To: Brown, Anthony R (RM)[anthony.brown@bp.com]
Cc: Doug Carey[douglas.carey@waterboards.ca.gov]; Greg Reller[gr@burlesonconsulting.com]; Cory Koger[Cory.S.Koger@usace.army.mil]; Cohen, Adam[Adam.Cohen@dgslaw.com]; 'sriese'[sriese@ensci-inc.com]; Jefferson, Jill[Jill.Jefferson@amecfw.com]; gohland@ohlandhydrogeo.com[gohland@ohlandhydrogeo.com]; Parrish, Kent[Kent.Parrish@amecfw.com]; Wirtschafter, Joshua[Wirtschafter.Joshua@epa.gov]; Lombardi, Marc (marc.lombardi@amecfw.com)[marc.lombardi@amecfw.com]; Gary Riley[Riley.Gary@epa.gov]
From: Deschambault, Lynda
Sent: Tue 12/6/2016 12:44:35 AM
Subject: FW: Leviathan Mine - Information Regarding Revegetation Treatability Study Baseline Soil Sampling in ACSA

Dear Mr. Brown

Please provide additional details (i.e. map relative to other hydrocarbon findings, and mining era site features) to support how ARC concluded that these observations do not merit follow-up /

investigation.

In April 2016, EPA specifically requested that ARC, *Please expand the sampling and analysis plan to include known areas of historical equipment maintenance and storage at the site. For example, at the former equipment maintenance facility formerly located east of the Aspen Seep Bioreactor;*

EPA is completing its review of ARC's response dated June 1, 2016. In that response, ARC specifically stated *"If evidence of other releases of petroleum -containing hazardous substances is uncovered during further investigations or future response actions, the USEPA will be notified and the need for additional investigation can be determined at that time"*

I am copying Gary Riley and Josh Wirtshafter on the matter, as it is unclear why ARC would not copy EPA on communications regarding encountered material and site trespassers onto the Superfund site property.

Best Regards,

Lynda Deschambault

Environmental Scientist

USEPA Region 09

(415) 947-4183

Please be advised I may have limited access to email , therefore please be patient with any communication delays.

From: Lombardi, Marc [mailto:Marc.Lombardi@amecfw.com]

Sent: Friday, December 02, 2016 1:28 PM

To: Deschambault, Lynda <Deschambault.Lynda@epa.gov>; 'Brown, Anthony R (RM)' <anthony.brown@bp.com>

Cc: Doug Carey <douglas.carey@waterboards.ca.gov>; Greg Reller <gr@burlesonconsulting.com>; Cory Koger <Cory.S.Koger@usace.army.mil>; Cohen, Adam <Adam.Cohen@dgslaw.com>; 'sriese' <sriese@ensci-inc.com>; Jefferson, Jill <Jill.Jefferson@amecfw.com>; Grant Ohland - (gohland@ohlandhydrogeo.com) <gohland@ohlandhydrogeo.com>; Parrish, Kent <Kent.Parrish@amecfw.com>

Subject: RE: Leviathan Mine - Information Regarding Revegetation Treatability Study Baseline Soil Sampling in ACSA

Lynda,

We have implemented the hydrocarbon investigation work as described in the June 1, 2016, On-Property Focused Remedial Investigation Work Plan, Amendment No. 12 – Task Sampling and Analysis Plan (TSAP) for Hydrocarbon Investigation. Other than as described in the work plan, we did not encounter any other investigation locations with anomalous "hydrocarbon" like odor while implementing the TSAP.

As for the revegetation plot soils mentioned in the November 4 email to Doug below, those were encountered while separately implementing the Focused Feasibility Study Revegetation Treatability Study Work Plan. As explained below, Hydrology Plot 2 was relocated after coming across the discolored soil, and preliminary field testing showed that whatever the encountered material was, it did not appear to warrant further investigation for hydrocarbon content. Similar to the excavation and wooden box found near MW-40, we informed the Water Board of this finding simply because they are the landowner for this portion of the site.

Should you have any questions or comments please contact Tony Brown at (714) 228-6770 or anthony.brown@bp.com <mailto:anthony.brown@bp.com>

Thanks,

Marc

Marc R. Lombardi, CEM, PG

Principal Geologist / Office Manager, Environment & Infrastructure Americas, Amec Foster Wheeler

10940 White Rock Road, Suite 190, Rancho Cordova, CA 95670, USA

D (916) 853-8903 M (916) 302-6326

marc.lombardi@amecfw.com <mailto:marc.lombardi@amecfw.com> amecfw.com

From: Deschambault, Lynda [mailto:Deschambault.Lynda@epa.gov]

Sent: Wednesday, November 30, 2016 7:55 AM

To: 'Brown, Anthony R (RM)' <anthony.brown@bp.com <mailto:anthony.brown@bp.com> >

Cc: Lombardi, Marc <Marc.Lombardi@amecfw.com <mailto:Marc.Lombardi@amecfw.com> >; Doug Carey <douglas.carey@waterboards.ca.gov <mailto:douglas.carey@waterboards.ca.gov> >; Greg Reller <gr@burlesonconsulting.com <mailto:gr@burlesonconsulting.com> >; Cory Koger <Cory.S.Koger@usace.army.mil <mailto:Cory.S.Koger@usace.army.mil> >

Subject: FW: Leviathan Mine - Information Regarding Revegetation Treatability Study Baseline Soil Sampling in ACSA

Dear Mr. Brown,

EPA is completing our review and comments on your Sampling Plan for Hydrocarbon Investigation dated 6/1/16.

Do you have any additional details on this?

Lynda

From: Carey, Douglas@Waterboards [mailto:douglas.carey@waterboards.ca.gov]

Sent: Monday, November 07, 2016 7:27 AM

To: Deschambault, Lynda <Deschambault.Lynda@epa.gov <mailto:Deschambault.Lynda@epa.gov> >; gr@burlesonconsulting.com <mailto:gr@burlesonconsulting.com> ; Cory.s.koger@usace.army.mil <mailto:Cory.s.koger@usace.army.mil>

Cc: Ferguson, Scott@Waterboards <scott.ferguson@waterboards.ca.gov <mailto:scott.ferguson@waterboards.ca.gov> >; Tom Bloomfield (tbloomfield@thegallaghergroup.com <mailto:tbloomfield@thegallaghergroup.com>) (tbloomfield@thegallaghergroup.com <mailto:tbloomfield@thegallaghergroup.com>) <tbloomfield@thegallaghergroup.com <mailto:tbloomfield@thegallaghergroup.com> >

Subject: FW: Leviathan Mine - Information Regarding Revegetation Treatability Study Baseline Soil Sampling in ACSA

Hello all,

I'm not sure why the email below was sent only to me. It appears AMEC encountered soil with "hydrocarbon" odor while performing baseline soil sampling for their revegetation work at Leviathan Mine.

Lynda and Greg, where you aware of this?

Please let me know if you would like to discuss.

Douglas Carey, P.G.

Senior Engineering Geologist

Leviathan Mine

Regional Water Quality Control Board, Lahontan Region

2501 Lake Tahoe Blvd.

South Lake Tahoe, CA 96150

(530) 542-5468

douglas.carey@waterboards.ca.gov <mailto:douglas.carey@waterboards.ca.gov>

From: Lombardi, Marc [mailto:Marc.Lombardi@amecfw.com]

Sent: Friday, November 04, 2016 3:11 PM

To: Carey, Douglas@Waterboards

Cc: Brown, Anthony R (RM); Cohen, Adam; Sandy Riese; Jefferson, Jill; Grant Ohland - (gohland@ohlandhydrogeo.com <mailto:gohland@ohlandhydrogeo.com>)

Subject: Leviathan Mine - Information Regarding Revegetation Treatability Study Baseline Soil Sampling in ACSA

Doug,

While performing baseline soil sampling on September 6, 2016 in support of the Revegetation Treatability Study, Amec Foster Wheeler field crews encountered soil with what was described as resembling a "hydrocarbon" odor. This observation was made in a single boring at 4.5 feet below ground surface at the original location of Hydrology Plot 2 (see attached figure and photos of the area). The soil in question was gray in color as opposed to the soils in the upper portion of the borehole, which were pale brown to brown in color. Upon the observance, the field sampling team stopped work until they could return with proper field monitoring equipment. The borehole was temporally covered, but it was not backfilled. As a side note, the first boring at the original Hydrology Plot 2 (approximately 25 feet away) was previously drilled and sampled to 6 feet bgs with no anomalous observations. Because of the uncertainty of the observations at the time and to avoid the area, Hydrology Plot 2 was relocated further to the west along the access road for LOC-34 and adjacent to Hydrology Plot 1.

When returning to the borehole on September 15, 2016, Amec Foster Wheeler personnel used a flame ionization detector (FID) and photoionization detector (PID) to take headspace readings from the collected soil sample. There were no detections from either the PID or FID; however, the sample was collected about 1.5 weeks prior to the FID/PID analysis and stored in a Ziploc bag. Therefore, field crews returned and collected additional sample from the borehole at a depth of approximately 4.5-5 feet bgs using a hand auger. The fresh sample had a headspace reading of 0.1 ppm on the FID and 1.4 ppm on the PID, suggesting that if the soil were affected by hydrocarbons in the past, the residuals are highly weathered as both of these readings are very low. The borehole was later backfilled on September 23, 2016.

We have had no further activity at this location, but we wanted you to be aware of this observation. The backfilled borehole location can still be discerned on the ground surface.

Should you have any questions or comments please contact Tony Brown at (714) 228-6770 or anthony.brown@bp.com <mailto:anthony.brown@bp.com> .

Thanks,

Marc

Marc R. Lombardi, CEM, PG

Principal Geologist / Office Manager, Environment & Infrastructure Americas, Amec Foster Wheeler

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