

Former Petrol Fueling Station Undergoing Redevelopment, UK

In-Situ Enhanced Desorption of Petroleum Hydrocarbons



Remediation Details

Site Type:

Former Petrol Fueling Station

Project Driver:

Redevelopment

Remediation Approach:

In-Situ Enhanced Desorption

Technologies:

PetroCleanze®

Summary

Historical leakages at a former industrial site undergoing redevelopment resulted in hydrocarbon contamination impacting the soil and groundwater. The contamination was located under the footprint of the planned building, requiring remediation works to be completed prior to construction taking place.

Treatment

Regenesi's PetroCleanze was applied, rapidly desorbing the contamination bound to the soils in the heavily impacted 'smear zone' at the top of the groundwater, which was then physically extracted.

Successful In-Situ Remedial Solution

Without the use of PetroCleanze, the absorbed hydrocarbons would have been difficult to remove using only a physical abstraction system (pump and treat) and would have provided an ongoing secondary source of contamination into the groundwater (often seen on many sites as 'rebounding' concentrations in the source area once the pumps were switched off).

Geology

	Bedrock
	Gravel
	Sand
X	Silt
	Clay

Medium

X	Groundwater
	Saturated Soil
	Vadose Zone

COC

X	Petro HCs
X	Petro LNAPL
	Chlorinated VOCs
	Metals

COC Concentration Levels:

High concentrations of TPH including LNAPL

Injection Grid:

4m x 4m

Injection Depth:

4m BGL

Injection Points:

48 Injection Points