

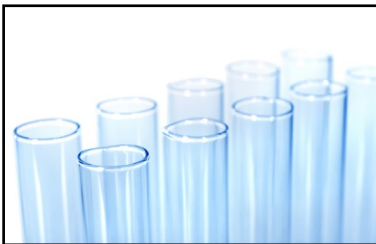
OVERVIEW:

Our approach to soil bioremediation is to utilise microorganisms naturally present in the environment (indigenous) to break down contaminants into harmless by-products. The technique is both environmentally sustainable technique and can also be very cost effective. The key to success is a thorough understanding of technique and site specific limitations to permit optimisation and predict timescales.

ADVANTAGES:

- Significant cost advantage over other techniques
- Available as an on or off site solution.
- Applicable to a wide range of common contaminants
- Targets the most mobile and therefore problematic contaminants
- Rates highly in terms of sustainability

UNDERSTANDING THE SCIENCE:



ERS' multidisciplinary team of chemists, microbiologists and geologists analyse the soil to determine initially its suitability for bioremediation and subsequently determine the additives required to achieve optimal biodegradation performance.

To determine suitability and for optimisation, ERS undertake laboratory assays using an automated respirometer as part of its site specific treatability testing. ERS' work on soil respiration in hydrocarbon contaminated soils is cutting edge both in industry and research terms. The versatility of the system enables bespoke assays to provide information on nutrient limitation, contaminant toxicity as well as biodegradation rates in soils.

ENGINEERING APPROACHES:



Bioremediation is most often used as the most cost effective treatment of hydrocarbon spills. ERS routinely use the following soil bioremediation engineering approaches:

- Windrows
- Biopiles
- Land farming
- Bioventing

The ERS team work with clients to identify the most appropriate for your site. Where on-site treatment is not appropriate, ERS provide off site treatment at one of ERS' Soil Treatment Centres.