

Enhanced LNAPL Recovery – Kent, UK

PetroCleanze key to removal of adsorbed petroleum hydrocarbons



LNAPL recovery pre and post treatment

Background

An unknown quantity of red diesel had leaked from the storage tank of a public facility's back-up generator. The contamination impacted the groundwater and 'smear zone' soils under the yard of the site. It was deemed necessary to remove all of the free product from the site and avoid rebounding concentrations due to desorption from the residual smear zone.

Treatment

Regenesi Remediation Services (RRS) used a vacuum tanker to remove the impacted water and LNAPL. PetroCleanze was then injected into wells within the impacted area. The PetroCleanze acted to desorb the adsorbed contamination on the site into the groundwater where it could be abstracted by a second vacuum tanker mobilisation.

Dramatic increase in LNAPL recovery within days

This treatment method avoided the need for excavation and the disturbance and on-going cost of an active pump and treatment system. Considerable adsorbed mass was encountered onsite, with PetroCleanze increasing the LNAPL available for removal at one well from a few mm to almost 1m. In this way PetroCleanze enhanced the efficacy and certainty of the contaminant removal and site remediation.

Remediation Details

Site Type:

Public Service Building

Project Driver:

Voluntary Cleanup

Remediation Approach:

In-situ Active Desorption followed by groundwater vacuum extraction

Technologies:

PetroCleanze®

Geology

X	Putty Chalk
	Gravel
	Sand
	Silt
X	Clay

Medium

X	Groundwater
X	Saturated Soil
X	Vadose Zone

COC

X	Petro HCs
X	Petro LNAPL
	Chlorinated VOCs
	Metals

COC Concentration Levels:

LNAPL

Treatment Depth:

4 m

Treatment Area:

55 m²

Remediation Cost:

£10,000