

Soil and Groundwater Remediation



For many contaminant releases, remediation is required to prevent or mitigate the impact to natural resources, ecological habitats and human health, and/or restore the resource or habitat. At some point during remedial investigation, sufficient data may exist to determine that an interim remedy is required, and when characterization is complete, a final remedy may be developed.

After various remedial options have been considered, a remedial approach is selected. The approach is detailed in a Remedial Action Plan (RAP) and a preliminary cost estimate to implement the remedy is usually prepared. Once the remedial approach proposed in the RAP has been approved by the regulators, and in some cases been subject to public review and comment, the remediation system needs to be designed. This is often completed in three stages: preliminary, intermediate, and final design.

At various design stages, application for permits to implement the remedy can proceed. Once the designs are completed and permits secured, remediation equipment is ordered, and construction/installation proceeds. Depending on the type and scale of the remediation program, a variety of contractors may be required to work alongside the design engineer and equipment vendors to install the full remediation system.

After construction, the system is checked for safe operation, trouble-shooting of possible issues performed, followed by an initial start-up period of operation. During full scale operation, the system is monitored for performance and general maintenance activities conducted. Periodic operational reports are prepared to document remediation progress and operational performance.

Aquilologic staff has extensive experience preparing RAPs, engineering designs, permit applications, contractor tender documents, and installation and performance reports for soil and groundwater remediation systems. We have also implemented complete remedial programs, including installation and operation of remedial systems for soil and groundwater contamination.