



Oilgram News/OPR Extra

A special edition from the editors of Platts

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A note to our readers: You may have observed that our publication schedule of this special edition has slipped from its previous daily frequency the last few days. As the Macondo spill disaster winds toward what looks like closure at the wellhead during the next few weeks, expect that the publication frequency will be less than daily. We expect to stop publication of the special edition when the Macondo well is capped.

Final declaration not in yet, but well is all but dead

■ Although BP needs only to deliver the final blow with a relief well later this month, the company remained cautious August 4 on any declaration of a Macondo victory in the Gulf of Mexico despite success with its static kill operation. "I'm looking forward to that day," said BP Senior Vice President Kent Wells when asked if he had finally reached a point where he could declare the "well is dead." Although static kill has reduced the pressure from the well to a point where he said "there is none" at the vessel involved in the operation, Wells reminded reporters: "We do want to get it sealed with cement." He said: "That date is coming. But we are in a good place today." Earlier, US National Incident Commander Thad Allen also emphasized the need to focus on the final stages of the Macondo battle during his portion of a briefing at the White House. "The last 24 hours have been fairly consequential in the life cycle of this response," Allen said. "We have reached a static condition in the well that allows us to have high confidence there will be no oil leaking into the environment," Allen said. But BP engineers and a government science team continued to study results from the static kill operation to determine their best method for proceeding with cement. Wells said they can choose to follow the static kill with cement from the top of the wellbore at the wellhead on the sea floor in 4,993 feet of water or wait for a relief well to administer cement as a bottom kill later this month at the reservoir 13,000 feet below the sea floor. The engineering team was expected to make a decision on cementing later Wednesday evening, Wells said.

■ Regardless of that decision, Wells and Allen repeatedly have said the relief well must be completed to assure that the well has been

plugged. And Wells said it again, telling reporters during his briefing: "We always said we would move forward with the relief well as the ultimate solution." The primary relief well remains on schedule for interception of the original Macondo wellbore by the middle of the month, with the bottom kill expected to take anywhere from several days to a few weeks. Wells has warned BP might need the entire month to complete the bottom kill, depending on the conditions found in the wellbore after interception. No oil has flowed from Macondo since July 15, when BP successfully installed a sealing cap above Macondo's malfunctioning blowout preventer. With static kill, however, BP has pumped drilling mud into the well relieving the pressure against the cap and at the *Helix Q4000* multipurpose vessel involved in the pumping on the surface. Before July 15, the well had leaked an estimated 4.9 million barrels of oil since the April 20 blowout that destroyed Transocean's Deepwater Horizon drilling rig and killed 11 workers.

Companies lay out spill response plan

■ Four oil companies Wednesday detailed their initial plans for a new \$1 billion containment system that would allow them to respond rapidly to deepwater drilling disasters in the Gulf of Mexico. Representatives from ExxonMobil, Shell, ConocoPhillips and Chevron discussed those plans at Tulane University during a US Bureau of Ocean Energy Management, Regulation and Enforcement forum on offshore drilling, the first of eight such forums to be held across the country by the federal regulator over the next two months. "It's a system that we intend never to use," said Sara Orrwein, vice president of engineering at ExxonMobil Development Company. "But if we must use it, we're confident that the system

will be able to quickly and effectively mitigate the impacts of any deepwater blowout." Orrwein said the aim is to establish instant spill response capabilities in the Gulf of Mexico with equipment arriving on an incident site within 24 hours of an accident. ExxonMobil is heading up the engineering and construction phase of the system, Orrwein said. Since June 21, a team of 40 engineers has been working together to hammer out the initial design of the new system. Melody Meyer, president of Chevron Energy Technology Company, said the system will be able to capture 100,000 b/d of oil and work at depths of up to 10,000 feet. Within six months, the companies aim to have engineering plans finalized, Orrwein said. Over the following 18 months, the system will be assembled and stored in a staging warehouse. Charlie Williams, chief scientist for Shell Oil, said the completely flexible and adaptable system has two ways to achieve full containment of a leak: by connecting to the well itself and by latching onto the ocean floor using subsea casing and suction piles. Both systems will be pressurized and designed to keep oil in and seawater out and prevent the formation of hydrates, Williams said. The design includes a subsea containment assembly, freestanding risers that can be positioned away from the well, and containment vessels that will work at the surface.

■ While all components of the system have been constructed in some previous form, they were not specifically designed for the same purpose, Williams said. "The system does look familiar to the system that we have been putting in place in the Gulf," said Steve Bross, a manager of project development at ConocoPhillips. The system will be pre-engineered and tested in the field, which will help



to avoid some of the problems and lags that arose when attempting to contain the Macondo well, Bross said. The companies together plan to form a nonprofit company called the Marine Well Containment Company, Orrwein said, and all other companies operating rigs in the Gulf of Mexico will be encouraged to join. The system will be able to respond to any accident in the Gulf, regardless if the involved companies are members. As technology progresses, the nonprofit will continue to develop and test more advanced systems.

Bromwich hears pleas on moratorium

■ Louisiana government leaders speaking at the forum implored Michael Bromwich, director of the BOEM to lift the six-month federal deep-water drilling moratorium, which they said has caused life in much of their area to grind to a halt. Terrebonne Parish President Michel Claudet said this is the first time his area has seen both its economic engines—fishing and oil field work—virtually stop. “This moratorium is an injury we do not have a remedy for,” Claudet said. New Orleans Mayor Mitch Landrieu said federal regulators should use a scalpel instead of a hammer when regulating drilling in the Gulf. Bromwich said information gathered at the bureau’s eight public meetings focused on oil spill containment, drilling safety and spill response issues will be analyzed and reported to US Interior Secretary Ken Salazar on a real-time basis “to see whether the moratorium can be shortened before the November 30 expiration date.” Bromwich said any decision to shorten the ban would not come before mid-September, after the last forum on September 13 in Lafayette, Louisiana. When pressed by local officials, Bromwich refused to further elaborate on any possible timeline. Bromwich said in a press conference he was “almost sure” the Interior Department will not make any decision on shortening the moratorium before the Fifth Circuit Court of Appeals hears oral arguments in a legal challenge to the moratorium on September 1. The White House press secretary, Robert Gibbs, said August 4 the Obama administration would “happily” lift the moratorium before its planned expiration if industry can show it has met a series of conditions.

Long-term impact from spill “likely”

■ The Gulf of Mexico oil spill “will likely have considerable impacts for years and possibly decades to come,” Jane Lubchenco, adminis-

trator of the National Oceanic and Atmospheric Administration, said August 4 at a White House briefing. “I think the common view of most of the scientists inside and outside government is that the effects of the spill will likely linger for decades,” she said. Lubchenco and other administration officials addressed the press following the release of a study that said about 75% of the oil that spilled after the Deepwater Horizon rig burned and collapsed in late April has evaporated or been burned, skimmed, recovered from the wellhead or dispersed. “The fact that so much of the oil has been removed and is in the process of being degraded is very significant and means the impact will not be even worse than it could have been,” Lubchenco said. But the amount of oil released was immense (4.9 million barrels, by recent government estimates), and the “impact is likely to be considerable,” she said. Research is continuing to get a better handle on the impact, “but it is not easy to determine,” Lubchenco said. For example, the full impact on fish populations of species that spawned in the water column contaminated with oil will not be known for a number of years, she said. She noted that bluefin tuna have eggs and larvae that would have been in oil-contaminated water. “If those eggs or larvae were exposed to oil, they probably would have died or been significantly impacted,” she said. NOAA was the lead agency on the study, which was undertaken with the Interior Department.

■ The study estimated that about 17% of the oil, or 827,000 barrels, was recovered directly from the well site. An additional 5% was burned, 3% skimmed and 8% chemically dispersed. “If you total up those...that gives you a sense of what the federal effort has been,” Lubchenco said. “And it totals about a third of the amount of oil that has been released.” About 16% of the oil dispersed naturally into the water column and 8% was chemically dispersed. All of the naturally dispersed oil and some of the oil that was chemically dispersed remained well below the surface in diffuse clouds where it began to dissipate further and biodegrade. An estimated 25% of the oil volume evaporated or dissolved naturally in the water column. Dissolution is the process by which individual hydrocarbon molecules separate and dissolve into the water. Dispersion is the process by which larger volumes

of water are broken down into smaller droplets. The remaining 26% of the oil is either on or just below the surface as a light sheen and weathered tar balls, has washed ashore or been collected from the shore, or is buried in sand and sediments, the report said. Lubchenco said about 37,000 tons of material have been removed from the beaches. All told, at least 50% of the oil that was released “is now completely gone from the system, and most of the remainder is degrading rapidly or in being removed from the beaches,” she said.

Dispersant use defended

■ An official with the US Environmental Protection Agency August 4 defended the use of chemical dispersants to cut through the oil that spilled into the Gulf of Mexico from BP’s Macondo well. But Paul Anastas, assistant administrator for research development for the EPA, acknowledged to a Senate panel that the dispersants’ “long-term environmental effects are still unknown,” though testing has shown they are generally less toxic than the oil itself. “We will persist in asking the hard questions until we fully know the long-term effects,” Anastas told members of the Senate Environment and Public Works Committee. A report released by the Obama administration August 4 said chemical dispersants helped degrade 16.5 million gallons of oil, or about 8% of the estimated 4.9 million barrels that spewed from the Macondo well. Committee Chairwoman Barbara Boxer, Democrat-California, pressed Anastas on whether oil spill relief workers knew that the makers of Corexit, the main dispersant used by BP, considered the chemical an “acute” hazard to human health. “I do not believe that all of the available information was being shared with the people on the ground,” Anastas told Boxer. BP sprayed atop the water and injected undersea some 1.8 million gallons of dispersant, an amount Rhode Island Democrat Sheldon Whitehouse called part of a “grand experiment” in the Gulf. The administration approved BP’s use of chemical dispersants to mitigate the effects of the Deepwater Horizon spill shortly after it started in April. BP reported that it had ended its use of dispersants when the well was sealed in mid-July. Environmentalists and some lawmakers have criticized the administration for using products that have not been tested well enough and which may be more harmful than the oil.