

NWX-DEPT OF INTERIOR

Moderator: Frank Quimby
June 10, 2010
3:30 pm CT

Coordinator: Welcome everyone and thank you for standing by. At this is time all parties are in a listen-only mode until today's question and answer session. At that time you can press star 1 on your phone if you'd like to ask a question. This call is being recorded. If you have an objection you may disconnect. I'd now like to turn the call over to Mr. Frank Quimby. You may begin.

Frank Quimby: Thank you. Today's new media teleconference on the national incident commands flow rate technical group will discuss the several scientific teams and methodologies being used to estimate the amount of oil leaking from BP's well in the Gulf of Mexico.

The principle speaker today is Dr. Marcia McNutt, the Director of the U.S. Geological Survey and Chair of the flow rate technical group. Following her remarks, there will be an opportunity for questions from members of the news media. Please focus your question on today's topic. The presentation will begin with a statement from Dr. McNutt.

Marcia McNutt: Good afternoon and thank you for joining today's call. Under the direction of the National Incident Commander, Admiral Thad Allen, scientists and

engineers with the U.S. Geological Survey, the Department of Energy, NOAA, along with top experts from universities and other research institutions, have been working tirelessly to develop scientific information on how much oil is actually being spilled into the Gulf of Mexico, both before and after the riser was cut on June 3.

This information and analysis will help guide efforts to stop the spill and to effectively deal with its impacts on the Gulf, its fragile coastal areas, its fish and wildlife. This is obviously a challenging scientific issue since the leak is located a mile below the ocean. As a result, we have teams of scientists working on a variety of different methodologies to develop information that will help us determine the flow rate.

Today I want to give you an update on where we stand. Let me start by addressing the methodology that's being used to estimate the flows from the well. First a team of Federal scientists led by Energy Secretary Steven Chu, is analyzing pressure readings from the blowout preventer stack and the riser to address flow rates and how flow rates may have changed as a result of the riser being cut.

The Department of The Interior and the Department of Energy have directed BP to provide precise differential pressure measurements inside and outside the top hat to allow Federal scientists to develop another independent estimate of how much oil is flowing from BP's well.

Second, the riser flow rate technical group which Admiral Allen convened and of which I am the lead, is pursuing a number of independent approaches. We provided an initial preliminary estimate on May 27 based on the data and analysis we have conducted to that point. But we were clear that the teams

were going to continue to analyze data as it came in to refine and revise that estimate.

The groups Plume Modeling Team is pursuing the approach of observing video of the oil gas mixture escaping from the damaged well, using particle image velocimetry analysis to estimate fluid velocity and flow volumes.

The Mass Balance Team is using remote testing data from deployment of airborne visible infrared image spectrometer -- also known as AVIRIS -- and satellite imagery to calculate the amount of oil on the ocean's surface on a certain day. The team is correcting the value for oil, evaporated skimmed, burnt and dispersed up to that day and divided that by time to produce an average rate.

The Reservoir Modeling Team is to analyzing the geologic formation, as well as composition and pressures of the oil, natural gas and other compounds that are being released. The team is developing a computer model that includes a wide variety of data from the well and the underlying reservoir.

The Nodal Analysis Team is using import from reservoir modeling including pressure, temperature, fluid composition and properties over time and pressure and temperature conditions at the leak points on the sea floor. They are also analyzing the geometries of the wells, the BOP and the riser to calculate fluid compositions, properties, influxes from both before and after riser removal.

Finally a team of experts from Woods Hole Oceanographic Institution and assisted by researchers from Johns Hopkins University, University of Georgia and Massachusetts Institute of Technology have used acoustic technologies to measure flow rates after the top-kill attempt ended and before the riser was cut.

As I mentioned, in the coming days we will analyze the new data and bring together the various scientific methodologies to develop an updated estimate of how much oil is currently flowing from BP's leaking oil well in the Gulf of Mexico.

In the meantime, two of the teams from the flow rate technical group and Woods Hole Team have developed updated estimates of how much oil was flowing into the gulf before the riser was cut on June 3. The Plume Modeling Team has analyzed new video provided by BP and calculated now not just the lower bounds of the flow which they estimated on May 27, but now also an upper bound estimate for the period of time before the riser insertion tube was inserted and before the riser was cut.

Recognizing limited data available and the small amount of time to process that data, these scientists' estimate of the average flow for the leakage prior to the insertion of the riser insertion tube was between the cutting of the riser 25,000 to 30,000 barrels per day, but could have been as low as 20,000 barrels per day or as high as 40,000 barrels per day.

The Mass Balance Team based on its analysis of observations made on May 27, and they reported as a preliminary estimate 12,000 to 19,000 barrels per day. They conducted additional analysis of the data and have updated that estimate to a range of 12,600 to 21,500 barrels a day, and those estimates apply before the riser was cut as well.

Meanwhile the Woods Hole Team generated an estimate of the total flow from the period before the riser was cut. This includes not only oil but natural gas and any condensates, oil, sediments and produced water. That team's initial total flow rate estimate is 0.12 cubic meters per second to 0.23 cubic

meters per second from before the riser was cut. This is a preliminary both flow estimate.

If we are to assume as did the video group that 40% of this outflow is oil, these numbers would convert to potentially more than 25,000 barrels a day from that analysis. However this is of course, only an estimate based on these numbers, and this is a calculation that would have to be checked because the type of technology they use is also sensitive to gas as well as the oil velocity.

Let me emphasize that our scientific analysis is still a work in progress and as you can tell from the range of estimates, there is a significant difference between the lowest possible estimate and the highest possible estimate. In the coming days we'll be refining our estimates further and also developing an estimate that combines all of these data points and methodologies into a best estimate after the riser was cut.

Finally we are posting data on a new Website that you can find on the DOE Website, and it's been established by the hard work of many DOE colleagues, so that the general public can look at the same information that our scientists are studying. Let me conclude by thanking all the scientists who are working so hard on this challenge. Thank you.

Frank Quimby: Okay. Operator are we ready for questions?

Coordinator: Thank you. We will now begin with a question and answer session. If you would like to ask a question, please press star and 1 on your phone. At the prompt record your name clearly. Again that's star 1 to ask a question. Please stand by for the first question.

Our first question is from Joel Achenbach, Washington Post. Your line is open.

Joel Achenbach: Thank you Doctor McNutt. Thanks for this news conference. Can you tell us, with the Woods Hole group, you said that translates to 25,000 barrels a day potentially. Is - what would be the upper limit? Can you give us the range in barrels per day? And secondly, how are you going to reconcile these different numbers and why are they so different?

Marcia McNutt: Okay Joel good question. The Woods Hole upper limit is potentially about maybe 10,000 barrels a day above the level that we're getting from the video group, but the - each of these methods has slightly different systematic biases in them. And we understand that as scientists and so that doesn't worry us.

We know that ultimately when all the oil is captured from this well -- and we hope that would be very soon -- we will be able to go back and understand better how in the future we actually would be able to understand from day one what the flow from a leaking well would be. And that's our goal from this, is to understand these biases and do it better next time. We know some are systematically high and some are systematically low.

Frank Quimby: Next question?

Coordinator: Our next question is from Seth Borenstein, Associated Press. Your line is open.

Seth Borenstein: Yes thank you Doctor McNutt for doing this. On the Woods Hole one, first you said - can you tell us who in Woods Hole because I must have missed that or I didn't see that in any of the earlier things.

And second you're using 40% flow of oil from the pipe. Why use 40 when for example, BP on May 21 in a press release said it's 50%. Are you - is there a reason you're using a lower number than even BP admits? And is the 50,000 barrels a day number using still 40% flow or is that using a higher flow? Why is that one higher than - as high as - you know why is that double the 25,000 barrels?

Marcia McNutt: Okay. Seth thank you for that question. That's a really good one. I think there has been a lot of confusion on this oil to gas ratio. BP actually has estimates of what is the oil gas ratio because they had samples of this well beforehand and it was 0.29. What they are producing right now from the top hat is 0.37.

But what has been assumed from what came out in one of the press releases that they had from the RITT tool was I think the 0.5. And we know that what comes up these risers when they're only capturing part of the flow is a biased number. So that's why you see these numbers all over the board. Oh, and from Woods Hole is Rich Camilli and Andy Bowen.

Frank Quimby: Next question?

Coordinator: Our next question is from Dan Franklin from the Huffington Post.

Dan Franklin: Yeah hi I'm sorry. I'm afraid I'm actually a little bit confused as to what the numbers were for the Woods Hole Team. It was 25,000 to what? You had said something about 10,000 above some other one. So what is the Woods Hole Team - what's the range for the Woods Hole Team? And are there any results yet from Dr. Chu's survey?

Marcia McNutt: Okay yeah. The upper bound of the Woods Hole group is if you make a lot of assumptions on what they're actually imaging, you'd probably get to about

50,000 if you - you know, make some assumptions that they weren't quite willing to make but you know, if I make them for them. And the other part of your question was - I'm sorry. What was it again?

Dan Franklin: Dr. Chu's...

Marcia McNutt: Oh, Dr. Chu. Dr. Chu's group does not have results yet because they are waiting for a differential pressure measurement to be made of the difference between the pressure inside the top cap and outside the top cap. It turns out that they can get flow rate of what's not currently being captured in terms of the flow that would be varying by factors of 2, 3 or 4 depending on very small differences in pressure inside versus outside the cap.

So that's why they want that measurement to be made. And BP is cooperating as quickly as they can to get that pressure measurement made, and so we hope to have that within the next day or two.

Frank Quimby: Next question?

Coordinator: Our next question is from Rob Hendin from CBS News. Your line is open.

Robert Hendin: Yes hi doctor. Thank you for doing this press conference. I wondered if you could just say in plain English what is the lowest estimate of the flow before June 3, and what is the highest estimate of the flow to give us a range in plain English without going into all of the detailed scientific methodology because frankly, for me it doesn't mean anything.

Marcia McNutt: Well, the lowest estimate that we're seeing that the scientists think is credible is probably about 20,000 barrels, and the highest that we're seeing is probably a little over 40,000 -- somewhere around there. Maybe a little bit more

depending on how - whether there are any systematic issues with gas in the Woods Hole estimates.

Frank Quimby: Next question?

Coordinator: The next question comes from Carl Sears, NBC News. Your line is open.

Carl Sears: Yes thank you. With all these different methodologies in play, will it ever be possible to get a precise number of the flow rate or is this just going to be an average of six different groups?

Marcia McNutt: Yes. Certainly there will be - it'll be possible to get a precise number because BP has been instructed of course, to capture 100% of the flow. When they do, we will go back to all of these groups and take a look at what their estimates were. We will find out what are the systematic biases in these different methodologies, and we will learn so much more about measuring oil in the ocean that we will be able to do a much better job next time in terms of how we go about measuring the release of oil and the inventory of oil in the ocean.

Frank Quimby: Operator we have time for one final question.

Coordinator: Okay. Our last question is from Patricia DiCarlo, CNN. Your line is open.

Patricia DiCarlo: Hi yes doctor thank you for - my question is, does the scientific teams now have additional video that they are interpreting after the riser was cut? Has that video been made available to all of the scientific teams or has it been made available to the media -- the high resolution video.

Marcia McNutt: Oh yes they do. Absolutely. High resolution video is - in fact it's been actually posted online on the DOE Website and in fact, yes. And it's - or maybe it's

going to be posted soon but the scientists are actually drowning in high resolution video -- absolutely.

Frank Quimby: Thank you very much. That concludes today's news conference.

Coordinator: Thank you for participating. Please disconnect your line.

END