienced at all phases of site characterization and assessment.

Phase I - initial assessment of the potential for contamination

Phase II – detailed sampling of areas suspected of contamination; including:

- Non-intrusive sampling (EM surveys, ERT, soil vapour surveys);
- Groundwater sampling including high quality low flow sampling; and
- Soil sampling for volatile (EPA 5035), semi-volatile and non-volatile parameters.

Phase III – development of a remediation plan

Remediation

MEMS approach to remediation is to ensure that we deliver the value added evaluations that can aid in significantly reducing remediation liabilities, including:

- Thorough review of options available under increasing complex criteria selection process;
- Identification of the viability of establishing site specific criteria or modifying generic criteria;
- Evaluating the feasibility of risk management as an alternative;
- Evaluating the feasibility of in-situ or on-site treatment as an alternative; and
- Evaluating Natural Attenuation as a long-term option for site remediation.

Our goal in site remediation is to ensure that we work with our clients to attain the most cost effective solution, providing the required level of environmental protection, in a timely and service oriented manner. Our success has been demonstrated through:

- Establishment of government approved site specific criteria that have reduced remediation liabilities by two orders of magnitude and not resulted in any future land use restrictions for the site;
- Initiation of risk-based remediation and reclamation process that will maximize the future land value of our clients property; and
- Use of combined in-situ and on-site treatment systems to significantly reduce remediation project costs.