

Combined Remedy

Technology

Combined Chemical and Biological Oxidation

Redox Tech recently began combining two safe remedial chemistries into one. The powerful, safe, nonhazardous mixture is ideal for petroleum contaminated sites. DualOxTM provides both rapid and long-term oxidation through chemical and biological processes with a combination of stabilized hydrogen peroxide (SHP) and our widely applied Sulfate BioChemTM (SBC). The mixture provides chemical oxidation through reaction with hydrogen peroxide and naturally occurring minerals. Thereafter, biological oxidation occurs as sulfate yields oxygen molecules through sulfate reduction. The combined chemistry provides rapid and long-term treatment that is safe and non-hazardous.

2-Part Product Formula

Stabilized Hydrogen Peroxide: First used by Redox Tech at a Naval Air Base in Florida in 2007, up to 8-weight percent hydrogen peroxide is combined with a food-grade stabilizing agent; the resulting mixture is non-hazardous and will not produce excessive heat or off-gassing yet is still a powerful oxidant for petroleum degradation.

Sulfate: Sulfate reducing bacteria are ubiquitous in the environment and they naturally promote degradation of petroleum compounds. The sulfate reducing bacteria use the oxygen from sulfate to convert petroleum compounds to carbon dioxide and water.

Advantages

- ✓ Combined degradation pathway; Oxidation and Bioremediation
- ✓ Rapid Results; Degrades Contaminants on Contact
- ✓ Long-term Treatment
- ✓ Safe and Easy to Handle; can be Self-Implemented
- ✓ Customizable: Percent of SHP and SBC can be tailored for site concentrations and conditions





Product Results