To: Faust, Matt (mfaust@bristol-companies.com)[mfaust@bristol-companies.com]; Egan, Robert[egan.robert@epa.gov]
From: Hanson, Kristen
Sent: Wed 3/23/2016 4:30:40 PM
Subject: FW: Tower Cross-Sections
Tower Site Investigation Cross-Sections Submittal ltr_Egan.pdf
34160024_EPA 2012 Tower_Soil Boring & Well Contamination Data.pdf
Tower Std WP Rev0 (3).pdf
November 2015 Groundwater Monitoring Reults Haskell Lake Petroleum Contamiantion Site kh.xlsx

Good Morning Bob and Matt,

Attached are my comments on EPA/Bristol's Site Investigation Work Plan, page 5. Comments on Pages 1-3 are included in a previous email and below in the email chain.

Bristol Workplan Text

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2.0 SCOPE OF WORK

Bristol and drilling subcontractor Coleman Engineering Company (CEC) will mobilize to the site in March 2016, to advance 15 direct-push soil borings near the Tower Standard site to a depth of 30 feet. Proposed soil boring locations are presented on Figure 3. Two primary soil samples will be collected at each soil boring location. The primary soil samples and associated quality control samples will be sent to Pace Analytical Services, Inc. (Pace) in Minneapolis, Minnesota, for analysis of VOCs including methyl tertiarybutyl

ether (MTBE), polynuclear aromatic hydrocarbons (PAHs), diesel range organics (DRO), gasoline range organics (GRO), and Resource Conservation and Recovery Act (RCRA) 8 metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver.)

Bristol will collect one sub-slab soil vapor sample; eight indoor and one outdoor ambient air sample. All air samples will be submitted to Pace for VOC analysis by method TO-15.

Bristol will collect groundwater samples from four existing monitoring wells selected by the EPA. Wells will be sampled using a bladder pump and low-flow sampling technique. Groundwater samples will be analyzed by Pace for VOCs, sulfate, nitrate, manganese, and iron. Four primary groundwater samples, one duplicate, one matrix spike/matrix spike duplicate (MS/MSD) pair, and one trip blank (for VOCs) are anticipated.

Comments:

Soil (1st Paragraph)

There appears to be three zones of contamination (vadose zone, smear zone, source at depth). There also appear to be the primary source area (east of the tank basin including MW-21, BH12, BH32A, BH21, and BH22.).

Primary Source Area

This primary area includes vadose zone impacts, smear zone impacts, and impacts at depth. There are also indicators of free product in this area (free product on soil cuttings at MW-21D encountered below 15 feet at above 30, sheen and oil spots in BH22, water and soil concentrations). This primary source area has impacted zones of contamination in at least 3 depths (unknown how many layers of source material below water). This area appears to be the source for the groundwater plume shown on the cross sections. Characterizing this source area would require more than 2 soil samples per boring because of contamination at multiple depths. Also complicating this area is what appears to be source material below water at depth (estimate around 20-25 feet). I can see using 8 borings to characterize and define the extent of the source

area. For thickness evaluations we would need up to 5 samples be boring. An alternative may be to consider adding LIF or similar screening tool. We had spoken about the possiblitily of LIF work in January. This would cut down on the number of soil samples per boring needed to characterize source area material. The driller contracted for this work has the capability (Coleman). Also, this would be extremely useful for screened interval placement for planned monitoring wells.

Smear Zone

Most of the proposed borings reflect smear zone contamination. This is of less importance then characterizing the source area. The extent of smear zone contamination is defined. I can see using up to one boring is needed to characterize degree and thickness.

Vapor (2nd paragraph – 1st 2 sentences)

Comments were provided to this State proposed sampling location in December. We have the same concern for the Kozak's sampling location today. The location is not within the lateral inclusion zone and located in the garage. We expected this location to be closer to the contamination (BH17). The WDNR technical contact, and even REI has echoed this same concern.

Hotel

The Tribe reiterates the concern that previously expressed regarding vapor intrusion sampling at the Hotel

1) WDNR agreed to do this work

2) The monitoring wells indicate no contaminated groundwater impacting the area surrounding and beneath the hotel and a vertical separation distance that screens out the potential for vapor intrusion. This work is not consistent with the Tribes immediate goals.

3) WDNR technical staff echoed our concern regarding the value of indoor air sampling in the hotel.

Regarding the SOW; Will the crawl space samples be ambient air or will soil probes be installed to collect soil vapor?

For access purposes,

The Hotel Owner's name and contact information is:

Steve Yach

690 W Nelson Rd

Mosinee WI 54455

Cell phone: 715-297-1222

Email: steveyach10@gmail.com

Well Sampling(3rd paragraph)

For the method, you could consider adding a grundfos pump option for future work. Both methods meet low flow sampling and future gw sampling subcontractor may have one or the other.

Does the analyte list cover all of our COCs? I attached a table with recent results showing detected COCs. From the SOW it is unclear if cadmium, lead, naphthalene, lead scavengers (12DCE, 12DBE), and other COCs are included in the analysis.

I will provide addition comments to the remainder of the workplan as I work through it.

Kristen

From: Egan, Robert [mailto:egan.robert@epa.gov]
Sent: Wednesday, March 23, 2016 7:14 AM
To: Hanson, Kristen
Subject: RE: comments on work plan and H&S Plan : KH comments part 1- pages 1-3

Hi Kristen,

Thanks for the comments. I usually don't pay a lot of attention to the Background section. You are correct in that it doesn't have much to do with this work. Maybe we should have Bristol minimize this section and just make a general statement that this work will be done to collect additional data and support future decisions on additional investigations and remedial activities, and skip a lot of the details from past efforts.

A comprehensive Background section can be provided in a report at a later date.

Bob Egan

Corrective Action Manager

Underground Storage Tanks Section

RCRA Branch

EPA Region 5

(312) 886-6212

(312) 692-2911 (fax)

From: Hanson, Kristen [mailto:KHanson@ldftribe.com]
Sent: Tuesday, March 22, 2016 4:24 PM
To: Egan, Robert <egan.robert@epa.gov>; Faust, Matt (mfaust@bristol-companies.com) <mfaust@bristol-companies.com>
Subject: RE: comments on work plan and H&S Plan : KH comments part 1- pages 1-3

Bob and Matt:

Here are my comments from pages 1-3. Comments from the remainder of the document are forthcoming .

Comments:

Page 2:

Several Private Wells were contaminated with Benzene: Hotel and Bill and Linda's. Lust replaced several wells at the hotel and one well at Bill and Linda's.

Page 2 paragraph 2:

The Tribe opened the perchlorate site investigation in 2008. A Preliminary Site Assessment, EPA removal Action, Tribal Investigation, and 2 TBAs were initiated at the site across the highway. There seems to be quite a lot of text here that is unrelated to a work plan. It would make sense to either describe it in entirety or leave it out. As written it is misleading.

Paragraph 3:

Seams applicable

Page 3:

The Tribe requested assistance from EPA in 2011.

Page 3 paragraph 4:

A total of 46 borings, although 8 encountered shallow refusal and were replicated nearby. 38 borings provided data.

I counted 64 soil samples collected by REI. The workplan cites 81.

EPA collected 17 soil samples splits

General Comment: There is a lot of discussion about state activities, but no discussion about EPA activities (i.e. EPA remedial investigation parallel to State, EPA corrective action notice)

Kristen

From: Egan, Robert [mailto:egan.robert@epa.gov]
Sent: Monday, March 21, 2016 5:39 PM
To: Hanson, Kristen
Subject: FW: Tower Cross-Sections

Bob Egan

Corrective Action Manager

Underground Storage Tanks Section

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EPA Region 5

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From: Faust, Matt [mailto:mfaust@bristol-companies.com]
Sent: Monday, March 21, 2016 5:30 PM
To: Egan, Robert <egan.robert@epa.gov>
Cc: Worley, Ray <Worley.ray@epa.gov>; Ruth, Scott <sruth@bristol-companies.com>
Subject: Tower Cross-Sections

PLEASE NOTE THE EPA AND CONTRACTORS ARE RECEIVING THIS EMAIL

Hello Bob,

Attached you should find the draft version of the cross-sections for the Tower site.

Please let me know if you have any questions.

Thank you,

--Matt

Matt Faust, P.G.
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