



Situation Report

U.S. Department of Energy Office of Electricity Delivery and Energy Reliability

Deepwater Horizon Situation Report #1

April 30, 2010 (4:00 PM EDT)

http://www.oe.netl.doe.gov/emergency_sit_rpt.aspx

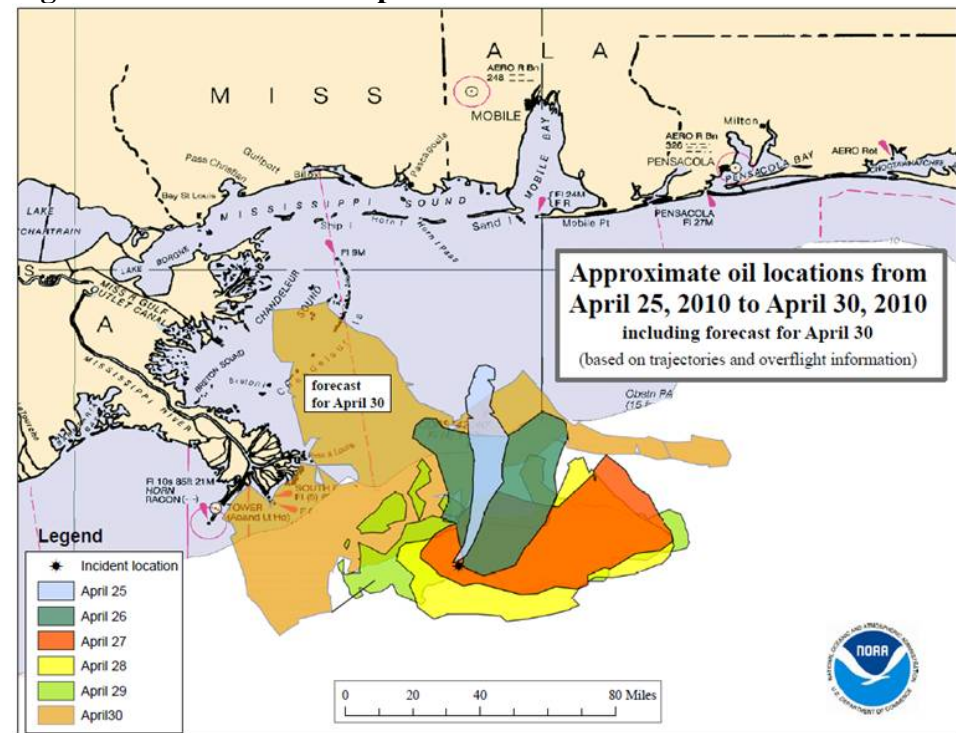
Overview:

At approximately 11:00 pm EDT April 20, 2010 an explosion occurred aboard the Deepwater Horizon mobile offshore drilling unit (MODU) located 52 miles Southeast of Venice, LA and 130 miles southeast of New Orleans, LA. Deepwater Horizon is owned and operated by Transocean Ltd. and BP owns the license under which the drilling was being performed. The MODU was drilling an exploratory well and was not producing oil at the time of the incident. As a result of the explosion and fire, 11 of the 126 crewmembers remain missing. The Deepwater Horizon MODU sank 1,500 feet northwest of the well site.

Crude oil is leaking from the well pipe, located on the Gulf of Mexico sea floor, at an estimated rate of approximately 5,000 barrels (210,000 gallons) per day. An oil sheen 80-120 miles wide is spreading across the Gulf. Oil is reported to have reached the Louisiana coast late April 29 and NOAA forecasts expect more oil to reach the coast April 30 (See Figure 1). On April 29 the Deepwater Horizon incident was declared a Spill of National Significance (SONS). A SONS is defined as “a spill that, due to its severity, size, location, actual or potential impact on the public health and welfare or the environment, or the necessary response effort, is so complex that it requires extraordinary coordination of federal, state, local, and responsible party resources to contain and clean up the discharge” and allows greater federal involvement.

To conduct the containment and cleanup operations, 75 vessels, including skimming boats, storage barges, and support vessels, and 1,900 personnel are responding. As of April 30, the U.S. Coast Guard (USCG) reported the cleanup response has collected 20,313 barrels (853,146 gallons) of oily water and has used 139,459 gallons of oil dispersant. The USCG has protected the Louisiana shoreline with over 217,000 feet of booms, and another 305,760 feet are forward staged to protect shorelines. Five staging

Figure 1: Location of Oil Spill and Forecast



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areas are in place: Biloxi, MS, Pensacola, FL, Venice, LA, Pascagoula, MS, and Theodore, AL. A sixth staging area is being set up in Port Sulphur, LA. To minimize the potential shoreline impacts, an in situ burn of the leaked crude oil was conducted April 28. The test burn was successful and larger burns are planned contingent on good weather.

The USCG is also restricting ships from traveling where the slick exists. The Southwest Pass, the main shipping lane connecting the Gulf of Mexico and Mississippi River, remains open to deep draft vessels and is free of any restrictions to marine traffic, although smaller passes in the Mississippi Delta region may be restricted or closed due to booming operations. The Minerals Management Service remains in contact with all oil and gas operators in the sheen area. Currently, no production has been curtailed as a result of the response effort.

Transocean is employing six remotely-operated vehicles (ROVs) to attempt to activate the blow-out preventer on the well pipe to seal the well, but has been unsuccessful in those attempts. The ROVs have shown that the riser pipe is bent at a 90 degree angle from the blow-out preventer and the riser pipe is leaking from three points. BP is preparing to drill relief wells in order to intercept the drilled well. By this weekend, the Transocean Development Driller III is scheduled to spud a relief well (drilling is expected to take two to three months). Over the next few weeks, BP is also fabricating a subsea collection system to funnel leaking oil to the surface for treatment.

DOE Actions:

- Staff from NNSA are participating in the U.S. National Response Team (NRT) activities in the response of Deepwater Horizon incident. The NRT responds to emergencies involving hazardous substances, pollutants and contaminants, hazmat, oil, and other environmental incidents of national significance.
- DOE staff represented by the Office of Electricity Delivery and Energy Reliability, Office of Fossil Energy, and the Energy Information Administration (EIA) are currently tracking and monitoring the oil spill and assessing the impact to electric utility power plants and oil facilities.

Electricity Infrastructure

Electric Power Facilities

- The oil spill has the potential to impact several electric power generation facilities in the Gulf Coast region. Four power plants have been identified as drawing cooling water directly from the Gulf of Mexico or adjacent salt water sources.
- If the water supply for these facilities becomes contaminated with oil, cooling water systems could be damaged.
- The operators of the affected facilities are working with the USCG and other State and local officials to implement plans to protect these waterways. In addition, the North American Electric Reliability Corporation (NERC), SERC Reliability Corporation, and DOE are monitoring the situation and assessing the impact to electric power facilities.
- Overall, no impact to regional electric power reliability is anticipated.



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Oil Infrastructure

Current Inventory, Refining Capacity, and Market Conditions

- As of April 30, refiners are not experiencing any impacts from the oil spill.
- The Gulf Coast (Texas through Alabama) receives an average of about 5.6 million barrels per day of imported crude oil through its ports.
- The State of Louisiana receives about 2 million barrels per day of crude oil imports.
- About 1 million barrels per day of product imports also flow into the Gulf Coast. Of those imports, Louisiana receives about 0.3 million barrels per day.
- Ports through which ships may use the Southwest Channel of the Mississippi River include Baton Rouge, New Orleans, and Gramercy. Volumes through these three ports averaged just over 0.7 million barrels per day over the past three years.
- According to the Port of South Louisiana, on average, two-to-three ships move a total of 1.0-1.5 million barrels through the river each day based on fourth quarter 2009 estimates.
- According to EIA, the gasoline market this spring did not see much tightness. The spring U.S. gasoline market is characterized by modest consumption, increased ethanol use, high availability of imports, and high gasoline inventories. Although refinery utilization rates have tightened somewhat from lower levels earlier this year, even if there were potential reductions in runs from some refineries, the above factors combine to suggest there are likely to be offsetting supplies available elsewhere in the system.
- Despite some tightening recently, inventories of crude oil, gasoline, and distillate products, particularly in PADD III, the Gulf Coast, are at or above the average range (See Figures 2-4).

Figure 2: PADD III Crude Oil Stocks

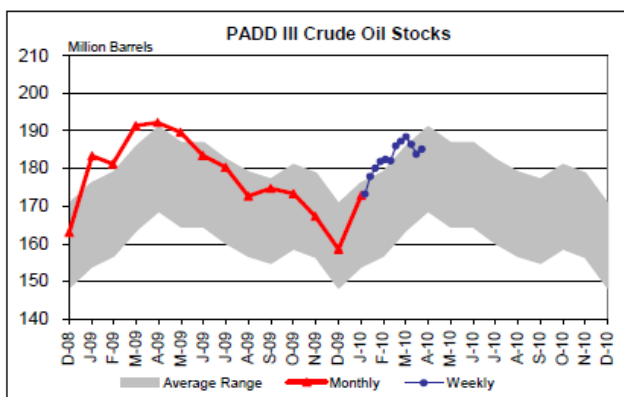
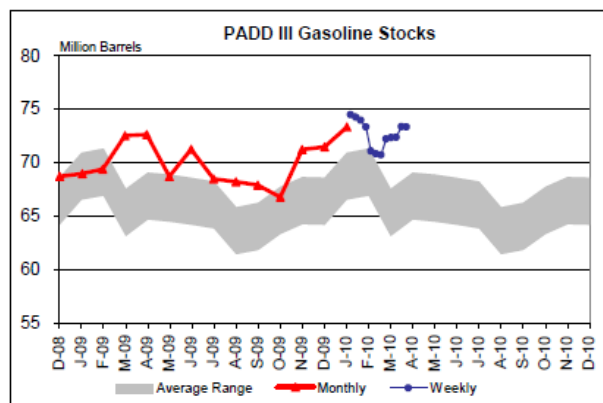


Figure 3: PADD III Gasoline Stocks

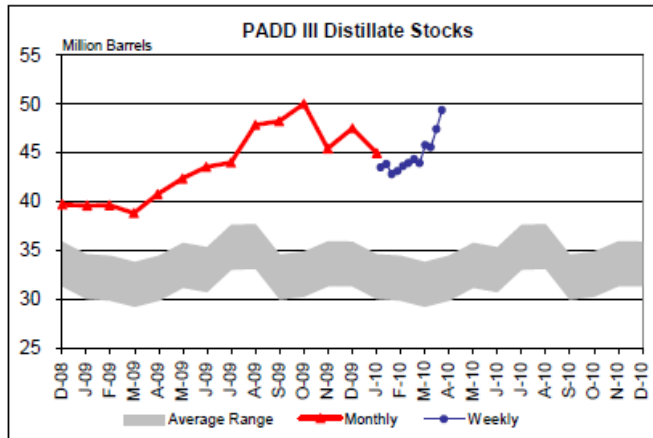


Source: Energy Information Administration, Weekly Petroleum Status Report, 23 April 2010.



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Figure 4: PADD III Distillate Stocks



Source: Energy Information Administration, Weekly Petroleum Status Report, 23 April 2010.

Coal Infrastructure

Gulf Coast Coal Imports

- Imports of coal to U.S. power plants could be affected by the Gulf oil spill if waterways are closed.
- Colombian coal dominates regional coal imports, accounting for about 80 percent of all imports.
- A large amount of the imported coal, about one third, enters the U.S. on coal freighters delivering coal to the ports of Mobile, AL and New Orleans, LA. This is equivalent to a daily average of 25,000 and 5,000 tons per day through Mobile and New Orleans, respectively.
- Coal imports are sufficient to provide the daily coal burned by three 1,000 megawatt power plants operating at full load.
- Stock piles at affected power plants offer a backup source of coal. If supplies were disrupted for more than several weeks, it may be possible to obtain domestic coal from nearby Alabama mines. Other possibilities include coal from Kentucky, West Virginia, and Wyoming.