Dispersants Versus the Oil Spill

June 01, 2010 11:15 AM Ryan Rivet rrivet@tulane.edu

British Petroleum has used large amounts of oil dispersants in fighting the massive oil release in the Gulf of Mexico. The company recently reduced its use of the chemical Corexit 9500 after demands by the federal government and concerns about Corexit's toxicity to humans and sea life. A Tulane toxicologist says, however, that her main concern is the oil's toxicity.





A C-130 aircraft sprays dispersant on an oil slick south of the Mississippi coastline. (U.S. Navy photo by Specialist 2nd Class Jonathen E. Davis)

"It's not the dispersants that cause the ecological effects [] it's the oil that's toxic," says Luann White, director of the <u>Tulane Center for Applied Environmental Public Health</u>. "None of these dispersants is so innately toxic -- once you use them out in the Gulf, they're not going to cause toxic effects in and of themselves."

White, whose center is part of the Tulane School of Public Health and Tropical Medicine, says the difference in toxicity between all dispersants is negligible. Even though roughly 670,000 gallons had been used as of Friday (May 28), the time frame

and the large volume of water in which it has been deployed dilutes the dispersants to very low concentrations in the Gulf waters, she says. Furthermore, Corexit biodegrades, so it shows little long-term effects.

"The quantities used so far have been spread over 40 days and over a wide area, so the concentrations in the water are not that high," White says. "It doesn't bio accumulate, and that's what we're always afraid of in assessing the long-term effects."

Seven fisherman working to contain the oil spill have complained of headaches, light-headedness and nausea. White says those reactions could be caused by other factors, including volatile organic compounds in the oil itself or other reasons unrelated to the oil. The fishermen's health complaints are under investigation. She warns against jumping to conclusions about the dispersant.

"I don't care which one is used as long as it's effective in minimizing the amount of oil that reaches the wetlands and doesn't break down into harmful products," White says. "What I would hate to do is take an established tool away from people who fight oil spills. Could it be used inappropriately? Absolutely. Is it being used inappropriately right now? I haven't seen that yet."