To: Rumrill, Nancy[Rumrill.Nancy@epa.gov]
From: JAMES D WALKER
Sent: Wed 3/1/2017 9:00:06 PM
Subject: RE: Question regarding step rate testing

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,,,,,,
Nancy,

Ex. 5 - Deliberative Process

Jim

From: Rumrill, Nancy
Sent: Wednesday, March 1, 2017 11:40 AM
To: JAMES D WALKER
Cc: Rao, Kate
Subject: FW: Question regarding step rate testing

Hi Jim,

Under the Excelsior consultations TDM for our conference calls, here's a followup question for you. Are there definitive steps in the SRT that they missed? The two guidances that he's referring to should be enough. Do you think the SPE 16798 would be helpful?

Thanks, Nancy

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United States Environmental Protection Agency

Nancy Rumrill (rumrill.nancy@epa.gov)

Drinking Water Protection Section (WTR-3-2)

US EPA, Region IX

75 Hawthorne St.

San Francisco, CA 94105

Phone (415) 972-3293
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From: Doug Bartlett [mailto:DBartlett@clearcreekassociates.com]
Sent: Wednesday, March 01, 2017 7:40 AM
To: Rumrill, Nancy
Cc: Rebecca Sawyer ; Alison Jones ; Roland Goodgame
Subject: Question regarding step rate testing

Nancy – in our meeting last week, you may recall we had a discussion about step rate testing to verify the fracture gradient proposed for the Gunnison project. I have attached two papers that I found online from EPA regarding the methodology for step rate testing. Are there any other papers that I should be reviewing? The step rate methodology that is described seems to match with what Excelsior did to obtain the fracture gradient value proposed in the UIC application.

Any guidance you can give me on this would be greatly appreciated!

Thank you,

Doug Bartlett

R. Douglas Bartlett, RG, CHG

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