

From: Steve Lehmann [steve.lehmann@noaa.gov]
Sent: Sunday, May 16, 2010 10:40 AM
To: bill.lehr@noaa.gov; charlie.henry@noaa.gov; demian.bailey@noaa.gov;
william.conner@noaa.gov
Subject: Re: Request to BP for Longer Video of Pipe Flow:

Bill

I am cycled out and this issue has been both passed to the FOSC, Charlie and BP executives with the urgency required. The FOSC was passing this to the IC (suttlles). It was first requested Friday night and again through the FOSC yesterday. As you know, the USCG is looking at several options and opinions including hiring Sandia Labs (will be done today) to coordinate a definitive scientific opinion that can be seen as truly third party.

No doubt, getting the Admin of NOAA involved will grease those skids and ease the tensions and burdens of the local SSC. This has always been an option to them, but we wanted to try locally first (so does the FOSC).

I'll pass this to the local SSCs and they will set this as a priority, I have no doubt.

Thank you, steve

Blackberry message from:
Steve Lehmann, NOAA-SSC
Please excuse typos

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

From: Bill.Lehr@noaa.gov <Bill.Lehr@noaa.gov>
To: Jane Lubchenco <Jane.Lubchenco@noaa.gov>
Cc: Steve Murawski <Steve.Murawski@noaa.gov>; David Kennedy <David.Kennedy@noaa.gov>; William Conner <William.Conner@noaa.gov>; Margaret Spring <Margaret.Spring@noaa.gov>; 'Alexander.E.MacDonald@noaa.gov' <Alexander.E.MacDonald@noaa.gov>
Sent: Sun May 16 09:10:00 2010
Subject: Request to BP for Longer Video of Pipe Flow:

Request to BP for Longer Video of Pipe Flow:

Should the latest effort by BP to insert the 'straw' into the pipe succeed, this note will be superfluous. Should this latest BP capping attempt fail, there will be increasing pressure to estimate release rate.

Professor Wereley of Purdue and others have estimated a much larger release than 5000 bbl/day. Based upon discussions with BP, these estimates may be too high because:

- The pipe opening is partially collapsed and is roughly 70% of the original cross-section
- Much of the release is either gas or dissolved gas in the fluid
- Flow is restricted further by a 6 inch interior pipe that does not carry any exiting fluid
- The short clip is not representative of a slower average flow

NOAA/ORR has arranged for fluid dynamics experts to repeat and extend the

methods of Prof. Wereley but we need BP to confirm the above points, provide us with their best information on the exiting gas-liquid constituent properties, and give us a much longer video clip of the pipe release. It is not our intention to release this clip to the public. That is a decision for the JIC. Rather, it will be used to allow the experts to better estimate flow rate. The continuing stonewalling of BP to repeated requests for the video are not in the best interests of anyone.

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

From: Jane Lubchenco <Jane.Lubchenco@noaa.gov>
Date: Saturday, May 15, 2010 8:59 am
Subject: RE: Paper on Acoustic Measurement Methodology
To: "bill.lehr@noaa.gov" <Bill.Lehr@noaa.gov>, Steve Murawski <Steve.Murawski@noaa.gov>
Cc: David Kennedy <David.Kennedy@noaa.gov>, William Conner <William.Conner@noaa.gov>, Margaret Spring <Margaret.Spring@noaa.gov>, "Alexander.E.MacDonald@noaa.gov" <Alexander.E.MacDonald@noaa.gov>

> All - If we are running into ANY roadblocks in getting information
> from BP, please let HQ folks know asap; we will work the right
> channels to get it. I was told yesterday by Sec Napolitano and Sec
> Salazar that we can get anything we need from BP.
> FYI: Steve Chu is saying that the video is insufficient for the
> calculations and is working on getting a faster camera down there.
> Tom Hunter is his point person on this - in Houston.
> Jane

>

> -----Original Message-----

> From: Bill Lehr [
> Sent: Saturday, May 15, 2010 11:47 AM
> To: Steve Murawski
> Cc: Jane Lubchenco; David Kennedy; William Conner; Margaret Spring;
> 'Alexander.E.MacDonald@noaa.gov'
> Subject: Re: Paper on Acoustic Measurement Methodology
>
> Steve,
>
> My suggestion for a couple of reviewers for the WHOI method, both of
> whom are actively involved in the spill response:
>
> Kurt Hansen of USCG R&D, who evaluated their TETHYS system for oil
> detection in a paper to the 2008 AMOP Technical Seminar. While
> promising, it did have limitations.
>
> Ir Leifer of UCSB who has researched the use of acoustic methods for oil
> location on the California seeps.
>
> My recommendation is that we continue to support the WHOI proposal but
> also conduct independent checks of their results. I have requested Prof.
> Riley of the U. of Washington to measure the plume using PIV methods
> employed by Professor Wereley of Purdue (the 70,000 bbl/ day man). Dr
> Pooji Yapa of Clarkson University, whose well blowout model we are using
> to initialize the subsurface oil transport, is doing comparison of the
> DEEPSpill experiment videos and the short BP clip of this release. I
> think that Prof Savas of UC Berkeley, an expert on fluid dynamics, is
> amenable to re-doing his preliminary calculations on the flow if we
> provide him with better data. Requests have been made to Fellows of
> the American Physical Society Fluid Dynamics Division by Prof. Lashemas
> of UCSB, who promised to forward on the names of any volunteers.

>
> We should shortly have volume estimates of the surface oil volume from
> the NASA plane data. By combining these measurements with our oil
> behavior model, cleanup reports, and a good estimate of source
> strength, we may get a handle of how much oil remains in the water column.
>
> A word of caution. Preliminary results indicate that the spill is larger
> than the 5000 bbl/day number. One point of obstruction we are facing is
> the reluctance of BP to provide a longer video of the pipe leak. Our
> academic experts say that a minimum of ten minutes is needed to get
> decently reliable answers.
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>
> Regards,
>
> Bill Lehr
> Senior Scientist
> NOAA/ORR
>
>
>
> On 5/15/10 6:02 AM, Steve Murawski wrote:
> > Attached is a paper from the WHOI folks on the methods they propose
> > to
> > estimate the well flow rates. Standing by for Admiral Neffinger for
> > the go ahead.
> >
> > -Steve