

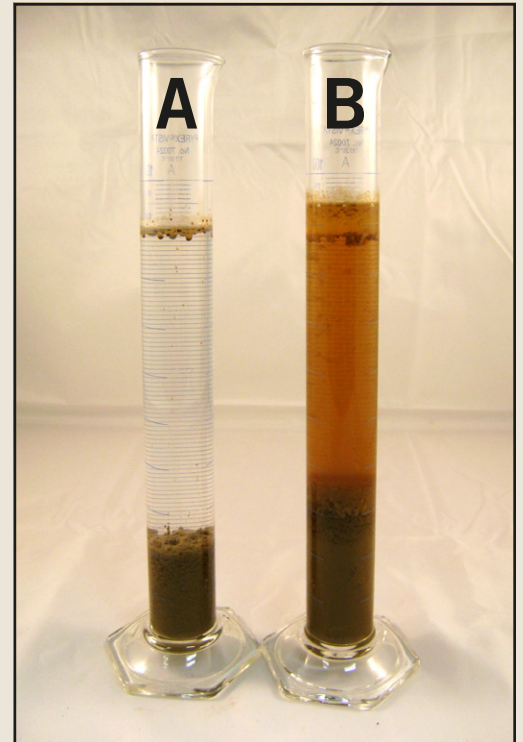
**DESCRIPTION**

RegenOx® PetroCleanze™ is a customized formulation of the widely-used RegenOx® *in situ* chemical oxidation technology. The primary function of RegenOx PetroCleanze is to increase the desorption rates of hydrocarbons bound in saturated soil and make them available for more efficient and rapid treatment using enhanced recovery technologies.

**FEATURES & BENEFITS**

RegenOx PetroCleanze offers the following features and benefits:

- Unique product chemistry proven highly effective on petroleum hydrocarbon contamination
- Detergent like technology moves bound hydrocarbons from the soil into the dissolved phase for better and more efficient recovery via physical/mechanical removal
- Designed to be used in conjunction with physical and/or mechanical recovery systems
- Powerful oxidation reactions equal to that of standard RegenOx oxidize more readily available hydrocarbons
- A two part integrated system comprised of standard RegenOx Part A and PetroCleanze, where the PetroCleanze component stays in-place providing an activation site for multiple applications if and when required.
- Engineered chemistry does not add surfactants but creates them aiding in enhanced hydrocarbon removal
- Avoids problematic carbon loading associated with the use of standard surfactant based technologies
- As part of an integrated site remediation approach RegenOx PetroCleanze reduces mass flux to facilitate risk-based and MNA site closures



**FIGURE 1:** Treatment with RegenOx PetroCleanze

- A. An untreated soil and hydrocarbon mixture in water
- B. RegenOx PetroCleanze treated soil and hydrocarbon mixture with bound hydrocarbon clearly being released into the dissolved phase for removal or treatment

**FORM & FUNCTION**

The RegenOx PetroCleanze formula is optimized to desorb bound hydrocarbon mass and drive it from the soil matrix into the aqueous phase (Figure 1). Once contaminants are moved into the dissolved phase, other methods such as chemical oxidation using standard RegenOx or enhanced recovery techniques such as dual-phase extraction, vacuum enhanced extraction, pump and treat systems and even enhanced bioremediation using Oxygen Release Compound (ORC®) or Oxygen Release Compound ADVANCED (ORC Advanced®) can be used. In some cases where significant mass removal is required, multiple applications of RegenOx PetroCleanze may be necessary along with multiple extraction events.