

Excavation Amendment BTEX and PAH Remediation in Florida

Contaminants	Application Method	Soil Type	Groundwater Velocity
BTEX, PAH	Excavation Amendment	Sand	0.01 ft/day

A site in Florida reached non detect (ND) for BTEX and PAHs 21 days after an ORC Tank Excavation Treatment. At this site excessively impacted soil was excavated from the vicinity of the pulled UST and transported off site for thermal treatment. Prior to backfilling the excavation, 600 pounds of ORC were added to the excavation and thoroughly mixed into the excavation soil and groundwater with a trackhoe bucket.

In the short treatment time, BTEX concentrations dropped from 116 ppb to ND and PAHs were reduced from 516 ppb to ND. Both the BTEX and PAH concentrations have stabilized at ND. Figure 1 illustrates the unassisted natural attenuation without ORC and the results of the ORC addition. Based on this rate of natural attenuation, BTEX would have taken 14.3 years to reach ND. The cost of ORC for this site was \$5,400.

ORC can be used to remediate any aerobically degradable compound in impacted soil as illustrated by this example.

Figure 1

