

Scientists: gov't Gulf oil spill report 'ludicrous'



A new government report suggests oil that reached shore from the Deepwater Horizon spill site and became buried in sand will “degrade through natural process,” but some scientists are at odds over it, one calling the spill a “3-D catastrophe.”

A report released last week by the National Oceanic and Atmospheric Administration (NOAA), called [Deepwater Horizon Oil Budget: What Happened To The Oil?](#), has drawn the ire from some scientists.

The report says the “vast majority” of oil that was allowed to contaminate the Gulf of Mexico has disappeared, thanks to “robust” cleanup efforts and nature’s ability to take care of itself.

Early last week, the [government announced 4.9 million barrels of oil spilled](#) into the Gulf. Two days later it issued the report that states about 33 percent of the spilled oil found in the water had been burned, dispersed, skimmed, or recovered by cleanup efforts.

In addition, 25 percent evaporated into the atmosphere or dissolved in the Gulf, with another 16 percent of the oil dispersing via a natural breakup process into microscopic droplets.

The last 26 percent, according to the report, is either on or just below the Gulf’s surface, washed ashore or collected from the shores, or is buried along the Gulf’s coastlines.

But to David Hollander, a University of South Florida chemical oceanographer, the NOAA estimates are “ludicrous.”

“It’s almost comical,” he states, according to [National Geographic News](#).

The reality, according to Hollander, is the government can only account for 25 percent of the spilled oil, that which has been burned off, skimmed, or directly collected.

As an example, the government report notes all submerged oil is considered dispersed, therefore not harmful, Hollander said. However, as the effects of oil mixed with dispersants at great ocean depths is still unknown, that’s not necessarily true, Hollander added.

“There are enormous blanket assumptions.”

The new government report came just days after speculation about the disappearing oil. After a capping of the well on July 19, US Coast Guard flyovers reported no big patches of crude oil on the Gulf’s surface.

However, oil cleanup efforts mostly revolve around eliminating what’s on the surface, another scientist notes.

Robert Carney, a Louisiana State University (LSU) biological oceanographer, said that although government figures may be specific, they are “notorious” for being uncertain because it is “exceedingly hard” to properly track spilled oil.

“Water is always moving—if I go out to the spill site tomorrow and look for hydrocarbons, I might not find much, because the oiled water is already gone,” Carney said.

The perception within the government and oil industry is that “as long as you keep it off the beach, everything’s hunky dory,” he added.

Another scientist adds to the reality of the situation in taking on the government report that suggests oil buried in sand along the Gulf’s beaches “is in the process of being degraded.”

This week, Markus Huettel, a biological oceanographer, along with colleague Joel Kostka were on a Pensacola, [Florida beach digging trenches](#). Instead of supporting the government's explanation, what they discovered were large swaths of oil up to two feet deep that are not degrading.

"So far, we haven't seen any rapid degradation in these deep layers," Huettel said, while noting oil on the sand's surface was disappearing within days, thanks to an abundance of oxygen.

The most common method for oil breakdown is when microbes consume it, but they are dependent on adequate oxygen levels for that to happen.

With little oxygen available at buried depths, the oil is likely to remain for years, until a storm or hurricane disrupts the upper sand layers covering the oil.

Huettel also notes buried beach oil might continuously migrate to sea as well as into groundwater supplies, where it eventually harms wildlife.

Oil-laden groundwater, contaminated from the [Exxon Valdez spill](#), disrupted nature for years after that spill, leading to "significantly elevated" deaths of pink salmon embryos between 1989 and 1993, Huettel said.

Another cause of alarm over the government report is the effect of [giant underwater plumes](#) of dispersed oil in the Gulf.

In a first of its kind, the government allowed BP to conduct its own experiment with the use of toxic dispersants in the deep waters of the Gulf. The ocean is cold and dark at the 4,000 and 5,000 foot depths where the dispersants were used. Huettel notes dispersant-treated oil may have sunk to the seafloor.

Another scientist suggests the chemically treated oil may be suspended and preserved at those depths, creating long-term survival problems for deep-sea creatures.

In his testimony before the US Congress on August 4, Ron Kendall, ecotoxicologist at Texas Tech University, said: "We have very limited information on the environmental fate and transport of the mixture of dispersant and oil, particularly in the deep ocean."

LSU's Carney called the assumption that microbes are the panacea for oil cleanup as being nonsense.

"The sentimentality that bacteria turn everything into fish food and CO2 is total bull," he said.

Hollander noted some oil fragments are so small the human eye cannot detect them, others are large enough that young fish will mistake them for food and consume them. He suspects a "real large chunk of food chain is being disrupted."

"We're getting into something different than the 2-D petroleum spill" noticeable on the Gulf's surface, he added. "All of the sudden you've taken this 2-D disaster and turned it into a 3-D catastrophe."