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From: Marcia K McNutt <mcnutt@usgs.gov>
Sent: Wed, 4 Aug 2010 15:17:45
To: GS FOIA 0105 <foia0105@usgs.gov>
Subject: Fw: press issues

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----- Forwarded by Janet N Arneson/DO/USGS/DOI on 08/04/2010 03:17 PM -----

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Date: 06/09/2010 11:04 AM

Subject: press issues

Hi all. I talked to an AP reporter (Seth Borenstein) yesterday who was pushing me for updates to the FRTG numbers. I explained to him that I still believe my original measurements from May 13 were realistic when adjusted for GOR and other issues. I told him I wasn't going to put any new numbers in the media but that he could make those adjustments himself and report that number, if he wanted to. Well, the quote that appeared in the AP story is below and it is carefully worded to sound like I gave out some preliminary FRTG numbers for flow before the riser cut. You may be asked to comment on this. I recommend telling anyone who asks about this quote that the numbers come from the reporter and not the FRTG. Sorry for the confusion...

"In an interview with The Associated Press, team member and Purdue University engineering professor Steve Wereley said it was a "reasonable conclusion" but not the team's final one to say that the daily flow rate is, in fact, somewhere between 798,000 gallons and 1.8 million gallons."

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-----Original Message-----

From: Franklin Shaffer [mailto:Franklin.Shaffer@NETL.DOE.GOV]
Sent: Monday, June 07, 2010 11:09 PM
To: ira.leifer@bubbleology.com; Bill.Lehr@noaa.gov; Marcia K McNutt
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mark_sogge@usgs.gov
Subject: RE: draft conclusions

Regarding the second statement about the team having more video samples now, I will simply say again that all of the video samples we have, combined, are less than 1% of the period over which we are asked to estimate total average flow rate.

And we have been able to get velocity data from about 30 minutes or less of the video. So our estimate of total average oil flow rate over a period of more than one month is based on data sampled over a period that is <0.05 % of the total period.

I don't know why I didn't realize this before. I guess I looking at the leaves with a microscope and failed to see the entire forest.

Frank

>>> "Marcia K McNutt" <mcnutt@usgs.gov> 6/7/2010 10:05 PM >>>

Bill et al.:

Does the team also want to consider providing some context for the policy folks who will be the greatest consumers of this information of why the lower range of these numbers is (slightly) higher than the lower bounds previously provided and why you are now more confident providing an upper bound?

I hesitate to put words into your mouth, so correct this if this is wrong. Seems to me that two things have changed that are worth mentioning that would allow policy makers to have added confidence in your results, namely:

- (1) there is reduced uncertainty in the oil/gas ratio, and in fact the number you now prefer is larger than what the previous lower bounds were based on;
- (2) you have been provided with more complete video segments that allowed analysis of longer time periods in order to assess whether the flow estimates you had were representative of low, average, or high flow conditions.

Marcia

From: ira leifer <ira.leifer@bubbleology.com> [mailto:ira leifer <ira.leifer@bubbleology.com>]

Sent: Monday, June 07, 2010 9:27 PM

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Subject: Re: draft conclusions

Dear Bill and colleagues,

I would like to suggest adding the words in <<<below>>>, to really emphasize that our numbers are only as good for the time of the data. It is possible that the data set of five minutes prior was double the flow (or half). I consider this a very important statement, as BP could release such video tomorrow (or in two years). I know Bill that the text you have written expresses this idea, but I really think it needs to be very very clear, and right near the numbers to reduce the likelihood of this conclusion being misused.

I also plan in my report to note that the analysis is of the oil and bubble plumes we could observe.

However, what I think we can congratulate ourselves. Given decent video data, we all analyzed the data by different approaches and arrived at a similar conclusion. Of course the conclusion is only as good as the data and our overall understanding of the processes involved. But, I think we can express confidence that as we receive other data, we have the

capability to analyze it as well as is technically feasible.

Warmest regards,

Ira

On Jun 7, 2010, at 4:23 PM, Bill Lehr wrote:

As with earlier estimates, the conclusions in this report are only to aid the Response, not to determine the final Federal estimate of spillage. Because of time and other constraints, only a small segment of the leakage time was examined, and assumptions were made that may through later information or analysis be shown to be invalid. For example, the Team assumes that the average flow between the start of the incident and the insertion of the RITT was relatively constant and the time frames that were included in the examined videos were representative of that average. If this were not true, then the actual spillage may differ significantly from the values stated below.

Most of the experts have concluded that, given the limited data available and the small amount of time to process that data, the best estimate for the average flow rate for the leakage prior to the insertion of the RITT is between 25 to 30 thousand bbl/day. However, it is possible that the spillage could have been as little as 20,000 bbl/day or as large 40,000 bbl/day. <<<<It also is possible that the data provided was unrepresentative of typical seabed emissions at that time period, with greater uncertainty for earlier time periods.>>>>. Further analysis of the existing data and of other videos not yet viewed may allow a refinement of these numbers.

The team has not estimated the flow rate during the period of

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active measures to reduce leakage such as after the insertion of the RITT or during and immediately after Top Kill. It is expected that the flow rate increased with the severing of the riser above the BOP. However, the team is still examining the video of that flow and will produce an addendum, if appropriate, with an updated leakage estimate.

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