Message (Digitally Signed)

From: Saguibo, Tracy-Joy I CIV NAVFAC HI, OPHE3 [tracyjoy.saguibo@navy.mil]
Sent: 11/30/2016 11:36:50 PM
To: 'TU, LYNDSEY' [Tu.Lyndsey@epa.gov]
CC: Linder, Steven [Linder.Steven@epa.gov]; Pallarino, Bob [Pallarino.Bob@epa.gov]; Fukumoto, Janice L CIV NAVFAC HI, EV3 [janice.fukumoto@navy.mil]; Waki, Cory K CIV NAVFAC HI, EV1 [cory.waki@navy.mil]
Subject: RE: SOPs and Methods and analytes for Red Hill
Attachments: 5+ANA RSK175, rev 6 3-21-16 cc7.pdf; 5+HPL9056 rev 9 ANION 9-21-16 cc1.pdf; 5+ana8270SIM, rev 6 4-8-16 cc4.pdf; 5+ana8270, rev 10 11-15-16 cc1.pdf; 5+ANA8260, rev 17 6-29-16 cc5.pdf; 5+ANA8015G, rev 9 1-4-16 cc2.pdf; 5+ana8015, rev 7 04-05-16 cc18 .pdf; 5+ana8011, rev 2 1-4-16 cc1.pdf; 5+ANA6010, Rev 9 1-4-16 cc20.pdf; 5+ANA4500SiD, Rev 2 1-4-16 cc1.pdf; 5+ANA3500FeBc, rev 4 5-20-16 cc1.pdf; 5+ANA2320B, rev 3 Alkalinity 6-1-16 cc6.pdf; smime.p7s

Lyndsey,

Please see attached for our laboratory's (APPL Inc.) SOPs: 8260 (BTEX and DCA), 8015 (TPH-g/d/o), 8270 (phenol), 8270 SIM (PAHs), 8011 (EDB), SM2320 (Alkalinity), SM4500 (total and dissolved silica), SM3500Fe (ferrous iron), 6010 (total metals), RSK175 (methane), and 9056/300.0 (anions). Fuel additive 2-(2-methoxyethoxy)-ethanol is not included in the attached files as the procedure was developed by APPL Inc. and is proprietary. To our knowledge, there is no EPA method specific for 2-(2-methoxyethoxy)-ethanol. APPL developed a procedure that includes a solid-phase extraction (which is not the usual water extraction method used for SVOC analysis) and a modified EPA Method 8270 SVOC analysis for fuel additive 2-(2-methoxyethoxy)-ethanol.

We are still working on responses to Mark's questions on the field SOPs, and will send those out as soon as we can.

V/R,
Tracy Saguibo
NAVFAC HI EV3
808-471-1171 ext. 340
tracyjoy.saguibo@navy.mil

-----Original Message-----
From: TU, LYNDSEY [mailto:Tu.Lyndsey@epa.gov]
Sent: Wednesday, November 30, 2016 10:44 AM
To: Saguibo, Tracy-Joy I CIV NAVFAC HI, OPHE3; Pallarino, Bob; Fukumoto, Janice L CIV NAVFAC HI, EV3; Waki, Cory K CIV NAVFAC HI, EV1
Cc: Linder, Steven
Subject: [Non-DoD Source] Re: SOPs and Methods and analytes for Red Hill

Tracy and Janice,

Were you able to obtain the SOP's from the lab the Navy is using? We will need them for comparison. I am also curious if DOH sent you their follow-up questions on the Navy's sampling methods (we mentioned this briefly on our call) and if you have had a chance to respond.

Thanks,

Lyndsey Tu

415-972-3269
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lPy6PW/gkKFaThwp/K87N8hDcQTTKKFTioSxqB8Q2BNX5JtAljwgAAAABJRU5ErkJggg==>

From: Saguibo, Tracy-Joy I CIV NAVFAC HI, OPHE3 <tracyjoy.saguibo@navy.mil>
Sent: Monday, November 28, 2016 2:32 PM
To: Pallarino, Bob; Fukumoto, Janice L CIV NAVFAC HI, EV3; Waki, Cory K CIV NAVFAC HI, EV1
Cc: TU, LYNDSEY; Linder, Steven
Subject: RE: SOPs and Methods and analytes for Red Hill

Received; thank you.

V/R,
Tracy Saguibo
NAVFAC HI EV3
808-471-1171
<
IORhBcBOvgYKf0Awi+4Ggr1MVPIIrYdnEpShddHIyLi6AVXVxsRRDRwbi4KNgu4lCIv8i/i6QRDzycy+09555LqOl5nhEUptPoJe1iDHU
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lPy6PW/gkKFaThwp/K87N8hDcQTTKKFTioSxqB8Q2BNX5JtAljwgAAAABJRU5ErkJggg==> ext. 340
tracyjoy.saguibo@navy.mil

-----Original Message-----
From: Pallarino, Bob [mailto:Pallarino.Bob@epa.gov]
Sent: Monday, November 28, 2016 12:22 PM
To: Saguibo, Tracy-Joy I CIV NAVFAC HI, OPHE3; Fukumoto, Janice L CIV NAVFAC HI, EV3; Waki, Cory K CIV NAVFAC HI, EV1
Cc: TU, LYNDSEY; Linder, Steven
Subject: [Non-DoD Source] FW: SOPs and Methods and analytes for Red Hill

Tracy and Janice,

Attached are the Region 9 Laboratory SOPs for your review.

Bob

Bob Pallarino

U.S. EPA Region 9

Underground Storage Tank Program Office

Land Division

LND-4-3

75 Hawthorne Street

San Francisco, CA 94105

(415) 947-4128
<
IORhBcBOvgYKf0Awi+4Ggr1MVPIIrYdnEpShddHIyLi6AVXVxsRRDRwbi4KNgu4lCIv8i/i6QRDzycy+09555LqOl5nhEUptPoJe1iDHU
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pallarino.bob@epa.gov

From: Bauer, Richard
Sent: Friday, November 25, 2016 9:07 AM
To: TU, LYNDSEY <Tu.Lyndsey@epa.gov>

Cc: Pallarino, Bob <Pallarino.Bob@epa.gov>; R9RSCC <R9RSCC@epa.gov>
Subject: SOPs and Methods and analytes for Red Hill

Attached are all of the SOPs listed in the table below. I have also attached an updated spreadsheet with the analyte reporting lists, quantitation limits, etc. that now includes iron, manganese, sulfate and nitrate.

Richard Bauer

US EPA Region 9 Laboratory

1337 South 46th Street, Building 201

Richmond, CA 94804

(510) 412-2312
<
IORhBcBOvgYKf0Awi+4Ggr1MVPIIrYdnEpShddHIyLi6AVXVxsRRDRwbi4KNgu4lCIv8i/i6QRDzycy+09555LqOl5nhEUptPoJe1iDHU
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lPy6PW/gkKFaThwp/K87N8hDcQTTKKFTioSxqB8Q2BNX5JtAljwgAAAABJRU5ErkJggg==>

From: Bauer, Richard
Sent: Wednesday, November 23, 2016 1:01 PM
To: TU, LYNDSEY <Tu.Lyndsey@epa.gov>
Cc: Pallarino, Bob <Pallarino.Bob@epa.gov>; R9RSCC <R9RSCC@epa.gov>
Subject: RE: Methods and analytes for Red Hill

I looked at the planned bottles to be collected at each well by the Navy's contractor. It appears that their list will cover everything we need except for the metals (lead, iron, manganese). The HCl preserved bottle they are collecting for ferrous iron is unfortunately unsuitable for our purposes. They can either leave that out of our shipment or, as we discussed, ship it and we will discard it upon arrival.

(Note that I have added, in red, the natural attenuation parameters listed on the HBWS list to the list I previously provided.)

If they were to exactly duplicate what they already plan to collect at each well and add one 500 mL plastic with nitric acid (HNO_3) to the list then everything we plan to do would be covered.

One final note is that the HBWS list includes dissolved lead. I propose to perform total lead as this will provide a conservative estimate of dissolved lead and will not require a separate, field-filtered sample bottle.

I'll send you copies of all the SOPs Friday or Monday.

Richard Bauer

US EPA Region 9 Laboratory

1337 South 46th Street, Building 201

Richmond, CA 94804

(510) 412-2312
<
IORhBcBOvgYKf0Awi+4Ggr1MVPIIrYdnEpShddHIyLi6AVXVxsRRDRwbi4KNgu4lCIv8i/i6QRDzycy+09555LqOl5nhEUptPoJe1iDHU
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From: Bauer, Richard
Sent: Tuesday, November 15, 2016 2:40 PM
To: TU, LYNDSEY <Tu.Lyndsey@epa.gov>
Cc: Pallarino, Bob <Pallarino.Bob@epa.gov>
Subject: RE: Methods and analytes for Red Hill

These methods and SOPs correspond with the lists of analyses and reporting limits I sent in a spreadsheet in a previous e-mail. Depending on what you are hoping to accomplish by doing this split sampling, you may not necessarily need to choose to have us do all of these.

Analysis

Method

EPA Region 9 Lab SOP

Lead, Manganese

200.8

507

VOCs

524.2

354

VOCs, Low Level

524.2 (SIM)

353

SVOCs

8270D

315

PAHs, Low Level

8270D (SIM)

375

TPH-GRO

8015C

380

TPH-DRO, ORO

8015C

385

Iron

200.7

505

Anions (nitrate, sulfate)

300.0

530

SIM = selective ion monitoring

PAH = polycyclic aromatic hydrocarbons

GRO = gasoline range organics

DRO = diesel range organics

ORO = motor oil range organics

Richard Bauer

US EPA Region 9 Laboratory

1337 South 46th Street, Building 201

Richmond, CA 94804

From: TU, LYNDSEY
Sent: Tuesday, November 15, 2016 1:36 PM
To: Bauer, Richard <Bauer.Richard@epa.gov>
Cc: Pallarino, Bob <Pallarino.Bob@epa.gov>
Subject: RE: Methods and analytes for Red Hill

Thanks Rich,

It seems as though we'll be meeting with someone from Eugenia's group on Thursday. If you could provide me with the reference method/SOP numbers from the lab that would be very helpful. Kathy Baylor provided me with a couple of example plans yesterday so I think I have a good selection of examples for now.

Thanks again!

Lyndsey Tu

Underground Storage Tanks Program

Land Division, U.S. EPA Pacific Southwest

Tu.Lyndsey@epa.gov | 415-972-3269
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IORhBcBOvgYKf0Awi+4Ggr1MVPIIrYdnEpShddHIyLi6AVXVxsRRDRwbi4KNgu4lCIv8i/i6QRDzycy+09555LqOl5nhEUptPoJe1iDHU
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From: Bauer, Richard
Sent: Monday, November 14, 2016 5:04 PM
To: TU, LYNDSEY <Tu.Lyndsey@epa.gov>
Cc: Pallarino, Bob <Pallarino.Bob@epa.gov>
Subject: RE: Methods and analytes for Red Hill

You can seek some guidance from Eugenia McNaughton in the Quality Assurance Office as to what she would consider the most appropriate planning documents. If the Navy (or their contractor) will actually be collecting both the primary and the split samples and shipping the splits to the Region 9 Laboratory then I would think that a very simple split sampling plan that references the Navy's Sampling and Analysis Plan and identifies the roles and responsibilities of the parties involved in the split sampling should be adequate. At a minimum I think you would want to reference the method numbers and Region 9 Lab SOP numbers for the methods we propose to use. I can supply copies of the actual SOPs if you want to include them as well. Some discussion of what will be done with the split sample results (and by whom) would be appropriate. Let me know if you need tables with method references, SOPs numbers ,etc, and/or copies of the actual SOPs.

Richard Bauer

US EPA Region 9 Laboratory

1337 South 46th Street, Building 201

Richmond, CA 94804

From: TU, LYNDSEY
Sent: Monday, November 14, 2016 4:38 PM
To: Bauer, Richard <Bauer.Richard@epa.gov>
Cc: Pallarino, Bob <Pallarino.Bob@epa.gov>
Subject: RE: Methods and analytes for Red Hill

Hi Rich,

I am hoping you can clarify a couple things for me. As the Navy will be collecting the samples, do we need to spend some time comparing the SOP the navy is using with the SOP the R9 lab would be using or does it not really matter for this type of analysis? I am also wondering what types of documents (if any) I should start preparing. If the navy is splitting the samples, and no EPA staff will be in the field, do we create an EPA FSP that just closely parallels the Navy's or do we just submit the Navy's documentation and perhaps some statement of purpose from EPA?

Thanks,

Lyndsey Tu

Underground Storage Tanks Program

Land Division, U.S. EPA Pacific Southwest

Tu.Lyndsey@epa.gov | 415-972-3269
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IORhBcBOvgYKf0Awi+4Ggr1MVPIIrYdnEpShddHIyLi6AVXVxsRRDRwbi4KNgu4lCIv8i/i6QRDzycy+09555LqOl5nhEUptPoJe1iDHU
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From: Bauer, Richard
Sent: Thursday, November 10, 2016 4:14 PM
To: Pallarino, Bob <Pallarino.Bob@epa.gov>; TU, LYNDSEY <Tu.Lyndsey@epa.gov>
Subject: Methods and analytes for Red Hill

Bob and Lyndsey:

Attached spreadsheet includes details for reporting limits, analyte, lists QC criteria etc. for methods that you may want to include for upcoming Red Hill split sampling.

Please note:

I have include both standard (full scan) SVOCs by method 8270 and a low level selective ion monitoring method (8270 SIM) for PAHs only. I think the Navy was using the later only. We can do either or both for you.

Feel free to follow up with any questions.

Richard Bauer

US EPA Region 9 Laboratory

1337 South 46th Street, Building 201

Richmond, CA 94804