From: Miranda Maupin
To: Wetmore, Cynthia
Subject: Re: FW: Phase I testing.
Date: Tuesday, March 17, 2015 2:43:03 PM
Attachments: image001.png
image002.png

Ok, thank you! I just spoke with Yolanda and she suggested we go ahead and have the call if that works for you?

Miranda

Miranda Maupin

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On Tue, Mar 17, 2015 at 2:40 PM, Wetmore, Cynthia <Wetmore.Cynthia@epa.gov> wrote:

Miranda, I will not be able to talk about any more than what I wrote. I don't know if a call wouldn't be super frustrating for everyone involved.

Cynthia Wetmore, Technical Support Section

US.EPA, Region IX, Superfund Division

75 Hawthorne Street, San Francisco, 94105

(415)972-3059

From: Wetmore, Cynthia
Sent: Tuesday, March 17, 2015 2:38 PM
To: 'Cynthia Babich'
Cc: 'Miranda Maupin'; pemodog@sbcglobal.net; LEONIDO-JOHN, STEVEN; Barton, Dana; Sanchez, Yolanda; Yogi, David; Safouh.Sayed@dtsc.ca.gov; 'Scandura, John@DTSC'; 'Senga, Robert@DTSC'; James Wells
Subject: Phase I testing.

Hi Cynthia,

As John Lyon's mentioned in the previous call, EPA is operating under a confidentiality order which limits what we can discuss to only publicly available information, which for purposes of the functional testing includes only the Phase I functional test. As EPA moves to approve each phase or step, EPA will work to get a releasable document to share with you. The Phase I test and results are as follows.

The Phase I test was developed to test one component of the HiPOx unit, the ozone generator. The design requires the ozone generator in HiPOx system to operate with a range between 23.7 to 27.2 mg/l of ozone. Previous Functional testing in December demonstrated that the system could produce 23.7 mg/L. Phase I was designed to demonstrate the system's ability to produce 27.2 mg/L ozone. The ozone when mixed with hydrogen peroxide forms a strong oxidant that reduces concentrations of all organic compounds including pCBSA.

The Phase I test was run on February 26, 2015. Although the HiPOx ozone dose system was set at 27.3 mg/L, the system was not able to maintain that rate. An average ozone dose of 25.9 mg/L, was achieved for the test. Samples were collected after each unit and the concentrations are as follows:

Constituent	Concentration in Groundwater (ug/L)				Concentration in Air (ppmv)	
	Influent	Post-HiPOx	Post-Air Stripper	Post-LGAC	VGAC Influent	Discharge Stack
pCBSA	48,000	34,000	31,000	<5	NA	NA
MCB	8,400	3,400	85	<0.5	5.7	<0.0005
CF	1,700	1,600	34	<0.5	5.5	<0.0005
Benzene	<100	<40	0.34 J	<0.5	0.14	<0.0005
1,2-DCA	<100	<40	0.78	<0.5	0.020	<0.0005
PCE	67 J	48	<0.5	<0.5	0.12	<0.0005
TCE	<100	<40	<0.5	<0.5	0.021	<0.0005
TBA	<2,000	<800	12	10	NA	NA
Arsenic	6.9	5.7	5.0	2.1	NA	NA

EPA does not believe the Phase I test met its objective to verify the full range of the ozone dosage system.

-Cynthia W.

Cynthia Wetmore, Technical Support Section

US.EPA, Region IX, Superfund Division

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