

ONE HUNDRED ELEVENTH CONGRESS  
**Congress of the United States**  
**House of Representatives**  
COMMITTEE ON ENERGY AND COMMERCE  
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**MEMORANDUM**

**June 8, 2010**

**To: Members of the Subcommittee on Energy and Environment**

**Fr: Subcommittee on Energy and Environment Staff**

**Re: Hearing on “The BP Oil Spill: Human Exposure and Environmental Fate” on June 10, 2010**

On Thursday, June 10, 2010 at 2:00 p.m. in room 2123 of the Rayburn House Office Building, the Subcommittee on Energy and Environment will hold a hearing entitled “The BP Oil Spill: Human Exposure and Environmental Fate.” This hearing will examine some of the potential impacts to humans and the environment that are associated with the spill.

**I. BACKGROUND**

Timeline of events

On April 20, 2010, at about 10 p.m., an explosion occurred on the Deepwater Horizon oil drilling rig in the Gulf of Mexico. There were 126 people on board at the time. Fifteen of those were injured and eleven died. The Deepwater Horizon, owned by Transocean Ltd., was under contract with BP to drill an exploratory well. BP was the lessee of the area in which the rig was operating. At the time of the explosion, BP and Transocean were in the process of temporarily closing the well, in anticipation of returning it to commercial production. Another company, Halliburton, had completed some cementing of casings in the well less than 24 hours prior to the accident. The Coast Guard responded to the explosion and fire.

On April 22, 2010, a second explosion caused the Deepwater Horizon to sink into the Gulf of Mexico at 10:22 a.m., taking with it a riser pipe which remained attached to the blowout preventer. The riser pipe, which normally goes from the wellhead to the drilling ship, broke as the Deepwater Horizon sank.

On April 24, 2010, remotely operated vehicles (ROVs) inspected the capsized rig on the sea floor and found two oil leaks from the well pipe along the sea floor (at a depth of approximately 5,000 feet). The initial estimate was that up to 1,000 barrels of oil a day could be

leaking into the water. This estimate was later revised to be at least 5,000 barrels per day, and has been revised to as high as 25,000 barrels per day since then.

On April 29, 2010, Secretary Napolitano declared the incident to be a “spill of national significance,” enabling the appointment of a national incident commander to coordinate response resources at the national level.

On May 2, 2010, BP began drilling the first deep-water intercept relief well, which is located a half-mile from the Macondo well, at a depth of roughly 5,000 feet. This well will attempt to intercept the existing wellbore at approximately 16,000 feet below the sea floor. BP estimates this process will take at least 90 days. On May 17, 2010, a second drill rig, Transocean’s Development Driller II, began drilling a second relief well.

On May 5, BP announced that it had stopped the flow of oil from one of the three existing leak points on the damaged oil well and riser in the Gulf of Mexico, although this action did not change the overall rate of the leak. BP made plans to deploy the cofferdam, a 125-ton, 14’ x 24’ x 40’ structure to be set over the end of the riser. On May 8, 2010, BP abandoned this approach due to the formation of methane hydrate crystals inside the dome.

On May 20, 2010, the U.S. Environmental Protection Agency (EPA) issued a directive requiring BP to identify and use a less toxic dispersant. On May 22, 2010, BP responded that it could not find an effective and available alternative on the EPA-approved dispersant list. On May 26, 2010, EPA issued a directive requiring BP to reduce dispersant application by 75% from the maximum daily amount used.

On May 26, 2010, BP launched its “top kill” and “junk shot” procedures in which drilling mud (which contains chemicals and other fluids) and a variety of solids such as shredded tires and golf balls were injected into the well in an attempt to stop the flow of oil and gas. Those efforts were abandoned on May 29, 2010.

On June 1, 2010, President Obama called the Deepwater Horizon oil spill “the greatest environmental disaster of its kind in our history.” That same day, U.S. Attorney General Eric Holder announced that the U.S. Department of Justice had launched a criminal investigation into the circumstances surrounding the explosion and oil spill.

On June 4, 2010, BP completed its efforts to cut off a portion of the riser and lower its Lower Marine Riser Package Cap Containment System to contain the flow of oil and gas and divert as much as possible to a rig at the surface. There are estimates that up to 15,000 barrels per day have been recovered.

As of June 7, 2010, approximately 2.19 million feet of containment boom and 2.46 million feet of sorbent boom have been deployed to contain the spill. Approximately 15.5 million gallons of an oil-water mix had been recovered. 1.09 million gallons of total dispersant have been deployed—779,000 on the surface and 317,000 subsea. More than 125 controlled burns have been conducted, removing a total of more than 3.2 million gallons of oil from the open water in an effort to protect shoreline and wildlife. 32 percent of the federal waters in the Gulf of Mexico have been closed to fishing.

The impacts of the oil spilled and the various techniques used to mitigate or respond to the accident have raised numerous environmental, health and other concerns, which include:

- Whether the dispersants and drilling mud used by BP pose risks to the marine ecosystem, and, if so, whether those risks will spread through the food chain.
- Whether the release of oil, which typically contains carcinogenic polycyclic aromatic hydrocarbons (PAHs), is exposing those responding to or living near the impacted areas to toxic air pollution.
- Whether the burning of oil is exposing those responding to or living near the impacted areas to toxic air pollution.

## **II. WITNESSES**

The following witnesses have been invited to testify on June 10th:

### **Dr. Chris Reddy Ph.D.**

Associate Scientist  
Department of Marine and Geochemistry  
Woods Hole Oceanographic Institution

### **Dr. Edward J. Trapido, ScD, FACE**

Associate Dean for Research,  
Professor and Wendell Gauthier Chair of Cancer Epidemiology  
LSU Health Sciences Center-New Orleans, School of Public Health

### **Dr. Gina Solomon MD, MPH**

EPA Science Advisory Board  
Senior Scientist, National Resources Defense Council  
Associate Clinical Professor of Medicine at the University of California at San Francisco  
Associate Director of the UCSF Pediatric Environmental Health Specialty Unit