Message

From: Davis, Eva [Davis.Eva@epa.gov]
Sent: 11/10/2015 7:34:34 PM
To: d'Almeida, Carolyn K. [dAlmeida.Carolyn@epa.gov]; Dan Pope [DPope@css-dynamac.com]
CC: Wayne Miller [Miller.Wayne@azdeq.gov]; steve@uxopro.com; Henning, Loren [Henning.Loren@epa.gov]
Subject: RE: Has criteria for termination of Steam Injection been met?
Attachments: has criteria for termination of steam been met Eva.docx

Maybe some of the information from below on whether or not EPA agreed with the criteria as written, and note that Table 4-2 of the RD/RAWP has more detail on the criteria. See comments added to your notes.

From: d'Almeida, Carolyn K.
Sent: Tuesday, November 10, 2015 12:00 PM
To: Davis, Eva; Dan Pope
Cc: Wayne Miller; steve@uxopro.com; Henning, Loren
Subject: RE: Has criteria for termination of Steam Injection been met?

Eva

Yes, I was thinking I would just forward these notes to AF and Amec, once I had concurrence from all of you - does anyone have anything to add?

From: Davis, Eva
Sent: Tuesday, November 10, 2015 9:27 AM
To: d'Almeida, Carolyn K. <dAlmeida.Carolyn@epa.gov>; Dan Pope <DPope@css-dynamac.com>
Cc: Wayne Miller <Miller.Wayne@azdeq.gov>; steve@uxopro.com; Henning, Loren <Henning.Loren@epa.gov>
Subject: RE: Has criteria for termination of Steam Injection been met?

Hi Carolyn –

I have noted also that AMEC is glossing over the shut down criteria as they are written in the RD/RAWP when they make claims that the criteria have been met. As for their primary criteria of mass extraction rates of 10% of the peak rate, I argued against 10% of the peak extraction rate being used for as a shut down criteria because the percentage is too high – we typically continue treatment to much smaller percentages, and I realized that it would take much more treatment to reach their benzene concentration criteria. Now they are wanting to shut down when they are still at ~ 30% of peak. I thought the benzene concentration range of 100 – 500 ug/l was reasonable – but they aren't even approaching that yet. I was ok with the completion of pressure cycling criteria, but that hasn't been met. I was concerned about the amount of steam injection criteria because I was afraid they would want to immediately shut down when they reached the design steam injection amount, but they want to shut down well before they reach that amount. I recommend that in response to what they have presented to us in the last 2 months, that we supply them with something in writing giving our evaluation of where they are in relation to the shutdown criteria. Your notes are one way that that can be done.

Eva

From: d'Almeida, Carolyn K.
Sent: Monday, November 09, 2015 3:25 PM
To: Davis, Eva; Dan Pope
Cc: Wayne Miller; steve@uxopro.com; Henning, Loren
Subject: Has criteria for termination of Steam Injection been met?

My notes, for your use. Comments?

Carolyn d'Almeida
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"Because a waste is a terrible thing to mind…"