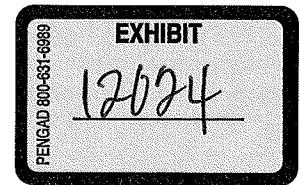


**From:** Howard, John (CDC/NIOSH/OD)  
**To:** Snawder, John E. (CDC/NIOSH/DART)  
**CC:** DeBord, Gayle (CDC/NIOSH/DART); Lotz, William G. (Greg) (CDC/NIOSH/DART); Kitt, Margaret (CDC/NIOSH/OD); Hearl, Frank J. (CDC/NIOSH/OD)  
**Sent:** 7/2/2010 8:40:15 AM  
**Subject:** RE: bulk samples of cleaners  
**Attachments:** image001.png; image002.png



John, this is a promising collaboration. Thanks for reaching out.

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**From:** Snawder, John E. (CDC/NIOSH/DART)  
**Sent:** Thursday, July 01, 2010 8:59 AM  
**To:** Bernard, Bruce P. (CDC/NIOSH/DSHEFS); Eisenberg, Judith (CDC/NIOSH/DSHEFS)  
**Cc:** DeBord, Gayle (CDC/NIOSH/DART); Blount, Benjamin (CDC/ONDIEH/NCEH); Osterloh, John (CDC/ONDIEH/NCEH); Lotz, William G. (Greg) (CDC/NIOSH/DART); Howard, John (CDC/NIOSH/OD)  
**Subject:** RE: bulk samples of cleaners

Good morning,

I was able to talk to Jorunn Kristine Bjørnevoll from Concantero this morning. They are the laboratory that has been doing some benzene biomonitoring in the Gulf. The ships they've received samples from are the Viking Poseidon and 5 others. They are the vessels operating some of the ROVs that are working down at the source. Jorunn reported that they are seeing slightly elevated levels ( ~25 ppm) of benzene metabolites in these workers. even correcting for smoking. They were also able to figure out that the highest exposure they saw was due to improper doffing of PPE. The worker consistently removed things out of order and this led to his higher numbers. It was pointed out to him and they saw them fall back in line. They are still receiving samples and soon should have some numbers to compare to other vessels in other locations. They are willing to share their general findings and we plan to talk in a week or too.

John

John E. Snawder, Ph.D., D.A.B.T.  
Leader, Biomonitoring Research Team  
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Phone: 513-533-8496 Fax: 513-533-8510

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**From:** Snawder, John E. (CDC/NIOSH/DART)  
**Sent:** Wednesday, June 30, 2010 3:44 PM  
**To:** Bernard, Bruce P. (CDC/NIOSH/DSHEFS); Eisenberg, Judith (CDC/NIOSH/DSHEFS)  
**Cc:** DeBord, Gayle (CDC/NIOSH/DART)  
**Subject:** RE: bulk samples of cleaners

Judi, Bruce

Attached is a biomonitoring plan, some language on the methodologies and there are a few bracketed comments in red to let you know what else is going on and available. I will be able to provide 2 people to assist. Depending on when you're leaving it might be me but, 2 will be easy to provide.

I will keep plugging away and working out some more analysis possibilities.  
John

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**From:** Bernard, Bruce P. (CDC/NIOSH/DSHEFS)  
**Sent:** Wednesday, June 30, 2010 2:56 PM

**To:** Snawder, John E. (CDC/NIOSH/DART)  
**Subject:** RE: bulk samples of cleaners

John:

Allison and I met with Gail this morning about biomonitoring. We would like to send two people from your group. If you wouldn't mind sending me the information that might add to that of Cindy Striley's table (which is really helpful)... that would be great – especially if there is something about the glycol ether derivatives... Thanks.

Bruce

**Bruce P. Bernard, M.D., M.P.H.**  
**Captain, USPHS**  
**Chief Medical Officer**  
**Health Hazard Evaluations and Technical Assistance**  
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**From:** Snawder, John E. (CDC/NIOSH/DART)  
**Sent:** Wednesday, June 30, 2010 9:44 AM  
**To:** Bernard, Bruce P. (CDC/NIOSH/DSHEFS)  
**Subject:** RE: bulk samples of cleaners

Bruce

I need to see Dr. Like at 10:00. If you like I can just provide you the whole write-up for the collection, storage and analysis. Since we are not meeting at 11:00 ((any idea why it's canceled). I will have time to take care of that by noon. I am playing phone tag with the people in a European lab that has done some biomonitoring. Since the 11:00 am meeting is canceled I can try and call her before she needs to catch a train. Also, I had also helped one of the labs that was going out very early in the response, set up a biomonitoring plan for their staff. I will see if they were able to do it and have any results.

John

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**From:** Bernard, Bruce P. (CDC/NIOSH/DSHEFS)  
**Sent:** Tuesday, June 29, 2010 7:07 PM  
**To:** Snawder, John E. (CDC/NIOSH/DART)  
**Subject:** RE: bulk samples of cleaners

John:

Could you be more specific on the compounds that you plan on measuring in terms of specific PAHs, and VOCs? I have to write up a protocol... I was told that you will split samples and send them down to the NCEH Labs to be run and they will compare them to the levels they obtained in the last NHANES data analysis.

I still have no idea when this training will take place or how many people we can test – how many urine cups can you have that we could practically mail back on dry ice, I suppose...

Bruce

**Bruce P. Bernard, M.D., M.P.H.**  
**Captain, USPHS**  
**Chief Medical Officer**  
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**From:** Snawder, John E. (CDC/NIOSH/DART)  
**Sent:** Tuesday, June 29, 2010 5:13 PM  
**To:** Bernard, Bruce P. (CDC/NIOSH/DSHEFS)  
**Subject:** RE: bulk samples of cleaners

Just keep us posted. We'll help all we can.  
If you get bored and want to learn more than you ever thought possible about chemicals in cleaning products and the like...this web site really is an excellent resource.  
<http://householdproducts.nlm.nih.gov/index.htm>  
John

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**From:** Bernard, Bruce P. (CDC/NIOSH/DSHEFS)  
**Sent:** Tuesday, June 29, 2010 5:09 PM  
**To:** Snawder, John E. (CDC/NIOSH/DART); Eisenberg, Judith (CDC/NIOSH/DSHEFS)  
**Subject:** RE: bulk samples of cleaners

The time is still unsure – the rumor is that additional training of all workers will be required by OSHA, so they will be returning to Venice and the Commander's Camp next week. I have NOT gotten a response from my email to find out the specifics yet.

Bruce  
Bruce P. Bernard, M.D., M.P.H.  
Captain, USPHS  
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**From:** Snawder, John E. (CDC/NIOSH/DART)  
**Sent:** Tuesday, June 29, 2010 4:59 PM  
**To:** Bernard, Bruce P. (CDC/NIOSH/DSHEFS); Eisenberg, Judith (CDC/NIOSH/DSHEFS)  
**Subject:** RE: bulk samples of cleaners

Judi, Bruce  
I am waiting to hear back from Ben Blount (he's out until Friday) but, he left some contacts for other folks. The biggest issue with propylene glycol and dipropylene glycol butyl ether is that at really low exposures they sort of get lost in normal metabolism. Higher exposures and you start to see parent, and glucuronide/sulfated metabolites. But likely irritation complaints before that. That's why I'm checking with Ben. Methods do exist for some of the other glycol ethers.

I will try and get in touch with Anila Bello at HSPH. She has been studying exposures and health effect of cleaning agents on health care workers. I'll see if she's done any biomonitoring and can offer a little guidance.

When might this occur? Leaving this weekend or during the week. I have some folks available over the weekend, I am available Monday night or Tuesday morning (I am supposed to be at Sauder Village over the weekend). The week of the 12<sup>th</sup> Barb may have to collect a sample in Indy for an HHE with Elena, Belinda and I are supposed to do site visits with DoD folks at LRAFB but, we have 3-4 others primed and ready to go and sample receivers standing by here.

John

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**From:** Bernard, Bruce P. (CDC/NIOSH/DSHEFS)  
**Sent:** Tuesday, June 29, 2010 11:13 AM  
**To:** Eisenberg, Judith (CDC/NIOSH/DSHEFS); Snawder, John E. (CDC/NIOSH/DART)  
**Subject:** FW: bulk samples of cleaners

John:

We are looking to see if the Corexit 9500 dispersant or the cleaners might have something we could measure in urine.... Ardy's lab is finding that COREXIT 9500 contains propylene glycol and dipropylene glycol butyl ether; she mentioned that she also saw a peak for 2-butoxyethanol in the samples she has and felt that it is likely there in small amounts, possibly as a contaminant (it is not specifically identified on the MSDS).

With this in small amounts, would it be worth testing for in the urine? Do you know of anything that we could test for regarding the dispersant or cleaners? (I asked Judi Eisenberg to work this out with you... but here I am asking the same thing.

It looks like we may go out next week to Venice LA, where we may have large groups attending training to do some urine testing ...would you have any staff that may go out for the week, arriving on Sunday night?

Bruce

**Bruce P. Bernard, M.D., M.P.H.**  
**Captain, USPHS**  
**Chief Medical Officer**  
**Health Hazard Evaluations and Technical Assistance**  
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**HHE** Health Hazard  
Evaluation Program

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**From:** Seitz, Teresa A. (CDC/NIOSH/DSHEFS)  
**Sent:** Tuesday, June 29, 2010 10:49 AM  
**To:** Bernard, Bruce P. (CDC/NIOSH/DSHEFS)  
**Subject:** FW: bulk samples of cleaners

MSDSs.

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**From:** Burton, Nancy C. (CDC/NIOSH/DSHEFS)  
**Sent:** Tuesday, June 29, 2010 10:35 AM  
**To:** Grote, Ardith A. (CDC/NIOSH/DART) (CTR); Seitz, Teresa A. (CDC/NIOSH/DSHEFS)  
**Subject:** FW: bulk samples of cleaners

FYI

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Industrial Hygiene Team Leader  
CDC/NIOSH  
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**From:** Niemeier, Richard T. (Todd) (CDC/NIOSH/DSHEFS)  
**Sent:** Tuesday, June 29, 2010 10:34 AM  
**To:** Dowell, Chad (CDC/NIOSH/DSHEFS); Burton, Nancy C. (CDC/NIOSH/DSHEFS)  
**Subject:** FW: bulk samples of cleaners

Not sure if you already have these but here are the MSDSs for the three cleaners that collected bulk samples for...  
Todd

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**From:** Grote, Ardith A. (CDC/NIOSH/DART) (CTR)  
**Sent:** Tuesday, June 29, 2010 10:25 AM  
**To:** Niemeier, Richard T. (Todd) (CDC/NIOSH/DSHEFS)  
**Subject:** RE: bulk samples of cleaners

yep

Ardith A. Grote  
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Home: [artegrote@fuse.net](mailto:artegrote@fuse.net)

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**From:** Niemeier, Richard T. (Todd) (CDC/NIOSH/DSHEFS)  
**Sent:** Tuesday, June 29, 2010 10:22 AM  
**To:** Grote, Ardith A. (CDC/NIOSH/DART) (CTR)  
**Cc:** Burton, Nancy C. (CDC/NIOSH/DSHEFS)  
**Subject:** FW: bulk samples of cleaners

Ardi- I wanted to make sure that you had the correct key for sample #'s for the bulk samples of cleaners that I collected last week for the oil spill. See below. Let me know if you have any questions.

Thanks,  
Todd

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**From:** Niemeier, Richard T. (Todd) (CDC/NIOSH/DSHEFS)  
**Sent:** Thursday, June 24, 2010 1:56 PM  
**To:** Burton, Nancy C. (CDC/NIOSH/DSHEFS)  
**Cc:** Dowell, Chad (CDC/NIOSH/DSHEFS)  
**Subject:** bulk samples of cleaners

Nancy- I tried to send this before but I think it didn't send right. Here is the sample submittal sheet for bulk samples of 3 cleaners that Chad asked us to collect today. We will plan to send these out tomorrow with Steve and Dave's samples for a Sat delivery. If you need them delivered tomorrow, let us know and we will make the 4 hr round trip to FedEx. Here is the key for the sample numbers:

236556 and 236800 CITRA Clean  
236549 and 236547 OMI CITRA Clean  
236543 and 236539 Pentene Clean.

Let me know if you have any questions.

Thanks,  
Todd