



www.cleanwatersolutionsinc.com

Our Product Line:

Our products are designed to use microbes to implement the process of bioremediation. This is a natural and environmentally sound solution to hydrocarbon pollution found on both land and water: in bilges of boats, marinas, lakes, and rivers (as well as storm water runoff in catch basins.) Our products are made in house and can be customized and tailored to any specification.

About our Microbes:

Microbes are nature's way of recycling. Ours, the *Archaea* family, are the most powerful known to mankind, a combination of more than 100 strains found in volcanoes, hot springs, and ocean vents all over the world. They can adapt to any circumstances. The Environmental Protection Agency (EPA) lists them on the National Contingency Plan.

Our Process:

The microbes, invisible to the naked eye, are supplied in powder form using a bentonite clay carrier. A unique process is used to form them into tablets without using binders or additives so that concentration levels will not be compromised. The tablets are then inserted into an open cell foam carrier that floats and absorbs 32 times its weight in oil. The microbes will lie dormant for upwards to five years until activated by oxygen, nutrients, motion, and the presence of a hydrocarbon. Once activated the microbes will multiply, doubling in number every 20 minutes. The microbes digest the hydrocarbons, such as MTBE, oil, gas, diesel, nitrates, kerosene, marine deposits, and also animal feces, fish blood, and even odors until they are gone. The microbes will turn the hydrocarbons into water-soluble fatty acids, which are food for fish and ocean vegetation. This process is known as *bioremediation*.

Where our natural recycling products work:

- Fueling stations in marinas
- Bilges of fishing, recreational, and tugboats
- For eliminating odors and fish entrails
- Containment booms, which not only contain but bioremediate -- cutting-edge technology
- Streams, lagoons, estuaries where animal feces are a problem
- Shellfish beds where breeding on water's surface is important
- In bodies of water where kerosene is surfacing and has to be skimmed off the surface and disposed of
- For bioremediating leaking oil on obsolete military vessels
- Cleaning and bioremediating onboard vessels at sea so the discharge water will be clean
- Septic systems
- Commercial grease traps in restaurants
- For catch basins to clean the drain and sump system to purify the water passing through the outfall pipe
- **For containing *E. coli***

Dock Shops

www.dockshops.net