

In-Situ Remediation

Kleinfelder has a team of in-situ remediation experts with a proven track record in the area of soil and groundwater site closure. The team adopt a Single Point of Accountability (SPA) model to effectively close sites and offer our clients a proven cost-effective and streamlined approach to achieve their goals.

PROJECTS:

- Conducted over 90 Underground Storage Tank (UST) removals in the Pacific Islands and Australia. Through the program Kleinfelder performed bioremediation, operation of both fixed and mobile water treatment, MPE and SVE systems. Various locations (Confidential Client)
- Completed several soil remediation programs, including the removal of asbestos, hydrocarbon and PFAS affected materials. The programs included liaising with relevant regulatory authorities, preparation of safety and technical based documentation, engaging with technical experts, and stringent waste tracking. Adelaide, SA (Confidential Client)
- Prepared Remediation Option Assessments (ROA) for groundwater at various areas of a former refinery. This included the installation of permeable reactive barriers, the installation of sumps for a bulk groundwater pump and treat system, slurry walls, and PlumeStop™ within a deeper regional aquifer. Adelaide, SA (Confidential Client)
- Prepared Remediation Option Assessments (ROA) at three active services station, prior to completing groundwater remediation design adopting ISCO injection technologies. The successful implementation, facilitated the completion of statutory audits and regulatory closure of all three sites. Western Australia (Confidential Client)



PROFILE

Contaminated soil and groundwater can represent a risk of harm to people and the environment. In-situ remediation is used for the remediation of harmful contaminants without the need for bulk excavation, resultant material storage, external treatment and off-site disposal. In-situ remediation often results in faster treatment and lower total life cycle costs.

Kleinfelder have significant experience in remedial design, pilot and bench test programs, permitting, installation and operation of various in-situ remediation systems. Our expertise is all in-house with the exception of global experts that allow us exclusive access to patented and proprietary technologies.

OUR SERVICES

In-situ Remediation services include:

- Groundwater Containment through recovery and treatment
- Air Sparging (AS) and Soil Vapour Extraction (SVE)
- Multi-phase extraction (MPE) systems
- In-Situ Chemical Oxidation (ISCO) and Solvent-enhanced ISCO
- Co-solvent flushing for non-aqueous phase liquid (NAPL)
- Bioremediation
- Monitored natural attenuation
- Emerging contaminants (PFAS and 1,4-Dioxane)