



**FW: FW: FRTG**

**Pond, Robert** to: mcnutt  
Sent by: **Robert.G.Pond@uscg.mil**

05/24/2010 01:36 PM

Cc: "Russell, Anthony LCDR", "Mark Miller - NOAA", jason.rolfe,  
james.witkop, Kevin.Kunkel, "Tobiasz, Tim CDR", "Greene,  
Lawrence CDR", "Grawe, William", "Moore, David"

Excellent thanks, will pass this to the Interagency Solutions Group members here and to the NIC Situation unit to ensure continuing awareness....

Bob Pond

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

From: mcnutt@usgs.gov [mailto:mcnutt@usgs.gov]  
Sent: Monday, May 24, 2010 1:17 PM  
To: Pond, Robert  
Cc: Pond, Robert; Russell, Anthony LCDR; Hayes, David  
Subject: RE: FW: FRTG

Here is my update, Bob.

\*\*\*\*\*  
Dr. Marcia McNutt  
Director  
US Geological Survey  
12201 Sunrise Valley Drive, MS 100  
Reston, VA 20192  
(703) 648-7411  
(703) 648-4454 (fax)  
(571) 296-6730 (cell)  
mcnutt@usgs.gov  
www.usgs.gov  
\*\*\*\*\*

From: "Pond, Robert" <Robert.G.Pond@uscg.mil>  
To: <mcnutt@usgs.gov>  
Date: 05/24/2010 11:44 AM  
Subject: RE: FW: FRTG  
Sent by: Robert.G.Pond@uscg.mil

Marcia

They are looking for

1. a one/two page executive summary of the FRTG Project Plan (similar to what David Moore sent you yesterday), 2. a list of team members. and
3. any update on the following bullets that were sent forward for the NIC to

use on the governor's call with the President at noon today.

Flow Rate Technical Group:

§ Dr Marsha McNutt, Director ,USGS, has assumed leadership of the Flow Rate Technical Group (FRTG).

§ The team is tasked with assessing the rate of release from the Deepwater Horizon BP oil well and is still working to bound the magnitude of the rate of flow.

§ Indications at this point are that the rate of release is greater than the original estimate of 5000 barrels per day.

§ Results of the analyzes will also provide information to reconstruct the flow history that will support mitigation and impact assessments and decisions.

They want the message to emphasize that this a two-step (or multi-step) peer reviewed process and to highlight technologies being used, as well as diversity of experts contributing.

Bob Pond

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

From: mcnutt@usgs.gov [mailto:mcnutt@usgs.gov <mailto:mcnutt@usgs.gov> ]  
Sent: Monday, May 24, 2010 11:32 AM  
To: Pond, Robert  
Subject: Re: FW: FRTG

Bob-

Can you please be clear what the questions are? Is it just for a list of the team members and a confirmation that it is a two-step process? Thanks.

Marcia

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Dr. Marcia McNutt  
Director  
US Geological Survey  
12201 Sunrise Valley Drive, MS 100  
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From: "Pond, Robert" <Robert.G.Pond@uscg.mil>  
To: "McNutt, Marcia" <mcnutt@usgs.gov>  
Cc: "Tobiasz, Tim CDR" <Timothy.A.Tobiasz@uscg.mil>, "Greene, Lawrence CDR" <Lawrence.E.Greene@uscg.mil>, "Grawe, William" <William.R.Grawe@uscg.mil>, "Witkop, James" <James.Witkop@mms.gov>, "Mark

Miller - NOAA" <Mark.W.Miller@noaa.gov>, <Jason.Rolfe@noaa.gov>, "Moore,  
David" <David.M.Moore@uscg.mil>, <vlabson@usgs.gov>  
Date: 05/24/2010 11:18 AM  
Subject: FW: FRTG  
Sent by: Robert.G.Pond@uscg.mil

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Dr McNutt

In your role as FRTG lead in support of the National Incident Commander,  
request your team provide answers to the Q's below by 1400 today.

Also request verification whether the CONOP attached remains valid, or whether  
it has evolved over the weekend since you have assumed lead for the Group.

Respectfully

Bob Pond  
NIC Interagency Solutions Group Coordinator  
202-372-1723

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

From: O'Neil, Christopher LCDR  
Sent: Monday, May 24, 2010 8:56 AM  
To: Pond, Robert  
Cc: Tobiasz, Tim CDR; Russell, Anthony LCDR  
Subject: FW: FRTG

Gents

I backed this off from a news release to updated fact sheet.  
Can frtg please look at the departments requst for info below and provide a  
few bullets?  
Thanks

Sent with Good (www.good.com)

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

From: Russell, Anthony LCDR  
Sent: Monday, May 24, 2010 08:30 AM Eastern Standard Time  
To: O'Neil, Christopher LCDR  
Subject: FW: FRTG

Chris,

Can you take the update release (described below) for action.

LCDR Tony Russell  
Press Secretary to the National Incident Commander  
Deepwater Horizon Response  
W- (202)372-4528  
C- (202)841-1462

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

From: Adam.Fetcher@dhs.gov [mailto:Adam.Fetcher@dhs.gov <

mailto:Adam.Fetcher@dhs.gov> <mailto:Adam.Fetcher@dhs.gov <  
mailto:Adam.Fetcher@dhs.gov> > ]  
Sent: Sunday, May 23, 2010 10:10 PM  
To: Smith, Sean; Stevens, Clark  
Cc: Russell, Anthony LCDR  
Subject: RE: FRTG

From: Stevens, Clark  
To: Fetcher, Adam  
Cc: Sean Smith <Sean.Smith@dhs.gov>  
Sent: Sun May 23 21:45:39 2010  
Subject: FRTG

Adam - tomorrow we need to do a release on the progress of the FRTG, provide some additional specifics etc.

I think the released should be framed as an updated on efforts to date.

The centerpiece can be the technologies that have been deployed to generate this important number.

It should re-emphasize that this is a two step process that includes a built in peer review effort.

It should also include a list of the key team members of both groups.

Sean and I talked about it tonight, so he can help provide any additional direction.

You should also feel free to reach out to Mike White at the CG who is playing a major role on the team.

I think its ok for this to be a two pager.

Clark Stevens

Press Secretary

Office of Public Affairs

U.S. Department of Homeland Security

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FRTG.5.24.docx

## Flow Rate Technical Group (FRTG)

Update for Monday, May 24 1400 h

Submitted by Marcia McNutt, US Geological Survey, Team Leader

### New developments:

1. Dr. Marcia McNutt, Director US Geological Survey and Science Advisor to the Secretary of the Interior, has assumed the leadership of the FRTG.
2. An additional team has been created to provide an estimate of the flow from the Deepwater Horizon spill under the leadership of Vic Labson of USGS. This team will estimate the oil flow rate based on mass balance calculations using remote sensing of surface oil from the AVIRIS airborne instrument, correcting for oil skimmed, burned, evaporated, and dispersed on the surface and subsea. This team's work is currently in peer review.
3. Video data provided to the plume modeling team under the leadership of Bill Lehr of NOAA on Sunday proved to be of excellent quality over the kink in the riser, but with poor illumination at the end of the riser. The team is working currently to get a quantitative estimate of the flow at the kink in the riser along with error bounds on that estimate.
4. BP engineers worked through the night to find better video for the end of the riser in the only 36-hour window that meets the team's requirements in terms of having no dispersants being applied, no RITT in the riser, and before the trench was excavated. They produced the best segment they could find and those data are in route at this time to the team.
5. I requested that BP also produce a data segment from a 6-hour period last night when the RITT tool was consistently producing oil at the *Enterprise* at a rate (when averaged over 24-hours) of 4000 bpd and gas at 12 million cu ft/day. At that time, flow out of the end of the riser was more sluggish, and might be easier for the team to analyze. They can then add in the known yield at the surface.
6. The other teams, the reservoir modeling (Don Maclay, MMS, lead) and nodal modeling (George Guthrie, DoE, lead) teams, are in place and putting together their information requirements. They are operating on a longer timeline for producing results (see below) but are reporting in regularly.

### My expectations:

The USGS "mass balance" calculation will produce an upper and lower bound on flow rates that will represent an average value over the time period from April 20<sup>th</sup> to May 17<sup>th</sup>. It will not be able to resolve variability within that time period, and could potentially be biased on the low side by the uncertainty in the amount of oil dispersed from the surface. Other quantities, such as subsurface oil dispersed, evaporation rate, oil burned, and oil skimmed, are more easily estimated.

The plume modeling team, based on my participation in an hour-long phone call yesterday and a phone call with NIST Director Pat Gallagher, is likely to produce a number with very large uncertainty. It will represent an estimate of the flow for one period in time, which may or may not be representative. The team assembled is very competent and does understand the difficulty of their task.

Both teams are pointing to a release rate larger than the current 5000 bpd. But the fact that the RITT can pull this amount with discharge still coming from the leaking riser is excellent evidence that the true rate of release is greater than the number that has been widely quoted for the last month.

**Current timeline:**

I expect by late today to have the USGS result through peer review. By tomorrow I should have a preliminary result from the plume modeling group if their current video is acceptable. We will then confer by phone and come up with a revised rate with uncertainty bounds. I hope to have that to you by tomorrow evening, assuming I can get a quick review of the result.

The reservoir and nodal groups are working on a 4-week timeline, and we will also be working to refine the earlier estimates on that timeline as well.