From: McDonald, Jeffrey
To: "Gilmore, Tyler J"
Cc: Greenhagen, Andrew; Bayer, MaryRose
Bcc: Smith, Robert H
Subject: IR4_01-14-2014 for the FGA permit applications
Date: Tuesday, January 14, 2014 3:51:00 PM

Tyler,
Here is some additional questions/comments that we had looking at the applications. After you look at them, can you let me know approximately how long you anticipate the FGA/PNNL will need to respond?
Thanks,
Jeff

RAI or item #	Subject	Appl. Page	Appl. Section.	EPA Comment / Question / Request	FutureGen Response
01-14-14_1	Construction and Operations - Annulus fluids	4.13	4.2.5	"Actual products may vary from those described above." This language is problematic in that the regulations require that the Director approve the annular fluid. Although we are not precluding any potential changes in the future, please provide the single, anticipated choice for this matter so that the EPA can decide if it meets the regulatory requirements.	
01-14-14_2	Construction and Operations - Open vs cased inj. Zone	4.15 to 4.18	4.2.7 and 4.2.8	Although you may be considering both open-hole completions or cased-hole completions, a decision on this matter needs to be made before any permit decision. Although we are not precluding any potential changes in the future, please provide the single, anticipated choice for this matter so that the EPA can decide if it meets the regulatory requirements.	
01-14-14_3	Construction and Operations - Pre-operational formation testing plan	4.19	4.2.9	The EPA would like to see more details on the pre-operational testing plan discussed in this section. Some data that will come out of this formation testing (e.g., analysis of Mt. Simon, St. Peter and New Richmond formations) are important in review.	
01-14-14_4	Construction and Operations - Stimulation plan	4.4	4.22	A stimulation plan has not been submitted at this point. If one is submitted soon, then It can be evaluated prior to any permit decision. If a permit is issued, a stimulation plan can be included in the record. If a stimulation plan is submitted after a permit decision, then a permit modification (assuming a permit is issued) would be required to add a stimulation plan.	

Jeffrey R. McDonald, Geologist
Underground Injection Control Branch
U.S. EPA - Region 5
(312) 353-6288 [office]
(312) 408-2240 [direct fax]
mcdonald.jeffrey@epa.gov