FILTRA-SYSTEMS PROJECT CASE STUDY Superfund Site—Creosote Removal

INDUSTRIAL OIL FILTRATION | CREOSOTE REMOVAL | CREOSOTE TREATMENT

US EPA Groundwater Remediation Of Creosote Oil

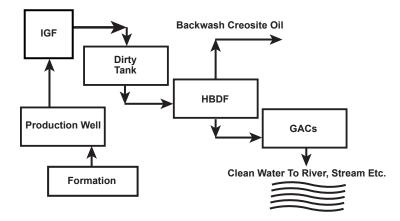
PRODUCT USED:

Deep Bed Filter and Walnut Shell Media Filter



END USER:	US EPA, Army Corps of Engineers Superfund
LOCATION:	Bainbridge Island, WA
UNITS:	(1) FDB-7P Deep Bed Filter (HDBF)
FLOW RATE:	70 gpm. (0.2 Million Gallons of Water per day)
PROCESS:	Removal of Creosote oil from Groundwater

CREOSOTE REMOVAL-PROCESS FLOW DIAGRAM



MORE INFO

The EPA superfund site program had undertaken the project of cleaning up creosote oil from the ground surrounding a former paper mill.

The EPA pilot plant was experiencing problems with respect to effectively backwashing the existing pilot multimedia filters, as the multimedia filters were experiencing a high amount of downtime.

The Deep Bed Filter was installed and operated for 2 months, backwashing daily in lieu of the multimedia filters, downstream of a dissolved air flotation (DAF) unit, and upstream of granular activated carbon (GAC) beds.

The pilot test showed inlet levels between 3.5 and 10 ppm of free oil and suspended solids and the filter effluent contained trace amounts (less than 1 ppm) free oil and TSS.

After the 2-month creosote treatment trial, it was determined that (1) 3' diameter (7ft2) Deep Bed Filter can continually process the same water that (2) 5' diameter (19.6 ft2 each or 39.2ft2 total area) multimedia filters had been processing.

Throughout the test, the HBDF effluent did not cause the differential pressure across the GACs to rise at any level, better than expected.

The GACs are used to remove the dissolved polychlorinated constituent in the water, which is continually monitored, to be certain that water is always below the plants regulated discharge limit for said constituent.

Once the creosote removal is complete and the groundwater is re-mediated, the land will be converted into a public park.

Filtra-Systems helps you find the easiest, most efficient way to remove creosote oils and more? Call us today for expert filtration help, 248-427-9090.

