

Engineers build giant dome to contain US oil spill

April 27 2010



This US Coast Guard image shows fire boat response crews as they battle the blazing remnants of the off shore oil rig Deepwater Horizon April 21. Engineers began constructing a giant dome to place over a leaking oil well in the Gulf of Mexico to contain a growing spill threatening the US coast, officials said Tuesday.

Engineers began constructing a giant dome to place over a leaking oil well in the Gulf of Mexico to contain a growing spill threatening the US coast, officials said Tuesday.

"It's a dome that would be placed over the leak and instead of the <u>oil</u> leaking into the <u>water column</u> it would leak into this dome structure," US coast guard spokesman Prentice Danner told AFP.



"They started working on the fabrication of this dome structure fairly recently and its estimated it will take two to four weeks to build."

British energy giant BP leases the Deepwater Horizon rig that has been gushing an estimated 42,000 gallons (160,000 liters) of oil a day into the sea since sinking last Thursday, still ablaze two days after an explosion that killed 11 workers.

The spill has created a slick measuring 77 kilometers (48 miles) by 62 kilometers (39 miles) at its widest points and located 50 kilometers (30 miles) off the ecologically fragile Louisiana coast.

BP has been using four robotic submarines to try to fully activate the blowout preventer some 1,500 meters (5,000 feet) down on the <u>seabed</u> and cap the oil well.

But almost two days of efforts have yielded no progress so far and the giant dome is now being suggested as the best short-term solution.

Officials said its exact dimensions were still being determined.

Vessels are also on stand-by to create relief wells that could permanently shut off the oil supply but BP officials say those operations would take two to three months.

"The dome would capture or gather the oil and allow it to be pumped out of that dome structure," explained Danner.

"If you could picture a half dome on top of the leak and the oil collects inside of this dome and is pumped out from there, that is the idea behind it."

Danner said the dome would be similar to welded steel containment structures called cofferdams used in oil rig construction, but stressed this



would be an original design.

"This is the first time this has ever been done. This idea didn't exist until now. It has never been fabricated before."

(c) 2010 AFP

Citation: Engineers build giant dome to contain US oil spill (2010, April 27) retrieved 10 April 2024 from https://phys.org/news/2010-04-giant-dome-oil.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.