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MCRD PARRIS ISLAND
5090.3a

EMAIL REGARDING SAMPLING RESULTS FROM WELLS AT SITE 45 DRY CLEANING
FACILITY SPILL AREA MCRD PARRIS ISLAND SC
4/28/2008
U S GEOLOGICAL SURVEY

From: Koroma-Llamas.Lila@epamail.epa.gov
To: [Don A Vroblesky](mailto:Don.A.Vroblesky)
Cc: AmickMS@dhec.sc.gov; art.sanford@navy.mil; barkerjs@dhec.sc.gov; charles.cook2@navy.mil; darrel.pittman@usmc.mil; Kelly.Taylor2@ch2m.com; [Sladic, Mark](mailto:Sladic.Mark); mmcrae@TechLawInc.com; timothy.j.harrington@usmc.mil
Subject: Re: Fw: Site 45 Well Approval
Date: Monday, April 28, 2008 4:49:22 PM
Attachments: [pic17757.gif](#)

Thanks Don. That's what I needed to know. Will review all info and get back to you all soon.

Thanks,
Lila

Don A Vroblesky
<vroblesk@usgs.gov>
To
Lila
04/28/2008 02:01 PM
Koroma-Llamas/R4/USEPA/US@EPA
cc
AmickMS@dhec.sc.gov,
art.sanford@navy.mil,
barkerjs@dhec.sc.gov,
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darrel.pittman@usmc.mil,
Kelly.Taylor2@ch2m.com,
mark.sladic@ttnus.com,
mmcrae@TechLawInc.com,
timothy.j.harrington@usmc.mil
Subject
Re: Fw: Site 45 Well Approval

The temporary well surficial data in the "SL" horizon are on the map as diamonds and are labeled "Temporary well, March 2008." In places where samples were collected from shallower horizons, the shallower horizons always contained lower concentrations than the deeper horizons. The entire data set can be found on the Site45 website. The multi-level sample results represent a first attempt at an experimental procedure, and there are some uncertainties associated with the data. Because it was a first attempt, the recovery process took longer than anticipated, so the deepest sample was transferred to vials 45 minutes after the shallowest sample. That opens up the possibility of VOC loss from the deeper samples relative to the shallow samples. If I ever do it again, I will just have more people. If you are interested, a graph of the data is below; however, I am reluctant to use the data from that test

for management decisions at this point. The relative concentrations look more-or-less like the mass flux values from the EnvironFlux report (1/29/07), except that no vinyl chloride flux (<0.000 mg/m2/day) was detected by the passive fluxmeter, and the multilevel concentration data seem to indicate a significant presence of vinyl chloride.

(Embedded image moved to file: pic17757.gif)

Don A. Vroblesky, Ph.D.
Research Hydrologist
U.S. Geological Survey
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Stephenson Center
Columbia, SC 29210-7651
telephone (803) 750-6115

Koroma-Llama
s.Lila@epama
il.epa.gov

To
Don A Vroblesky <vroblesk@usgs.gov>
04/28/2008 cc
10:23 AM AmickMS@dhec.sc.gov, art.sanford@navy.mil,
barkerjs@dhec.sc.gov, charles.cook2@navy.mil,
darrel.pittman@usmc.mil, Kelly.Taylor2@ch2m.com,
mark.sladic@ttnus.com, mmcrae@TechLawInc.com,
timothy.j.harrington@usmc.mil
Subject
Re: Fw: Site 45 Well Approval

What about the recent temporary well Surficial Upper and Multilevel sample results downgradient from the secondary source area? When will we see those results?

Thanks,
Lila

Don A Vroblesky
<vroblesk@usgs.gov>
Lila To
04/28/2008 09:42 AM Koroma-Llamas/R4/USEPA/US@EPA
cc

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mmcrae@TechLawInc.com,
timothy.j.harrington@usmc.mil
Subject
Re: Fw: Site 45 Well Approval

This includes all of the relevant data collected to date. TetraTech data from temporary wells are included, but not data older than 2 years. Multiple samples were collected from monitoring wells, but only data from September 2007 are shown, for the sake of simplicity. Because there has been no data collected from new points in the deep aquifer, there has been no change in the hypothesis that ground water in that part of the aquifer flows generally southwest.

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To
charles.cook2@navy.mil, art.sanford@navy.mil,
koroma-llamas.lila@epa.gov, mark.sladic@ttnus.com,
04/23/2008 04:13 PM timothy.j.harrington@usmc.mil, mmcrae@TechLawInc.com,
AmickMS@dhec.sc.gov, darrel.pittman@usmc.mil,
Kelly.Taylor2@ch2m.com, barkerjs@dhec.sc.gov,
vroblesk@usgs.gov

cc

Subject

Fw: Site 45 Well Approval

Hi Charles,

Please include the entire team list when sending e-mails for team decisions.

We will have to look at this. Will let you know. But first, a couple of questions:

Is this reflective of all the samples drawn to date? I understood there have been some samples taken for which we do not yet have results. Please advise. I would like to see data for all samples taken to date before making this decision.

Also, has there been any change in opinion about Deep aquifer flow direction? Regardless, please add an arrow from the secondary source area showing the current thought as to deep aquifer flow direction.

Thanks,

Lila

----- Forwarded by Lila Koroma-Llamas/R4/USEPA/US on 04/23/2008 04:02 PM -----

"Cook, Charles
CIV NAVFAC SE"
<charles.cook2@navy.mil>
To
Lila
Koroma-Llamas/R4/USEPA/US@EPA,
04/23/2008 02:57 PM <AmickMS@dhec.sc.gov>,
<barkerjs@dhec.sc.gov>
cc
"Sladic, Mark"
<Mark.Sladic@tetrattech.com>,
"Sanford, Art F CIV NAVFAC SE"
<art.sanford@navy.mil>
Subject
FW: FW: Site 45 Well Approval

Lila and Sommer

Unless you have objections these are the final well locations selected by USGS based on the benefit of having recent temporary well data. Again, the "D Horizon" means deep well and SL horizon means surficial. It is

important to note the deep well is outside the source zone.

v/r
Charles Cook

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

From: Don A Vroblesky [<mailto:vroblesk@usgs.gov>]
Sent: Wednesday, April 16, 2008 11:10
To: Cook, Charles CIV NAVFAC SE
Cc: vroblesk@usgs.gov
Subject: Re: FW: Site 45 Well Approval
Importance: High

Please see the attached letter requesting approval of the monitoring well locations from the MCRD Partnering Team.

Thank you

Don Vroblesky
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telephone (803) 750-6115
(See attached file: Request for MW location approval.doc) (See attached file: Request for MW location approval.doc) (See attached file: Request for MW location approval.doc)