

Does Your Oil Spill Response Plan Include Bioremediation?

Whether you're a maritime industry executive, an emergency response professional or offshore vessel operator, you need to have all the latest cost-effective and time-saving tools in your arsenal when it comes to maximizing your oil spill response capabilities and results.

The recent oil spill of the container ship *Rena* in New Zealand is yet another unfortunate incident that has wreaked havoc the environment. Of course, oil spills aren't just a shipping problem.

The global oil and gas industry has been tarnished by the huge Deepwater Horizon gushing well blowout that devastated much of the Gulf of Mexico in the Spring of 2010.

This unprecedented accident stretched spill response teams to the limit and dramatically highlighted the need for best practices when it comes to saving as much of the environment as possible in the event of a catastrophe.

No matter the size of an oil spill, pulling out all your big guns is necessary for getting the job done as quickly, efficiently and safely as possible.

Traditional oil response equipment includes the use of:

- ♦ skimmers
- ♦ a variety of booms
- ♦ oil transfer pumps
- dispersant spray equipment (for ground or air)
- ♦ oil storage equipment
- response vessels and aircraft

Plus a whole lot of additional equipment, people, and labor. These are necessary and critical components to the clean up process, and naturally, they all cost time and money.





The process of bio-remediation - using naturally-occurring oil-eating microbes, has been studied since the 1940s but it wasn't widely used until the Exxon Valdez oil spill disaster in 1989, when it was applied to 378 of the 587 shoreline segments over the course of several months. Today, the Environmental Protection Agency (EPA) Office of Research, and the U.S. Geological Survey (USGC) continue studying this method.

In fact, the USGS, after carrying out several studies in the 1980s, concluded that "naturally occurring microorganisms play a central role in the transport and degradation of not only petroleum products, but also of nearly every toxic compound that enters the environment," and the EPA fully endorses the use of bioremediation in oil response measures (see their website here: www.epa.gov). Bioremediation has also been used effectively in the Deepwater Horizon well blowout clean up, now the largest oil spill in history.

To help finish an oil spill cleanup task, there are products such as Bio-W. This product can be used with a boomable spill, will not leach, and may be disposed of in 10 days time. Additionally, there are new products on the way that can be used in shallow water and marshlands to more thoroughly and adequately clean and remediate the natural habitat. These are much more thorough, time and cost-effective than multiple repeat trips by work personnel with traditional "diapers"/pads, etc.

Is using bioremediation a silver bullet? No. That's mainly due to the fact that it is a slower process than primary response tactics, but its effectiveness cannot be understated. When you take into consideration that specialized bioremediation products are ready and safe to use, require no personnel training, and cost up to 70% less than other technologies, it makes sense to add this proven technique to your oil spill response arsenal.

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