UKSpillContractors ACCREDITATION SCHEME

soilutions

Bioremediation of Hydrocarbon Contaminated Soils – Dundee

The Client: Dundee City Council

The Challenge: Approximately 2,800 m^3 of hydrocarbon impacted soil was stockpiled at the rear of Marchbanks Recycling Depot in Dundee. Soil analysis indicated that soils were contaminated with heavy end hydrocarbons.

The Solution: Bioremediation was identified as the most appropriate form of remediation in order to achieve compliance for safe disposal.

Soilutions Ltd acted as the principle contractor for this bioremediation project. Contaminated materials were excavated from the stockpile and screened for large and non-biodegradable materials using an Allu bucket attached to a twenty tonne 360 excavator prior to forming the windrows. The oversized screened material was sorted and placed into appropriate skips i.e. timber, concrete for recycling.

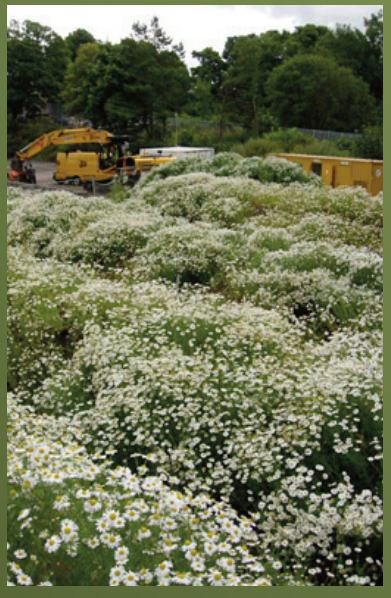
The excavated contaminated material was then placed into three windrows which were lined underneath with polythene sheeting. This polythene sheeting was put in place to prevent cross-contamination of the ground beneath the windrows. Windrows were then covered to prevent rain penetration.

During the construction of the windrows samples were collected to assess the nutrient status, pH, and indigenous microbial and degrader populations of the soil in order to identify any constraints to bioremediation. Regular monitoring of the windrows was carried out for the duration of the works. The windrows were 'turned' using an Allu bucket at intervals determined from data taken during monitoring visits, this allowed the soils to be aerated and chemically amended to enhance the bioremediation process.

Duration: 15 months

INITIAL EXCAVATION AND DUMPING OF STOCKPILED SOILS

TURNING OF CONTAMINATED SOILS



WINDROWS FOLLOWING REMEDIATION

ISOQAR REGISTERED UKAS MANAGEMENT SYSTEMS 0026
Certificate Number 4733
ISO 9001 / ISO 14001 / OHSAS 18001

Tel: 0131 538 8456
Web: www.soilutions.co.uk
Twitter: @soilutions
Blog: blog.soilutions.co.uk
Fax: 0131 467 0099
Email: info@soilutions.co.uk