Remediation of PAHs for NAPLs Contaminated Sediments Using Air Sparging

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In situ air sparging (IAS) is a groundwater remediation technology for contamination below the water Polycyclic aromatic hydrocarbons (PAHs), which involves the injection of air, under pressure, into a well installed in the saturated zone. The outer layer sample of M area had Sand (S) characteristics (average particle size, 1.789 Φ), that of H area had sandy Silt (sZ, 5.503 Φ), and that of S area did Silt (Z, 5.835 Φ). And, the complex layers for treatment before experiment in the B area showed Clay (C, 8.528 Φ). For the samples to fresh air was continuously injected at 5 L/min for 48 h, and extracted analyze while reducing pressure of two vacuum pumps. The biggest difference took place in PAHs reduction rates, which were 18.8% (M area), 34.4% (H area), 9.9% (S area), and 1.8% (B area), that of H sample being the highest. In the relationship between particle sizes and removal rates among samples, correlation coefficients were 0.76.