Message

From: Krueger, Thomas [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=5032E094667E4AB3BCD05326C7C3CF18-TKRUEGER]
Sent: 2/24/2020 1:43:18 PM
To: Ohl, Matthew [ohl.matthew@epa.gov]
Subject: RE: Third Site - DNAPL Containment Area Sampling Work Plan

ATTORNEY-CLIENT COMMUNICATION

Ex. 5 Attorney Client (AC)

Tom

From: Ohl, Matthew <ohl.matthew@epa.gov>
Sent: Friday, February 21, 2020 2:52 PM
To: Krueger, Thomas <krueger.thomas@epa.gov>
Subject: FW: Third Site - DNAPL Containment Area Sampling Work Plan

Hi Tom:

Have you had a chance to review this?

Thanks you,

Matt

Matthew J. Ohl
Remedial Project Manager
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fax: 312.692.2447
e-mail: ohl.matthew@epa.gov

From: Ohl, Matthew
Sent: Friday, February 14, 2020 9:10 AM
To: Krueger, Thomas <krueger.thomas@epa.gov>
Subject: FW: Third Site - DNAPL Containment Area Sampling Work Plan

Ex. 5 Attorney Client (AC)

Matthew J. Ohl
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From: Suzanne OHara <SOHara@Geosyntec.com>
Sent: Thursday, February 13, 2020 4:02 PM
To: Ohl, Matthew <ohl.matthew@epa.gov>
Cc: Krueger, Thomas <krueger.thomas@epa.gov>; Norman Bernstein <nwbernstein@nwbllc.com>; Peter M. Racher Esq. <pracher@psrb.com>; Andrew A Gremos <agremos@ramboll.com>; Gary Wealthall <GWealthall@Geosyntec.com>; Nicole.L.Toth@usace.army.mil; Mark Nichter <Mark.W.Nichter@usace.army.mil>; Becker, David J CIV USARMY CEHNC (USA) <Dave.J.Becker@usace.army.mil>; Douglas Buchanan <Douglas.M.Buchanan@usace.army.mil>
Subject: RE: Third Site - DNAPL Containment Area Sampling Work Plan

Matt,

As requested, please find attached:

- The average daily temperatures for each temperature sensor (OptiTAM) in every temperature monitoring string from initial readings to the most recent data collection (up to October 6 2019) in an Excel spreadsheet; and
- A summary of the extraction well operational data including measured PID concentrations, well head vacuum, and well head temperatures.

These data were collected and recorded by McMillan McGee (MM) and were downloaded by Geosyntec from MM's project website. Based on the data available to us, there appeared to be only daily temperatures, not more frequent intervals. Other than the PID data in the attached, we have no water or vapor monitoring data for the individual extraction wells. Please note that Geosyntec downloaded the attached data from MM's project website and has not validated the data for its accuracy.

Based on the lateral distribution of the temperature sensors and the manner in which several of these probes were constructed, the temperature data recorded by MM may not be representative of actual temperatures throughout the ERH treatment volume. Specifically, there were no temperature sensors between the outer most electrodes and the sheet pile wall. Additionally, our review of the project records indicate that grout prevented temperature sensors from being installed throughout the target treatment depth in temperature probes T-E1 (no temperature sensors below 20 ft), T-B4 (no temperature sensors below 29 ft), and T-C1 (no temperature sensors below 36 ft). Copies of the progress reports that note the grout blockage in these sensors are attached for reference. Given the lack of temperature sensors in key portions of the ERH treatment volume (both laterally and vertically), interpolation of temperatures in areas without sufficient sensor coverage cannot be relied upon to accurately reflect temperatures actually achieved in these areas.

Regards,

Suzanne

Suzanne O'Hara. MSc., P.Geo. (ON), P.G. (NY)
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From: Ohl, Matthew <ohl.matthew@epa.gov>
Sent: Thursday, February 13, 2020 7:47 AM
To: Suzanne OHara <SOHara@Geosyntec.com>
Cc: Krueger, Thomas <krueger.thomas@epa.gov>; Norman Bernstein <nwbernstein@nwbllc.com>; Peter M. Racher Esq. <pracher@psrb.com>; Andrew A Gremos <agremos@ramboll.com>; Gary Wealthall <GWealthall@Geosyntec.com>; Nicole.L.Toth@usace.army.mil; Mark Nichter <Mark.W.Nichter@usace.army.mil>; Becker, David J CIV USARMY CEHNC (USA) <Dave.J.Becker@usace.army.mil>; Douglas Buchanan <Douglas.M.Buchanan@usace.army.mil>
Subject: RE: Third Site - DNAPL Containment Area Sampling Work Plan

Suzanne:

Thank you for the work plan. Please submit all data collected before, during and after ERH treatment including, without limitation, the following:

- average daily (and more frequent) temperatures for each temperature sensor (optiTAM) in every temperature monitoring string from initial readings to the most recent data collection in an Excel spreadsheet or Access database; and
- any PID data, water or vapor sampling results or readings during all periods of operation for the individual extraction wells.

Thank you,

Matt

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From: Suzanne OHara <SOHara@Geosyntec.com>
Sent: Wednesday, February 12, 2020 4:04 PM
To: Ohl, Matthew <ohl.matthew@epa.gov>
Cc: Krueger, Thomas <krueger.thomas@epa.gov>; Norman Bernstein <nwbernstein@nwbllc.com>; Peter M. Racher Esq. <pracher@psrb.com>; Andrew A Gremos <agremos@ramboll.com>; Gary Wealthall <GWealthall@Geosyntec.com>; Mark Nichter <Mark.W.Nichter@usace.army.mil>; Nicole.L.Toth@usace.army.mil
Subject: Third Site - DNAPL Containment Area Sampling Work Plan

Matt

Please find attached the sampling plan for the DNAPL Containment Area. This work plan outlines the field activities required to identify the source of residual mass observed in compliance monitoring wells P-1 and P-2 following Electrical Resistance Heating (ERH) within the DNAPL containment area. Please let us know if you have any questions or comments on the plan so that we can schedule the field work as soon as possible.

Regards,

Suzanne

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