

Solubilisation and Removal of Coal Tar Residues from Soil at the Site of a Former Old Gasworks

Remediation of former gasworks sites in the UK and Europe has become more challenging with the introduction of tighter controls on site emissions and discharges, and restrictions on the transfer of material to landfill. Many sites have areas of considerable ground pollution, particularly in around where pits, old tanks or gas holders were used to store coal tar, which was a by-product of gas production. Coal tar is toxic, does not readily biodegrade and can no longer be disposed to landfill in the EU by law.

A trial was carried out on heavy coal tar contaminated soil using two of Global Advantech's specialist chemical products to demonstrate an economic method of cleaning the soil.

First, a 2% by weight of Global Advantech's Ultra-Green Oil-Phase Soil and Sludge Washing Agent DC210 was mixed into a quantity of soil with very heavy coal tar contamination to liquefy it. Second, this was added into a mixing vessel containing clean water with Global Advantech's Ultra-Green Aqueous-Phase Soil and Sludge Washing Agent DC210 at a concentration of 1% and agitated for 60 seconds. The coal tar was released from the solids and floated to surface, from where it was skimmed off. The solids were removed and thoroughly rinsed.

Analysis showed that the washing operation had reduced coal tar hydrocarbon content of the soil from an initial value of 30% to 1%.

Before



After



Global Advantech develops and supplies innovative products and technologies for environmental clean-up and pollution control:

- Recovery of hydrocarbons from oil and gas production wastes and sludges.
- Treatment of wastewater and effluent.
- Remediation and decontamination of hydrocarbon contaminated soil, sand and concrete.



Global Advantech Limited

Exceptional clean technologies for a sustainable future.....

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