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## Special Milliken fiber being tested in Gulf to mop up spill

By Jenny Munro • Staff writer • June 4, 2010

Spartanburg-based Milliken & Co. has developed a nanofiber that can absorb 40 to 50 times its weight in oil and could help in the cleanup of the huge [Gulf of Mexico oil spill](#), threatening the ocean waters, marshes and shorelines of Gulf states.

The fiber, developed by Milliken Research, could help fill a void in the high demand for oil-absorbing materials created by the [BP oil spill](#) in the deep waters of the ocean off the coast of Louisiana.

The oil well blowout occurred April 20, causing a catastrophic explosion on the [Deepwater Horizon](#) offshore oil drilling platform that was situated about 40 miles southeast of the Louisiana coast. Eleven workers were killed in the explosion and 17 more were injured.

"A team of scientists is running field tests on the product down in the Gulf," Richard Dillard, Milliken spokesman, said, adding that the U.S. Coast Guard also is running tests on the fiber.

Milliken's team visited two Alabama communities devastated by the spill, he said, and was "told it was the best product they'd seen."

Other efforts to absorb oil also are under way. A trial stretch of oil-absorbent material affixed to 5-foot posts was placed along Front Beach in Ocean Springs, Miss., on Wednesday in an effort to protect the city's coastline from the oil spill. More sand berms are being placed along Louisiana's coastline. Both human and animal hair is being used to absorb oil in some areas.

Another possibility is a nonwoven cotton [technology](#) from The Institute of Environmental and Human Health at Texas Tech. [Sachadri Bankumar](#)

much as 70 times its weight. And it won't just stay in a landfill forever," he said.

The oil spill is the largest offshore spill in U.S. history. No firm figures are available on the flow of crude oil, but it is estimated at 500,000 to 4.2 million gallons a day.

Milliken Research developed the nanofiber, roughly 100 times smaller than a human hair, with a high surface area, which makes the fiber an effective absorber of oil. The fibers are capable of absorbing two to three times the current market standard, Milliken said. The material has a small pore size, which helps retain the oil inside the material. Also, the fibers have a low density, allowing them to float on water and absorb oil and hydrocarbons while rejecting water.

"The team developing the technology used in this market has been working long days and weekends in order to get this technology to a level we feel will have a significant impact in the Gulf clean-up," said David Wenstrup, director of development. The technology has been moving forward at "an extremely rapid pace."

Dillard said development of the fiber began about a year ago, but the team realized the Gulf Oil spill gave it a real-world [application](#) and quickened the completion of the research.

The tiny nanofibers are bunched together and can take many different forms — booms, ropes and

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