

Simmons, Lilly

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McDonald, Jeffrey

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Thursday, January 16, 2014 4:52 PM

To:

Gilmore, Tyler J

Cc:

Deardorff, Jason; Simmons, Lillateese; Short, Steve M; Nimmons, Michael J; Appriou,

Delphine; Lanigan, David C

Subject:

RE: IR5 01-16-14 regarding the ERRP that would go into any potential permit

Tyler,

Thanks. Actually, if we could use your conference number, I'd appreciate it.

And thanks again for helping with our call with Ken, Tinka, etc.

Jeff

Jeffrey R. McDonald, Geologist
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U.S. EPA - Region 5
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mcdonald.jeffrey@epa.gov

From: Gilmore, Tyler J [mailto:Tyler.Gilmore@pnnl.gov]

Sent: Thursday, January 16, 2014 4:21 PM

ጉ: McDonald, Jeffrey

Deardorff, Jason; Simmons, Lillateese; Short, Steve M; Nimmons, Michael J; Appriou, Delphine; Lanigan, David C **subject**: Re: IR5 01-16-14 regarding the ERRP that would go into any potential permit

Jeff,

We are available tomorrow for a phone discussion (11am CST). Some of the questions may take more than a phone call, but we can work through each of them. Will you set the call up? If not I have a conference number we can use, just let me know.

Thanks

Tyler

From: <McDonald>, Jeff McDonald <mcdonald.jeffrey@epa.gov>

Date: Thursday, January 16, 2014 10:23 AM **To:** Tyler Gilmore <<u>tyler.gilmore@pnnl.gov</u>>

Cc: "Deardorff, Jason" < Deardorff. Jason@epa.gov>, "Simmons, Lillateese" < simmons.lilly@epa.gov>

Subject: IR5 01-16-14 regarding the ERRP that would go into any potential permit

Tyler,

Here are some questions regarding the Emergency and Remedial Response Plan (ERRP). Lilly and Jason feel that some of these might be resolvable over the phone. Would you have time to talk at either 4pm CST today or 11am CST tomorrow?

off

RAI or item #	Subject	Appl. Page	Appl. Section.	EPA Comment / Question / Request
01-16-14_1	Emergency and Remedial Response (ERR) Plan			Please assign a relative risk measurement to each emergency scenario discussed in the application and if the event has the potential to cause varying levels of risk depending on severity and/or circumstances, please explain this.
01-16-14_2	Emergency and Remedial Response (ERR) Plan			Please provide a table listing operational positions and what specific ERR training will be provided to each position
01-16-14_3	Emergency and Remedial Response (ERR) Plan			Please link emergency response procedures and emergency scenarios in the ERR Plan to procedures in the Testing and Monitoring Plan where appropriate.
01-16-14_4	Emergency and Remedial Response (ERR) Plan			ERR scenarioof monitoring well malfunction: It seems there should be a distinction between a monitoring well malfunction that requires an emergency response (monitoring well mechanical integrity failure) and a device malfunction that requires repair. Additionally, is there a backup monitoring scheme in the event of an equipment failure at one or more wells? (e.g., temporary use of manual measurements down hole or changes in the Testing and Monitoring Plan to compensate for non-functioning monitoring wells)
01-16-14_5	Emergency and Remedial Response (ERR) Plan			Regarding ERR scenario of a loss of MI of the injection well: Does this assume an uncontrollable loss of MI that cannot be re-established? If so, how does grout or chemical sealant barrier in an adjoining well stop fluid movement <i>via vertical channelsalong the wellbore</i> of the injection well? Does the adjoining well intersect the leaking injection well?

1-16-14_6	Emergency and Remedial Response (ERR) Plan	Please provide a potential response addressing fluid movement into each of the monitored USDWs individually. If the appropriate response procedures are identical for each, please attest to this.
01-16-14_7	Emergency and Remedial Response (ERR) Plan	Please include the ERR scenario of CO2 moving rapidly and unexpectedly in one direction and finding conduits for upward movement beyond the AOR.
01-16-14_8	Emergency and Remedial Response (ERR) Plan	ERR scenario of an earthquake: What are the procedures or protocols for determining whether harm has occurred and/or determining causation of the earthquake? Are response procedures different for different magnitudes of seismic event?
01-16-14_9	Emergency and Remedial Response (ERR) Plan	Discuss with FG that the EPA Director will authorize injection once all requirements have been met (the application states that FutureGen will inform the Director when injection is scheduled to begin).

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