



Fibertect Absorbent Could Aid Gulf Coast Oil Disaster Clean-Up

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Newswise — Fibertect, a three-layer flexible, inert, nonwoven, non-particulate decontamination system that has been proven to be successful in absorbing and adsorbing chemical warfare agents, may now prove useful in recovery efforts in the British Petroleum (BP) Deepwater Horizon disaster and other oil spills of similar size and severity.

Fibertect was developed by Seshadri Ramkumar, an associate professor at The Institute of Environmental and Human Health (TIEHH) at Texas Tech University. It is manufactured by Hobbs Bonded Fibers for First Line Technology.

The three layers of material consist of a top and bottom fabric with a center layer of fibrous activated carbon that is needle punched into a composite fabric.

The top and bottom layers provide structural coherence, improving mechanical strength and abrasion resistance while the center layer holds volatile compounds, like oil.

Ramkumar said according to documented research published by many scientists, raw cotton can absorb up to 20 times its weight.

But when chemically modified the material can hold more than two to three times that amount. And unlike synthetic materials like polypropylene that are currently used in many oil containment booms, Fibertect made from raw cotton and carbon is biodegradable.

According to BP, the U.S. Coast Guard and the National Oceanic and Atmospheric Administration (NOAA), the spill is leaking about 5,000 barrels a day, but some researchers are claiming the disaster could prove even more dramatic.

It began April 20 after an explosion and fire aboard the semi-submersible drilling rig in the Gulf off the coast of Louisiana. Some of BP's first attempts at clean-up were not successful and as the British oil giant struggles to collect oil from the leak, First Line has submitted information on the Fibertect technology as an alternate response technology.

In addition, several other oil companies are working to take precautionary measures in light of recent events and some are researching the benefits of keeping a cache of Fibertect on board rigs in order to start immediate clean-up in case of future spills.

"Fibertect has already proven to be effective in the bulk decontamination of chemical warfare agents and toxic industrial chemicals, but our proposal here is to use it to aid in the clean-up efforts in the Gulf," said First Line Technology President Amit Kapoor. "Fibertect allows for a green, environmentally safe, biodegradable technology that is perfect for the expanding effort to protect and decontaminate coastal lands and wildlife. We welcome the opportunity to work with the government, BP, or other oil companies in a joint effort to defend and preserve our planet."

While Ramkumar has not done any testing on the coast yet, he and his team are proposing to use discounted low micronaire raw cotton that attracts oil to develop oil-absorbent pads that could be used to soak up oil in the Gulf of Mexico.

Fibertect is currently used primarily by the military, first responders and receivers, hospitals, hazmat teams and fire fighters during decontamination, but the professor said it can absorb oil and hold volatile gases, making the material an obvious choice for cleaning up crude oil.

About First Line Technology:

Founded in 2003, First Line Technology, LLC is a supplier of Out of the Box Solutions for first responders and the military. As a Total Solution provider for emergency response equipment, First Line works directly with manufacturers and subject matter experts to provide current solutions for emergency response missions. First Line has established itself as a leader in new product development and deployment with innovative and simple solutions. First Line prides itself on creating high-quality products that are comfortable, effective, and safe for use in an All-Hazards response.

About Hobbs Bonded Fibers:

For more than 22 years, Hobbs Bonded Fibers (ISO certified 9001:2000) has specialized in developing and manufacturing specialty nonwoven products for Industrial and Consumer markets. The use of synthetic, natural and specialty fibers allows Hobbs Bonded Fibers the flexibility to design products to a customer's exact specifications. All of Hobbs' products are manufactured in the United States.

Contact Information

Available for logged-in reporters only

Description

Military wipe designed by Texas Tech could solve oil spill problems.

For the video, visit <http://www.ireport.com/docs/DOC-447299>

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