CHITOREM® CHITIN COMPLEX

PROVIDING BOTH A FAST AND SLOW RELEASE CARBON SOURCE ALONG WITH AN INHERENT BUFFERING AGENT

CHITOREM® is a 100% natural product that is comprised of chitin (a natural polysaccharide), proteinaceous material, and calcium carbonate. This product is used in bioremediation as a carbon source and subsequent electron donor for the microbial degradation of chlorinated solvents, heavy metals, perchlorates, and acid mine drainage in contaminated aquifers.

BENEFITS OF CHITOREM®

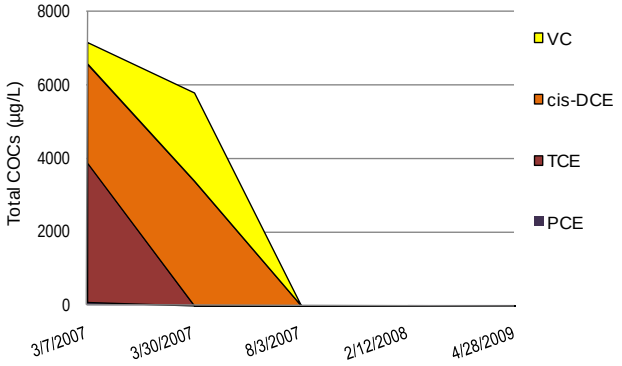
- Provides both fast (more soluble fraction) and slow releasing carbon source.
- Provides both carbon and nutrients.
- Niche application for acid mine drainage and low alkalinity halogenated solvent remediation; contains an inherent buffering agent to maintain moderate pH.

DECHLORINATION IN OPEN EXCAVATIONS

Former Dry Cleaning Site: Jacksonville, FL

Following excavation of the source area, CHITOREM® was applied to the excavated area. Dechlorination of residual PCE and its daughter products to below MCLs was seen in less than two years.

(Data courtesy of Steve Buser, Golder Associates, Florida Remediation Conference 2009)

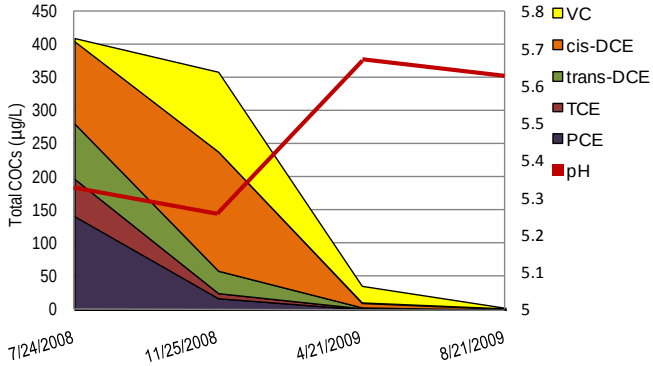


DECHLORINATION IN LOW pH AQUIFERS

Electroplating Facility: Ormond Beach, FL

CHITOREM® has been used successfully at sites with low pH aquifers. At a site with pH in the range from 4-5.5, dechlorination of residual PCE and its daughter products to below MCLs was seen in less than two years.

(Data courtesy of Steve Buser, Golder Associates, Florida Remediation Conference 2009)



ACID MINE DRAINAGE APPLICATIONS

National Tunnel Superfund Site: Black Hawk, CO

CHITOREM® has been used successfully as a carbon substrate in biochemical reactors:

- Shown to remove metals including Fe, Zn, Cu, and Mn to below treatment objective levels.
- Increased pH from 4.55 to 6.98.
- Increased alkalinity from 0 to 2,000 mg/L (as $CaCO_3$).

JRW BIOREMEDIATION LLC

www.jrwbioremediation.com
(913)438-5544
info@jrwbiorem.com