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PRESS RELEASE



What if the Next Oil Spill Could Be Dinner for Microorganisms?

Pollution is an ongoing reality. From time to time, dramatic oil spills make international news. Smaller spills or leaks plague everyday industrial activity. In light of these persistent hazards to the ecosystem, what can be done to clean up the environment and avoid serious fines and liabilities that threaten industries? While some companies rely on chemical extraction, incineration, or the use of



chemical dispersants for contaminant cleanup, Bionetix® International takes a superior approach by harnessing the power of nature to turn oil spills into dinner for microorganisms.

The Power of Bio-Dispersants

Just as humans prefer the convenience of readymade food, microbes that consume hydrocarbons must first be given easy access to contaminants before they can digest them. This is done by the use

of surfactants and dispersants, which desorb contaminants from the soil or break oil slicks and spills into smaller droplets that are more accessible. Unfortunately, chemical dispersants have seen wide



but controversial use tied to health concerns. However, the same dispersing mechanism is available through BIOSURF™, which relies on a naturally derived biosurfactant from plant extracts as its main active ingredient. BIOSURF™ has high dispersing power and also acts as a strong biostimulant to promote biodegradation.

A Feast for Microorganisms

Microorganisms that naturally occur in the environment have been known to rise to the occasion and multiply when there is an oil spill. These microorganisms release enzymes that help them digest surrounding contaminants and use them as a food source. Humans can potentially boost and speed this process by bioaugmentation—adding specially selected microorganisms targeted to digest hydrocarbons. For example, Bionetix® BCP35S™ contains organisms that will degrade a wide range of petroleum hydrocarbons such as gasoline, diesel, crude oil, benzene, toluene, ethyl benzene, and xylene in soil. Bioaugmentation with BCP35S™ can deep clean soils, reduce pollution liability, and lower disposal costs. BCP35M™ is similar but suited to marine or wastewater applications.

Positive Field Trials

Two recent field trials showed a significant reduction in soil hydrocarbon contaminants when Bionetix® biologicals were applied. In Bulgaria, an ongoing trial (temporarily interrupted by COVID and later freezing winter temperatures) experienced a swift drop in petroleum hydrocarbons after the application of BIOSURF™ and BCP35S™.



Hydrocarbons decreased from

approximately 39,574 mg.kg⁻¹ to approximately 10,919 mg.kg⁻¹ in the first nine weeks (a 72% reduction, approx.) and continued to drop after a temporary spike (possibly due to false positives

or longer chain hydrocarbons breaking down into shorter chains that could actually be measured). Results were similar in a Canadian trial, where petroleum hydrocarbons dropped more than 70% in only 20 days after treatment with BCP35S™ and BIOSURF™.

In-Situ/Ex-Situ Treatment and Spill Kits



One of the great things about Bionetix® solutions is their flexibility for use onsite or offsite, at a gas station, in a landfill, in marine environments, or by the side of the road. This reduces the hassle for oil companies and engineers looking for effective options to clean up soil. Other companies just need good options to comply with spill plan

regulations and avoid serious fines. Bionetix® offers superior technology for all of these situations by harnessing the power of nature to clean up the environment, simply by helping more microorganisms to the “table” to dine on hydrocarbons.

To learn more about the potential of bioremediation, view our “Oil & Gas Cleanup Solutions” and contact us for further assistance here:

<http://www.bionetix-international.com/products/specialty-industries/>

**It is always important to ensure that use and disposal of all materials is in accordance with local guidelines.*

PRODUCT DESCRIPTION	APPLICATION INSTRUCTIONS	KIT INCLUDES & APPLICATIONS FOR SPILLS
<p>SPILL KIT 35S contains a patented blend of natural, non-toxic, and biodegradable microorganisms that can quickly degrade a wide range of hydrocarbon spills.</p> <ul style="list-style-type: none"> • Liquid • Solid • Oils (Gasoline, Kerosene, Engine Oil, etc.) <p>Bioremediation with SPILL KIT 35S can be used on any spill that has not yet been cleaned up. It is a natural and safe way to clean up hydrocarbon spills.</p>	<p>SPILL KIT 35S is a natural and safe way to clean up hydrocarbon spills. It is a natural and safe way to clean up hydrocarbon spills.</p> <p>SPILL KIT 35S is a natural and safe way to clean up hydrocarbon spills. It is a natural and safe way to clean up hydrocarbon spills.</p>	<p>SPILL KIT 35S is a natural and safe way to clean up hydrocarbon spills. It is a natural and safe way to clean up hydrocarbon spills.</p> <p>SPILL KIT 35S is a natural and safe way to clean up hydrocarbon spills. It is a natural and safe way to clean up hydrocarbon spills.</p>



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Bionetix® International is a Canadian-based company that produces biological products used in thousands of field applications worldwide. We promote a healthy environment by providing superior, environmentally friendly alternatives to current treatment methods. Our customers are able to clean and remediate contaminated systems or boost agricultural productivity in a cost-effective, natural, and non-intrusive way through the application of our biological products. Headquartered in Quebec, Canada; Bionetix International is a subsidiary of Cortec® Corporation. ISO 9001:2015 Certified.

Cortec® Corporation is the global leader in innovative, environmentally responsible VpCI® and MCI® corrosion control technologies for Packaging, Metalworking, Construction, Electronics, Water Treatment, Oil & Gas, and other industries. Our relentless dedication to sustainability, quality, service, and support is unmatched in the industry. Headquartered in St. Paul, Minnesota, Cortec® manufactures over 400 products distributed worldwide. ISO 9001, ISO 14001:2004, & ISO 17025 Certified. Cortec Website: <http://www.cortecvci.com> Phone: 1-800-426-7832 FAX: (651) 429-1122