Message

From: d'Almeida, Carolyn K. [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=9EC4401AFA1846DD93D52A0DDA973581-CDALMEID]
Sent: 5/19/2016 6:19:26 PM
To: Butler, Thomas [Butler.Thomas@epa.gov]
Subject: FW: EPA's partial comments on EBR workplan for BCT tomorrow.
Attachments: GWTSC-038 Davis Williams AFB EBR Workplan review final.pdf

Here is are the preliminary comments we sent to AF/Amec yesterday on their workplan for enhanced bioremediation. The concern is that SEE was terminated with significant but unknown quantity of NAPL remaining, the site is still hot, contaminants more mobile and they are no longer extracting and containing the plume. Loren is planning to talk to Phil about this, and we may have another dispute on our hands.

From: d'Almeida, Carolyn K.
Sent: Wednesday, May 18, 2016 2:44 PM
To: 'JERRARD, CATHERINE V GS-13 USAF HAF AFCEC/CIBW' <catherine.jerrard@us.af.mil>; Smallbeck, Donald R. <Donald.Smallbeck@amec.com>
Cc: Wayne Miller <Miller.Wayne@azdeq.gov>; steve <steve@uxopro.com>; Davis, Eva <Davis.Eva@epa.gov>; Dan Pope <DPope@css-dynamac.com>; Henning, Loren <Henning.Loren@epa.gov>; 'Gorm Heron' <gheron@terratherm.com>; 'Pearson, Stuart C.' <stuart.pearson@amecfw.com>; Devon Phelan <dphelan@terratherm.com>
Subject: EPA's partial comments on EBR workplan for BCT tomorrow.

Cathy

In the interest of saving time, and as I know Amec is anxious to get them given their relevance to tomorrows discussion, I am forwarding you comments received from Dan Pope; I don't have Eva's comments yet; so this is a partial response. We intend to send a followup letter after tomorrows BCT discussion.

In summary, the comments indicate:

1) The results of the EBR Pilot Test are equivocal, difficult to interpret for practical use, and result in high uncertainty when used to model and plan full-scale EBR, and MNA.
2) The proposed approach to full-scale EBR, as described in the Work Plan, is based on the results of the EBR Pilot Test, literature data, and predictive modeling; the estimates of EBR and MNA effectiveness and timeframes are subject to high uncertainty.
3) The uncertainty involved in the above items, and all further modeling and monitoring, should be quantified and presented clearly according to USEPA data quality and uncertainty analysis guidance for statistical approaches and modeling (USEPA 2009).
4)Monitoring of EBR, and the following MNA, should include complete delineation (on and off-Site) of contaminant sources, and the dissolved contaminant plume(s).

Significant potential difficulties with implementation and effectiveness of the proposed EBR+MNA remedy indicate that success of this remedial plan is highly uncertain. Further, it appears unclear from the workplan presentation how much the success of the EBR workplan as currently proposed relies upon advection and dispersion mechanisms as actual biodegradation in attainment of long term remedial goals.

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"Because a waste is a terrible thing to mind…"