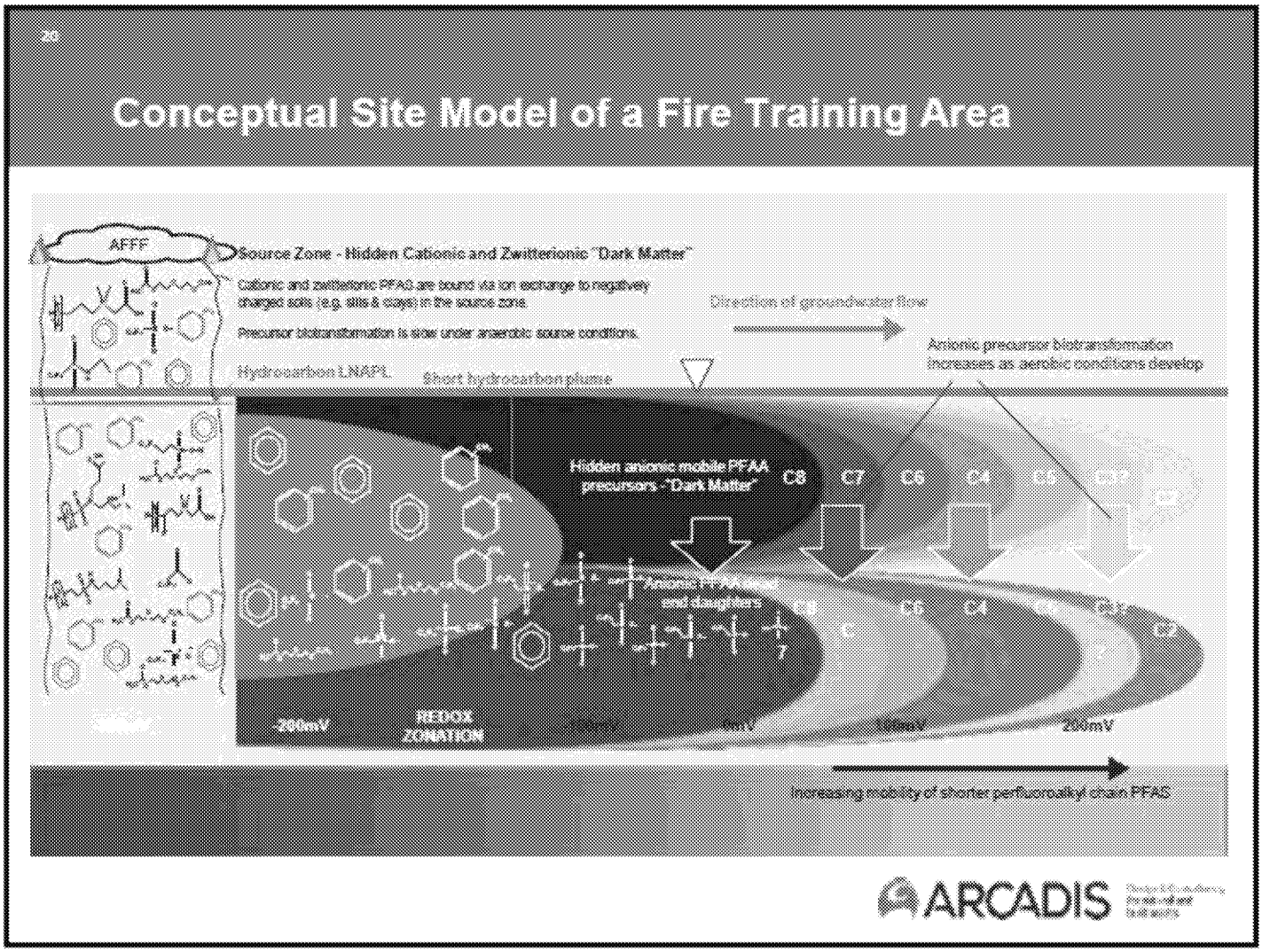
Message

From: d'Almeida, Carolyn K. [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=9EC4401AFA1846DD93D52A0DDA973581-CDALMEID]
Sent: 12/8/2016 10:37:00 PM
To: Davis, Eva [Davis.Eva@epa.gov]; Wayne Miller [Miller.Wayne@azdeq.gov]; 'steve@uxopro.com' [steve@uxopro.com]
CC: DPope@css-dynamac.com
Subject: RE: Draft response to 11/17/16 AF letter
Attachments: PFAS_FateTransportWebinarNov2016.pdf; ER-199522-CP-1.pdf

Here is the PFAS presentation I also reference in the letter, another issue we need to look at at ST12



From: Davis, Eva
Sent: Thursday, December 08, 2016 1:13 PM
To: d'Almeida, Carolyn K. <dAlmeida.Carolyn@epa.gov>; Wayne Miller <Miller.Wayne@azdeq.gov>; 'steve@uxopro.com' <steve@uxopro.com>
Cc: d p <DPope@css-dynamac.com>
Subject: RE: Draft response to 11/17/16 AF letter

Here's another document we need to look at – of note:

Anaerobic bioremediation is still not thoroughly understood, especially under field conditions, making clean-up times difficult to predict.

Benzene, the most toxic of the BTEX compounds, has not been conclusively shown to degrade under all anaerobic conditions that exist in the field.

Augmentation of the ground water with nitrate and sulfate was able to reduce the concentrations of toluene, ethylbenzene, and xylenes to very low levels, far below the maximum contaminant levels (MCLs). . . . Over the time span of this demonstration, benzene concentrations were not reduced to below the benzene
MCL of 5 :g/L. Because the benzene concentration was reduced over time in all three treatment zones (Figures 6-8), we suspect that continued operation of this technology would be able to reduce the benzene concentration in ground water to below the MCL. **However, it appears that much of the benzene removal is due to flushing by the extraction well, not due to biodegradation.**

From: d'Almeida, Carolyn K.
Sent: Thursday, December 08, 2016 2:42 PM
To: Wayne Miller <Miller.Wayne@azdeq.gov>; 'steve@uxopro.com' <steve@uxopro.com>
Cc: Davis, Eva <Davis.Eva@epa.gov>; d p <DPope@css-dynamac.com>
Subject: Draft response to 11/17/16 AF letter

Wayne

I am forwarding you a draft joint reply to the letter from Phil Mook for your review and comment. I have a meeting scheduled on Friday at 11 to discuss with Loren; are you available then? I understand Angeles wants us to prepare a response and then meet to brief both her and Tina before signature.

Carolyn d'Almeida
Remedial Project Manager
Federal Facilites Branch (SFD 8-1)
US EPA Region 9
(415) 972-3150

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