

WATER QUALITY DIVISION

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WYOMING WATER AND WASTE ADVISORY BOARD

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IN RE: WATER QUALITY DIVISION  
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TRANSCRIPT OF MEETING PROCEEDINGS

Pursuant to notice duly given to all parties in interest, this matter came on for meeting on the 11th day of September, 2015, at the hour of 9:31 a.m., at Casper Community College, University Union Building, Room UU315, 125 College Drive, Casper, Wyoming before the Wyoming Water and Waste Advisory Board, Ms. Marjorie Bedessem, Chairwoman, presiding, with Mr. David Applegate in attendance, and Ms. Lorie Cahn attending telephonically.

Mr. Mike Jennings, Monitoring Reimbursement Program; Mr. William Tillman, Regulatory Engineer; and Ms. Gina Thompson, Water Quality Division, were also in attendance.

1 P R O C E E D I N G S

2 (Meeting proceedings commenced  
3 9:31 a.m., September 11, 2015.)

4 CHAIRPERSON BEDESSEM: I'd like to call  
5 this meeting of the Water and Waste Advisory Board to  
6 order. We'll introduce our advisory board members.

7 BOARD MEMBER APPLGATE: Dave Applegate,  
8 representing industry.

9 CHAIRPERSON BEDESSEM: Marge Bedessem, I  
10 represent the public. And we have Lorie Cahn, representing  
11 the public.

12 MS. THOMPSON: Lorie, can you hear us?

13 BOARD MEMBER CAHN: I can, yes.

14 CHAIRPERSON BEDESSEM: Just holler if we  
15 need to speak louder.

16 (Off-the-record discussion.)

17 CHAIRPERSON BEDESSEM: So first up, we have  
18 the Water Quality Division. Administrator Frederick was  
19 not able to attend today, so presenting is Mr. Tillman.

20 MR. TILLMAN: Yes, Madam Chair.

21 We'd like to present again Chapter 24, which is  
22 the chapter on Class VI injection wells facilities for the  
23 underground injection control program. This was previously  
24 presented back in May to the advisory board, and we'd like  
25 to present the summary of changes that were made since that

1 board meeting.

2 First off --

3 BOARD MEMBER CAHN: I can't hear Bill. And  
4 I didn't understand really well.

5 MS. THOMPSON: Okay.

6 CHAIRPERSON BEDESSEM: Yeah, if you can  
7 just kind of get cozy here in an attempt to get most of our  
8 language in close proximity to the speakers and microphone  
9 as possible.

10 BOARD MEMBER CAHN: I can't hear Marge. I  
11 guess it's breaking up.

12 CHAIRPERSON BEDESSEM: Well, you sound  
13 wonderful, Lorie.

14 BOARD MEMBER CAHN: Oh, now you sound  
15 really good.

16 MR. TILLMAN: Lorie, is this better? Can  
17 you hear now?

18 BOARD MEMBER CAHN: Yes, now I can hear  
19 Bill and Marge.

20 CHAIRPERSON BEDESSEM: Okay. We will all  
21 project.

22 Okay, Bill, the floor is yours.

23 MR. TILLMAN: Okay. First off,  
24 Administrator Frederick would like for me to advise the  
25 board that in the chapter in Section 3(c) there was a

1 section where the federal -- federal language has language  
2 in there for converting Class II injection wells to Class  
3 VI. That's from the federal CFR. And the legislature, in  
4 conjunction with the Joint Minerals Committee, is working  
5 on legislative language to also address the conversion of  
6 Class VI -- or, excuse me, Class VI to Class II wells.  
7 That will be in the next legislative session. We don't  
8 know what that language will look like, but more than  
9 likely whatever that statutory language that comes out of  
10 that legislative action will likely replace what is  
11 currently in Section 3(c) now. And just wanted to make the  
12 board aware of that. It shouldn't -- this was basically  
13 intended just as a heads-up to let you know, but hopefully  
14 didn't preclude any action to forward this to the EQC.

15           Moving along. Most of the changes that were made  
16 in this chapter were in regard to seeking primacy from the  
17 EPA. The EPA provided what they call a crosswalk, where  
18 they take our chapter and review it, make comments,  
19 suggestions for changes to more align with the federal  
20 language. That was done after the last board meeting, and  
21 at that time -- or previously we hadn't had the financial  
22 assurance part added to the chapter, so now they had the  
23 full chapter to review. And the majority of the changes  
24 that we're going to present today are basically based from  
25 that crosswalk.

1           In addition to that, there were grammar changes  
2 that Ms. Cahn suggested changing from which to that. There  
3 was some capitalization errors that were changed. Also, we  
4 made some changes from the federal language where they  
5 referred to the director where it should be administrator  
6 in our case, and we made those changes as well.

7           And also we made some changes from the federal  
8 cross-references to cross-references within the chapter,  
9 being that our chapter basically aligns with the federal  
10 language, so it is a little more clearer as to how to  
11 follow along.

12           Proceeding forward. In Section 2, we made some  
13 changes to definitions based on the crosswalk. We made  
14 changes to the definition of Class VI well, the confining  
15 zone definition, and also the injection zone definition  
16 were changed per the crosswalk from the EPA.

17           We also made changes to -- in the definition of  
18 hazardous waste where we corrected the cross-reference to  
19 40 CFR 261.3. We also added the definition of long-term  
20 stewardship, which is from the carbon sequestration working  
21 group. Since this term is used in the chapter, we felt we  
22 needed to add that definition.

23           We also add the definition of plume stabilization  
24 for consistency with the statute, Wyoming Statute  
25 35-11-313(f)(vi)(F). We also changed the injection -- or

1 excuse me, the definition of post-injection site care for  
2 clarity with Section 17.

3 Finally, we changed the -- or we clarified when  
4 we referred to the U.S. EPA administrator is the U.S. EPA  
5 regional administrator, being there is a regional  
6 administrator there in Washington, D.C. and within the  
7 chapter most times we're referring to the regional  
8 administrator in Denver.

9 Moving forward in Section 3, we made changes to  
10 section (b)(i) and (b)(i)(A). All those changes were made  
11 on the EPA crosswalk.

12 In Section 3(c)(i), we made change per Klaus  
13 Hanson's suggestion. The language that he added were "in  
14 his best estimate," reading the entire section after  
15 consultation with the Oil and Gas Conservation Commission  
16 the supervisor or the administrator may, in his best  
17 estimate, require change -- require Class VI permit in  
18 consideration of the following. That was per Klaus  
19 Hanson's suggestion.

20 In Section 4, we added part (b)(x) -- excuse me,  
21 added (b)(x)(A) through (F), per the crosswalk. That would  
22 be lines 409 through 428. In Section (b)(xi)(G) through  
23 (H), were also added per the crosswalk.

24 Paragraph (c)(i)(R) were -- those were lines 606  
25 through 608.

1                   BOARD MEMBER APPELATE: Can I just ask a  
2 question?

3                   MR. TILLMAN: Yes.

4                   BOARD MEMBER APPELATE: A clarification,  
5 since I wasn't in the earlier meeting.

6                   So under the conversion of Class II wells to  
7 Class VI wells --

8                   MR. TILLMAN: Uh-huh.

9                   BOARD MEMBER APPELATE: -- just so I  
10 understand the context here, basically the Oil & Gas  
11 Commission has the ability -- it says they may -- you just  
12 give me the context regarding the use of the word may  
13 require a Class VI permit. And after that you have  
14 regarding a Class -- yeah, just help me understand that.  
15 Does the Oil & Gas Commission have the ability to not  
16 require a change in that permit status? Is that what that  
17 says.

18                   MR. TILLMAN: Yes. It's may, basically.  
19 It's not required. They may require that change. And  
20 basically in consideration of these -- the criteria  
21 listed after that. So it's not an absolute. It's a  
22 discretionary -- I guess a discretionary decision before  
23 the administrator.

24                   BOARD MEMBER APPELATE: Okay. Thank you.

25                   MR. TILLMAN: Moving on. It would be, I

1 believe, Section 4(c)(i)(AA) and (c)(i)(AA)(I) were also  
2 added per the crosswalk.

3 CHAIRPERSON BEDESSEM: What line are we on?

4 MR. TILLMAN: Be like 655 through 660.

5 BOARD MEMBER CAHN: Are you on the  
6 redline/strikeout version line numbers?

7 MR. TILLMAN: Yes, I'm in  
8 redline/strikeout.

9 CHAIRPERSON BEDESSEM: Uh-huh.

10 BOARD MEMBER CAHN: Thank you.

11 MR. TILLMAN: Moving on to Section 5.

12 Section 5 (b)(vi) was added per the crosswalk. Section  
13 (b)(vi)(A).

14 CHAIRPERSON BEDESSEM: Can you give us line  
15 numbers every time as well? It's appreciated.

16 MR. TILLMAN: I'll find that.

17 CHAIRPERSON BEDESSEM: It's a big chapter.

18 MR. TILLMAN: Oh, I don't know where I'm  
19 at. Give me a moment, please.

20 MS. THOMPSON: Is it 722?

21 MR. TILLMAN: Yes. In line 722, Section  
22 (b)(vi)(A), we added "state, tribal, and territory  
23 boundaries," per the EPA crosswalk.

24 On line 803 we also added, "and/or mass and total  
25 anticipated volume and/or mass," and that was also per the



1 EPA crosswalk.

2 On lines 825 and 826, we added the  
3 cross-reference in Section 11, per the EPA crosswalk as  
4 well.

5 And, again, the majority of these changes, I'd  
6 say 90-plus percent of the changes, were based on comments  
7 from the EPA. Going forward on lines 828 through 832,  
8 those were added and changed per the EPA crosswalk. Where  
9 am I? There we go.

10 On lines 834 we removed the results of formation  
11 testing are required in this paragraph of this section,  
12 formally (xix). Those were removed per the crosswalk, and  
13 they were moved up into a different section.

14 MS. THOMPSON: So we moved everything up.  
15 We took that passage out and moved everything up per the  
16 recommendation.

17 CHAIRPERSON BEDESSEM: Just before we get  
18 too far past that. 826 I think you need "of" instead of  
19 "at" on line 826.

20 MS. THOMPSON: So "at Section 11," where it  
21 reads that, you'd like to see it read "of Section 11"?

22 CHAIRPERSON BEDESSEM: Yeah. I think all  
23 the rest of yours are "of."

24 MS. THOMPSON: Okay. We'll keep consistent  
25 with what you --

1 BOARD MEMBER CAHN: Which line numbers?

2 CHAIRPERSON BEDESSEM: That was 826.

3 MR. TILLMAN: Okay. On line 865 -- lines  
4 865 through 869 were added per the EPA crosswalk. And line  
5 874 through 875 were also added per the EPA crosswalk, and  
6 was -- words added, "At the administrator's discretion, a  
7 demonstration of the alternative post-injection site care  
8 time frame required by Section 17 of this chapter," was  
9 added to that paragraph.

10 On line 900 -- 900 through 902 were added per the  
11 EPA crosswalk. The entire Section (c), which would be 906  
12 through 908 were added per the EPA crosswalk.

13 On, let's see, I believe 913 through 936 were  
14 added per the EPA crosswalk, and we moved the passage that  
15 was formerly in Section 5(b), per Lorie Cahn's comment they  
16 were added to (d)(iii), which would be lines 923 and 924.  
17 Ms. Cahn just thought they were in the wrong place  
18 previously, and we moved those to that section.

19 CHAIRPERSON BEDESSEM: Uh-huh. And you'll  
20 have the strikeout of the formerly --

21 MR. TILLMAN: Yes.

22 And on lines 994 through 996, those were changed  
23 also per the EPA crosswalk. In Section 6, lines 1 --  
24 excuse me, 1011 through 1012, we corrected the  
25 cross-reference to the Wyoming Hazardous Waste Rules.

1 Lines 1017 through 1021 were added per the EPA crosswalk.

2 BOARD MEMBER CAHN: Can we go back line  
3 1007 through 1009. That was an if wording, and I'm not  
4 sure the --

5 THE REPORTER: She's cutting up. I  
6 can't make it out.

7 CHAIRPERSON BEDESSEM: Yeah. Lorie, can  
8 you repeat that? You were cutting out. We only got part  
9 of that sentence.

10 BOARD MEMBER CAHN: Sorry. I wanted to go  
11 back to my 1007 through 1009, and I am not sure that adding  
12 the word "or" solves the wording issue. So what I want to  
13 ask a question -- it's the phrase that starts, "or the  
14 request for coverage" --

15 THE REPORTER: Ms. Cahn. Ms. Cahn.

16 CHAIRPERSON BEDESSEM: Can you repeat your  
17 last sentence, Lorie?

18 BOARD MEMBER CAHN: I'd like to ask -- the  
19 last part of the phrase "or the request for coverage under  
20 the individual permit," what precedes that if there was  
21 nothing else in the sentence? I'm trying to understand  
22 what's trying to be said here, then we can work on the  
23 English to understand what's trying to be said.

24 So it would be, "No person shall," from line  
25 1,000, and then some -- and then "request for coverage

1 under the individual permit." What would go before that?

2 MR. TILLMAN: I believe what's intended in  
3 that section is basically no one can, let's see, conduct  
4 any authorization -- no one can inject anything in a manner  
5 that results in a violation of a permit condition or a  
6 representation made in the application, or if they request  
7 under an individual permit, conditions in the individual  
8 permit cannot result in a violation.

9 BOARD MEMBER CAHN: Okay. My question, if  
10 we took out -- I just want to know if there was only one  
11 thing instead of three things. Would it say no person  
12 shall conduct any authorized injection activity in a manner  
13 that results in a violation of the request for coverage  
14 under the individual permit?

15 MR. TILLMAN: No. There are -- I believe  
16 there are three individual or three --

17 BOARD MEMBER CAHN: I know there's -- I'm  
18 trying to just say -- I'm trying to make sure the wording  
19 is correct. That's three different things, and I want to  
20 make sure there's parallel construction. So I'm just  
21 asking the question, if you only had one -- we're going to  
22 have three in the end, but I want to understand, if you  
23 only had one, what would be the full sentence if there was  
24 only one?

25 CHAIRPERSON BEDESSEM: She's trying to

1 figure out how --

2 BOARD MEMBER CAHN: Would it be no

3 person --

4 CHAIRPERSON BEDESSEM: Because it's not

5 understandable.

6 BOARD MEMBER CAHN: Excuse me?

7 CHAIRPERSON BEDESSEM: Thank you, Lorie. I

8 think your point is we're trying to look at this paragraph

9 so that it's understandable. The way it's constructed

10 right now, it's difficult to follow.

11 MR. TILLMAN: Okay.

12 CHAIRPERSON BEDESSEM: And so she's just

13 asking that we simplify it down to one so we can figure how

14 things should be separated by commas, or whatever, so that

15 we can get the full thought here.

16 MR. TILLMAN: Absolutely.

17 Proceed, Ms. Cahn.

18 BOARD MEMBER CAHN: So my question is if we

19 started the sentence and this is not a proposed change --

20 this is to understand there was only one thing and we had a

21 sentence, would it read no person shall conduct any un --

22 any authorized injection in a manner that results in a

23 violation of the request for coverage of individual permit.

24 Is that what it would read?

25 MR. TILLMAN: Yes. I believe so.

1                   BOARD MEMBER CAHN: Okay. So we then take  
2 the sentence and we say everything that follows all three  
3 things, all after the word of. So the first one violates  
4 any permit condition, that one makes sense; violation of  
5 representations made in the application, that makes sense,  
6 in fact; and the third one would be violation of the  
7 request for coverage under individual permits; is that  
8 correct?

9                   MR. TILLMAN: Yes.

10                   BOARD MEMBER CAHN: Okay. If that's  
11 correct, then we need violations of permit conditions,  
12 instead of "or," we need a comma.

13                   MR. TILLMAN: Okay.

14                   BOARD MEMBER CAHN: And then the sentence  
15 make sense to me. Now we have parallel construction. Does  
16 everybody agree?

17                   MR. TILLMAN: Yes, that sounds fine.

18                   BOARD MEMBER CAHN: Okay. Thank you.

19                   MR. TILLMAN: Okay. Let me get back to  
20 where -- okay. In Section 8, line 1056, we added the part,  
21 "and is acceptable to the administrator."

22                   In line 1043 -- excuse me, line 1040 through 1043  
23 that passage has changed per the crosswalk.

24                   CHAIRPERSON BEDESSEM: 1040?

25                   MS. THOMPSON: I'm sorry. 11.

1                   CHAIRPERSON BEDESSEM: All right. Thank  
2 you.

3                   MR. TILLMAN: I'm sorry.

4                   And lines 1163 through 1170, those were added per  
5 the crosswalk.

6                   Also lines 1177 through 1178 were also added per  
7 the crosswalk.

8                   Section.

9                   CHAIRPERSON BEDESSEM: So there's another  
10 "at Section 4." Is that how it's handled throughout the  
11 whole chapter? It's just odd. I saw it in other spots,  
12 where it said --

13                  MR. TILLMAN: Oh, the line.

14                  CHAIRPERSON BEDESSEM: -- "in Section 4" or  
15 "of." "In" or "of." Just look through it and figure out  
16 so they're all the same.

17                  MS. THOMPSON: Yeah, we'll have to check  
18 for consistency and make it all one.

19                  CHAIRPERSON BEDESSEM: Yeah, all the same.

20                  MR. TILLMAN: In lines 1235 and 1236, that  
21 passage was changed per the EPA crosswalk.

22                  Lines 1240 through 1243 were also added per the  
23 EPA crosswalk.

24                  Lines 1258 through 1262, also added per the EPA  
25 crosswalk.

1           In lines 1264 through -- excuse me, in 1269,  
2 through 1270, those were changed per the EPA crosswalk.

3           And also line 1279, that was also changed per the  
4 EPA crosswalk.

5           Moving on to Section 10. Lines 1289 through 1292  
6 were changed per the EPA crosswalk.

7           BOARD MEMBER APPLGATE: Question here.  
8 The whole Section 10 is blue. Does that mean whole Section  
9 10 is new?

10           MS. THOMPSON: So it's new to the -- the  
11 section is new to the chapter, compared to the chapter that  
12 is currently on file with the Secretary of State, so it's  
13 highlighted blue. But within that chapter, they -- the EPA  
14 requested that we make additional changes to how we had  
15 phrased certain passages. So --

16           CHAIRPERSON BEDESSEM: So how do we know  
17 what was changed from the EPA crosswalk, if the whole  
18 section is blue, because it was added prior?

19           MS. THOMPSON: I can look and see  
20 specifically what was changed in that passage.

21           BOARD MEMBER APPLGATE: Well, my question,  
22 I guess in general was -- and maybe you answered this, but  
23 I'm not sure I heard it clearly. Was there depth waiver  
24 requirements previously?

25           MR. TILLMAN: Yes. Well, there was depth



1 waiver requirements from the federal language previously in  
2 the chapter. And like she referred to, the EPA crosswalk,  
3 they didn't like particular words or sentences within what  
4 we had, so we made changes to that. But the entire  
5 section, I guess, is new to the chapter. I understand  
6 what --

7 CHAIRPERSON BEDESSEM: So where was the  
8 section before?

9 MR. TILLMAN: It was in Section 10. It was  
10 in Section 10, these depth waiver requirements. It was  
11 there. But like I said, we -- there were changes requested  
12 from the EPA within what we already added. But to what  
13 you're speaking --

14 BOARD MEMBER APPLGATE: It currently is  
15 colored. It just makes it appear as if the whole chapter  
16 is --

17 MS. THOMPSON: That whole section, it is  
18 not new. You've seen this section before as it's new. The  
19 way that passage is to read -- it used to read a  
20 demonstration that the injection zone is or are laterally  
21 continuous is not a USDW, is not hydraulically connected to  
22 USDW, and does not outcrop within the area of review, has  
23 the appropriate geochemistry and safe -- can safely contain  
24 the injected fluids. And it didn't match the CFR  
25 perfectly, and so they flagged it in our -- in our

1 crosswalk. So we changed it to match the CFR wording.

2 CHAIRPERSON BEDESSEM: Okay.

3 MS. THOMPSON: So the concept is not  
4 different, the phrasing is.

5 CHAIRPERSON BEDESSEM: Okay. It's -- I  
6 couldn't --

7 BOARD MEMBER APPELEGATE: Let me come back  
8 to my question one more time.

9 MS. THOMPSON: Sure.

10 BOARD MEMBER APPELEGATE: So you have -- you  
11 have four pages of what appears to be a new chapter.

12 CHAIRPERSON BEDESSEM: New section.

13 MS. THOMPSON: Yes.

14 BOARD MEMBER APPELEGATE: Yeah, new section,  
15 Section 10. It's unclear why it's all colored blue,  
16 because you're saying it's not a new chapter. So much of  
17 the content there was already there.

18 MR. TILLMAN: Yes.

19 MS. THOMPSON: Sort of. Okay. So he had  
20 we have -- we have multiple versions. We have the version  
21 that operators would be beholden to if we had primacy, and  
22 that's the official copy that's on file with the Secretary  
23 of State.

24 BOARD MEMBER APPELEGATE: Did that include  
25 this chapter?

1 MS. THOMPSON: This particular section,  
2 Section 10, the way it is worded now, is not in there.

3 BOARD MEMBER APPELLEGATE: So one more time.  
4 Was Section 10 -- I'm trying to understand my level of  
5 review that's required of Section 10.

6 MS. THOMPSON: Right.

7 BOARD MEMBER APPELLEGATE: Was Section 10,  
8 injection depths waiver requirements, part of the current  
9 regulatory framework? Is there a current Section 10?

10 MR. TILLMAN: No. Not in the chapter  
11 that's on file with the Secretary of State.

12 MS. THOMPSON: Right. And you have seen  
13 Section 10 before because we brought this chapter to you  
14 before, and we're saying in this particular subparagraph  
15 (a)(i), that we -- we submitted this chapter the way it  
16 reads now to EPA, and they said, "No, not good enough in  
17 that particular passage. You're in the right direction but  
18 we want you to change the wording."

19 So the section is highlighted because in  
20 comparison to the Secretary of State chapter it is new.  
21 And when they do their review and the Legislative Services  
22 Office does their review, and the Attorney General does  
23 their review, they're going to compare everything to what's  
24 on file now, and so they want to see what's new compared to  
25 what's on file now.

1                   CHAIRPERSON BEDESSEM: So we have to figure  
2 out a way, when we're -- when we're looking at these  
3 chapters -- so, for example, like the previous time we  
4 looked at Chapter 24.

5                   MS. THOMPSON: Yes.

6                   CHAIRPERSON BEDESSEM: There was some  
7 proposed changes.

8                   MS. THOMPSON: Yes.

9                   CHAIRPERSON BEDESSEM: And then since that  
10 time, based on the crosswalk and based on any additional  
11 comments you may have received there may be additional  
12 changes.

13                  MS. THOMPSON: Right.

14                  CHAIRPERSON BEDESSEM: So we've got to  
15 figure out a way the advisory board can see the newest  
16 changes are in like a different color, then you can --  
17 there's a method where then you can go back and make them  
18 all same color when you send them to Secretary of State?

19                  MS. THOMPSON: Right.

20                  CHAIRPERSON BEDESSEM: But that we can see  
21 the incremental change because then we're thinking you  
22 changed all this, but we've actually reviewed that before  
23 at the previous meetings.

24                  MS. THOMPSON: That's correct.

25                  CHAIRPERSON BEDESSEM: And there is a way

1 to do that, then make them all the same color so you're not  
2 redoing your work for when you have go to the Secretary of  
3 State. So if we can manage that so then we're not kind of  
4 re-reviewing the previous efforts, that certainly will help  
5 us out and let us understand what the newest changes are.

6 MS. THOMPSON: Okay.

7 MR. TILLMAN: I understand. I'm not  
8 sure -- I guess I've got the previous draft that was  
9 presented to you before.

10 CHAIRPERSON BEDESSEM: Uh-huh.

11 MR. TILLMAN: And in these sections I  
12 believe there's six or seven changes. I can read what was  
13 previously there, and then you can see what that change is.  
14 Would that help you at this point? Because, again, I guess  
15 understand what you're saying, that it's hard for you to  
16 see what the incremental change was from last time to this  
17 time.

18 CHAIRPERSON BEDESSEM: Right. Right. I'm  
19 just saying going forward, you can do that in a different  
20 color --

21 MR. TILLMAN: Yes.

22 CHAIRPERSON BEDESSEM: -- then make it all  
23 the same later, and that would be easier.

24 And then it's up to you, Dave, if you would care  
25 to see those small changes that are within the Section 10

1 that are the most recent update.

2 BOARD MEMBER APPLGATE: Yeah, I'm -- I'm  
3 not as concerned about the recent changes. I'm trying to  
4 understand the context of the overall change.

5 MR. TILLMAN: Okay.

6 MS. THOMPSON: Okay.

7 BOARD MEMBER APPLGATE: And I'll repeat  
8 it, because I wanted to make sure I heard it clear. This  
9 Section 10 is not currently in the regulatory framework  
10 that operators are required to adhere to.

11 MS. THOMPSON: Yep.

12 MR. TILLMAN: Correct.

13 BOARD MEMBER APPLGATE: So it's a new  
14 section.

15 MR. TILLMAN: This is all new section.

16 BOARD MEMBER APPLGATE: So can you help me  
17 understand what you might have explained at the last  
18 advisory meeting, which, I apologize, I did miss that one,  
19 the rationale or reason.

20 BOARD MEMBER CAHN: Dave, can you get a  
21 little closer to the microphone, please?

22 BOARD MEMBER APPLGATE: Can you provide me  
23 the basis and rationale for the inclusion of Section 10,  
24 give me a little background on why it became a necessary  
25 component of the rules.

1                   MR. TILLMAN: It was part of the federal  
2 CFR that was associated with carbon sequestration. It was  
3 a -- a depth waiver that pertained to that.

4                   BOARD MEMBER APPLGATE: And our earlier  
5 rules did not have --

6                   MR. TILLMAN: Did not have that.

7                   THE REPORTER: One at a time.

8                   MR. TILLMAN: No, the earlier rules did not  
9 have that. This came out after we had already promulgated  
10 the chapter. So as we were adding the part for financial  
11 assurance, this part also needed to be added to the  
12 chapter, so we added it at the same time.

13                   BOARD MEMBER APPLGATE: Okay. Thank you.

14                   CHAIRPERSON BEDESSEM: And then can you  
15 also check through, as you're going through your grammar  
16 checks, or whatever, when you have USDWs plural, that it  
17 doesn't have an apostrophe.

18                   MS. THOMPSON: Okay.

19                   MR. TILLMAN: How would you like to  
20 proceed, then, being there's some confusion as to the  
21 incremental change? Would you like me to read the prior --

22                   CHAIRPERSON BEDESSEM: Sounds to me like  
23 there's some very minor changes that are related to the  
24 crosswalk, so I don't know that you need to go through  
25 those in detail.

1 MR. TILLMAN: Okay.

2 BOARD MEMBER APPELEGATE: And you've  
3 answered my question, so I don't need to know what those  
4 incremental changes were.

5 MR. TILLMAN: Okay.

6 CHAIRPERSON BEDESSEM: Just carry on.

7 MR. TILLMAN: Okay. Lines 1294 through  
8 1299 were -- was reworded per the crosswalk.

9 Lines 1301 through 1305 were changed per the  
10 crosswalk.

11 Lines 1334 through 1360 was added per the  
12 crosswalk, that entire subsection.

13 Lines 419 -- excuse me, 1419.

14 BOARD MEMBER CAHN: I didn't hear which  
15 line you're on.

16 MR. TILLMAN: 1419.

17 BOARD MEMBER CAHN: Before we go on to 1419  
18 I have a question of lines. Does this work when I talk  
19 directly into the phone? Is that better?

20 CHAIRPERSON BEDESSEM: It was better just a  
21 moment ago.

22 BOARD MEMBER CAHN: Okay. Let me go back  
23 to the speaker. Okay.

24 CHAIRPERSON BEDESSEM: Yeah, that's better.  
25 Thank you.



1                   BOARD MEMBER CAHN: Okay. So in lines  
2 1385, it talks to "If the US EPA regional administrator  
3 requires information to make a decision, the administrator  
4 shall provide the information..." I think that  
5 administrator then should be --

6                   THE REPORTER: Ms. Cahn, can you repeat? I  
7 think if you talk slower, it won't break up so bad.

8                   BOARD MEMBER CAHN: Okay. Line 1385 says,  
9 "If the US EPA regional administrator requires additional  
10 information to make a decision, the administrator shall  
11 provide the information." And I think the second  
12 administrator, it doesn't make sense that EPA's requesting  
13 information they're going to provide. I think the second  
14 administrator or refers to DEQ, and so it should probably  
15 say the director or it should say the EPA -- it should say  
16 the DEQ administrator or something. It doesn't make sense  
17 if EPA needs more information, that EPA's going to provide  
18 the information.

19                   MS. THOMPSON: That is -- this is correct,  
20 Ms. Cahn. I believe we pulled that from the Federal  
21 Register. And the way it was previously stated in the  
22 Federal Register, it talks about the regional administrator  
23 and the director. But the director is not the -- does not  
24 oversee the program, and so when we made that change, it  
25 did confuse the matter. So we will add some clarifying

1 language there to more clearly state that the DEQ  
2 administrator of Water Quality will be submitting that  
3 additional information to EPA, if they so desire.

4 BOARD MEMBER CAHN: Okay. Thank you.

5 MS. THOMPSON: Uh-huh.

6 MR. TILLMAN: Okay. Where was I? Lines  
7 1439 through 1444 were changed per the EPA crosswalk.

8 And lines 1449 through 1457 were added per the  
9 EPA crosswalk.

10 In Section 11, lines 1471 through 1476 were  
11 changed per the EPA crosswalk.

12 Lines 1479 through 1480 were also changed per the  
13 EPA crosswalk.

14 Lines 1491 through 1495 also changed per the EPA  
15 crosswalk.

16 BOARD MEMBER CAHN: I have a comment on  
17 those. I found that the new wording was extremely  
18 difficult to follow, so I would suggest that be reworded.  
19 Start the sentence with the end and say, "After the casing  
20 is set and cemented, cement" --

21 CHAIRPERSON BEDESSEM: What line is this,  
22 Lorie?"

23 BOARD MEMBER CAHN: I'm on line 1481  
24 through 93, and I would start with -- I would propose the  
25 sentence be changed to be, "After the casing is set and

1 cemented, cement bond and variable density logs," plural,  
2 "to evaluate cement quality radially that have," instead of  
3 with, "sufficient resolution to identify, voids, or other  
4 areas of missing cement, and a temperature log."

5 MR. TILLMAN: We'll take your comment under  
6 advisement. We'll have to look and see how the comment was  
7 received from the EPA and how they worded that. We  
8 understand the grammar that you're suggesting. We'll take  
9 a look at that.

10 BOARD MEMBER APPELEGATE: So -- I've seen  
11 this occur before, so I'm going to ask this question. Are  
12 we approving this today?

13 MR. TILLMAN: We would like to ask for  
14 approval today, yes.

15 BOARD MEMBER APPELEGATE: Is that going to  
16 be sufficient for you, Lorie?

17 CHAIRPERSON BEDESSEM: Yeah, it's not a --

18 BOARD MEMBER CAHN: Excuse me?

19 CHAIRPERSON BEDESSEM: -- substantive  
20 change. It's a --

21 BOARD MEMBER APPELEGATE: I'm just asking  
22 her because we've got -- yeah. Are you going to be okay  
23 with that response, given we're being asked to approve this  
24 today?

25 BOARD MEMBER CAHN: Yeah, if they re-word

1 it. The wording was very confusing.

2 BOARD MEMBER APPELEGATE: They didn't say  
3 they'd re-word it. They said they'd consider re-wording  
4 it. From a process standpoint, I've just seen this get  
5 hung up before, so I'd rather us work through it.

6 BOARD MEMBER CAHN: Yeah. I guess I'll  
7 wait to see how many of these we can't resolve, how many  
8 there are, so I'm going to withhold judgment.

9 BOARD MEMBER APPELEGATE: So last meeting  
10 where we had this issue regarding a set of rules we wanted  
11 to push it forward and we had a number of these unresolved,  
12 so do we want to take a few minutes and try to work through  
13 it or --

14 MR. TILLMAN: I don't feel --

15 CHAIRPERSON BEDESSEM: Yeah, this --

16 MR. TILLMAN: Go ahead, Madam Chair.

17 CHAIRPERSON BEDESSEM: In that previous  
18 case, there were substantive changes. This is basically  
19 just rewording for clarity. It's not changing the meaning.  
20 It's really just making it more understandable. So I'm not  
21 sure that it's a parallel situation.

22 BOARD MEMBER CAHN: Marge, I can't -- I  
23 can't hear you, Marge.

24 CHAIRPERSON BEDESSEM: I'm saying that I'm  
25 not sure that's a -- a parallel situation.

1                   Do you -- Bill, would you be able to repeat back  
2 Lorie's suggestion, rather than us trying to hear?

3                   MR. TILLMAN: I believe what she's  
4 suggesting, what she said, after the -- after the casing is  
5 set and cemented, a cement --

6                   BOARD MEMBER CAHN: No, not "a." The "a"  
7 is -- there's two things there, there's cement bond and  
8 variable density logs. So "a" should not be there.  
9 It's -- this is dependent on cement bond and variable  
10 density logs, plural.

11                   MR. TILLMAN: Madam Chair, Gina's just  
12 looked it up, and I guess the way this is worded is the  
13 exact quote from the CFR.

14                   MS. THOMPSON: The comma is where it is in  
15 the CFR the way they've -- the way EPA has compared the CFR  
16 to our chapter. They -- they compared the two passages and  
17 they preferred theirs. And so I'm not quite sure how to  
18 address that phrasing change and rearranging. I don't know  
19 if that -- if that affects the overall meaning. Because  
20 the way it reads, I'm wondering if that -- the bit about it  
21 being after the casing is set and cemented, if that only  
22 applies to the temperature log and they only want that  
23 after the casing is set.

24                   CHAIRPERSON BEDESSEM: So you're saying  
25 your preference would be to leave the language as is

1 because you know that's already approved through the  
2 crosswalk?

3 MS. THOMPSON: Yes.

4 CHAIRPERSON BEDESSEM: And so it's a matter  
5 of -- of whether Ms. Cahn is okay with that for the time  
6 being.

7 BOARD MEMBER CAHN: The problem is that --  
8 and I'll ask Dave and Marge -- I would think you can't do a  
9 cement bond and variable density log until after the casing  
10 is set and cemented. So the problem is we don't know that  
11 after the casing is set and cemented -- it looks, according  
12 to wording, that it's only for the temperature log, but it  
13 is for all three things. You need a cement bond and you  
14 need a -- a cement bond and variable density log -- or  
15 logs, and that's three different things.

16 CHAIRPERSON BEDESSEM: Can we just put a  
17 comma after temperature log?

18 BOARD MEMBER CAHN: Yeah, that would help.

19 CHAIRPERSON BEDESSEM: Let's just put a  
20 comma after temperature log.

21 BOARD MEMBER CAHN: Is cement bond and  
22 variable density log one thing or --

23 CHAIRPERSON BEDESSEM: I think that would  
24 work to make it clear that the time frame of "After the  
25 casing is set and cemented" applies to --

1 MR. TILLMAN: The entire --

2 CHAIRPERSON BEDESSEM: -- the entire  
3 previous set of requirements.

4 And then you're not changing what -- what EPA has  
5 already approved dramatically. You're just adding a comma  
6 and it clarifies.

7 Bill, are you okay with that?

8 MR. TILLMAN: That would be fine.

9 CHAIRPERSON BEDESSEM: Lorie, does that  
10 work?

11 BOARD MEMBER CAHN: Yeah.

12 CHAIRPERSON BEDESSEM: All right. It's a  
13 compromise.

14 BOARD MEMBER CAHN: No, that's fine.

15 CHAIRPERSON BEDESSEM: Okay. So do you  
16 want to move on? I don't know what number you're at.

17 MR. TILLMAN: Yes. I'll find where I  
18 stopped.

19 Okay. Moving on. Lines 1503 through 1505, we've  
20 also changed per the crosswalk.

21 CHAIRPERSON BEDESSEM: You might want to  
22 put the comma again after temperature log.

23 MR. TILLMAN: Got it. Thank you, ma'am --  
24 or Madam Chair.

25 Lines 1527 through 1535 were changed per the

1 crosswalk.

2 Lines 1537 through 1539 were also changed per the  
3 crosswalk.

4 Lines 1541 through 1550 were also changed per the  
5 crosswalk, in particular lines 1546 through 1550 were  
6 added.

7 Lines 1555 through 1557 were also changed per the  
8 crosswalk. We added -- we changed the notification from 48  
9 hours to 30 days per the EPA crosswalk.

10 Lines 1561 through 1570 were re-worded per the  
11 EPA crosswalk.

12 Lines 1583 through 1585 were changed per the EPA  
13 crosswalk.

14 Lines 1599 through 1601 were also changed per the  
15 EPA crosswalk.

16 Lines 1603 through 1608 were changed per the EPA  
17 crosswalk.

18 BOARD MEMBER APPLGATE: I'm going to back  
19 up here for just a second.

20 MR. TILLMAN: Okay.

21 BOARD MEMBER APPLGATE: Line 1555 on the  
22 change from 48 to 30 days is very significant. It says,  
23 "The owner or operator must" --

24 THE REPORTER: I'm sorry. Can you slow  
25 down.



1                   BOARD MEMBER APPLGATE:  "The owner or  
2 operator must submit a schedule of such activities to the  
3 administrator upon spudding the well" -- you're spudding  
4 wells -- "and notify the administrator of any changes to  
5 the schedule at least 30 days prior to the scheduled test."

6                   Well, the changes that might occur would be  
7 during the drilling of the well, and then you would be  
8 giving them a couple days' notice for those changes.  I  
9 think you've made the -- the implementation of this almost  
10 impossible by saying 30 days prior to the scheduled test.  
11 I understand that's what the EPA might have had in their  
12 rule, but it certainly seems unreasonable that once you  
13 spudded the well, we now have a schedule, you have these  
14 tests planned, something happens, you try to give two days'  
15 notice to the administrator during the process of drilling  
16 this well, that seems at least practical and implementable  
17 to somehow say you have a change after spudding and you're  
18 going to give him 30 days notice?

19                   CHAIRPERSON BEDESSEM:  Is this from the  
20 crosswalk or --

21                   MR. TILLMAN:  Yes.

22                   BOARD MEMBER APPLGATE:  I would tell them  
23 they're wrong.  It seems impossible.  I think it's  
24 unworkable the way it's written.

25                   MR. TILLMAN:  Let's look and see what

1 the --

2 MS. THOMPSON: So this comes from 40 CFR  
3 146.87(f), and the CFR reads the owner or operator must  
4 provide the director with the opportunity to witness all  
5 logging and testing by the subparts. The owner or operator  
6 must submit a schedule of such activities to the director  
7 30 days prior to conducting the first test and submit any  
8 changes to the schedule 30 days prior to the next scheduled  
9 test.

10 BOARD MEMBER APPLGATE: That seems to be a  
11 little different than what's written here.

12 BOARD MEMBER CAHN: Upon spudding the well  
13 was added by DEQ.

14 CHAIRPERSON BEDESSEM: So we need to delete  
15 the "upon spudding the well."

16 BOARD MEMBER CAHN: EPA's language might be  
17 better than DEQ's.

18 MS. THOMPSON: Yeah, the -- the -- the  
19 timing was the issue. It was the difference of 48 hours  
20 versus 30 days, and they were concerned that it was a less  
21 stringent passage.

22 BOARD MEMBER APPLGATE: I think the idea  
23 of giving 30 days notice before you start a project, that  
24 seems reasonable. But to somehow say that you -- upon  
25 spudding the well, that you -- yeah, you created a

1 disconnect here because you spudded the well, you could  
2 have changes occur and you're not going to be able to give  
3 30 days' notice for those changes.

4 CHAIRPERSON BEDESSEM: Is -- the term "upon  
5 spudding the well" is not in the federal version?

6 MS. THOMPSON: It is not.

7 CHAIRPERSON BEDESSEM: So the suggestion is  
8 to remove that.

9 MS. THOMPSON: So if we -- if we adopted  
10 the federal passage --

11 BOARD MEMBER APPLGATE: Could you read the  
12 federal passage one more time?

13 MS. THOMPSON: The owner or operator must  
14 provide the director with the opportunity to witness all  
15 logging and testing by the subparts. The owner or operator  
16 must submit a schedule of such activities to the director  
17 30 days prior to conducting the first test and submit any  
18 changes to the schedule 30 days prior to the next scheduled  
19 test.

20 BOARD MEMBER APPLGATE: So all that makes  
21 sense to me, other than the -- no, that just read the last  
22 phrase. It says 30 days and in any --

23 MS. THOMPSON: Must submit -- so prior to  
24 conducting the first test --

25 BOARD MEMBER APPLGATE: That makes sense.

1 MS. THOMPSON: -- and submit any changes to  
2 the schedule 30 days prior to the next scheduled test.

3 BOARD MEMBER APPLGATE: Yeah, that part  
4 I'm just not familiar enough with the drilling. But just  
5 seems to me that last part, some changes occur in the  
6 drilling process that could necessitate a change to the  
7 schedule that then would not necessarily allow a 30-day  
8 notice, but --

9 BOARD MEMBER CAHN: Dave, can you use the  
10 microphone more, please.

11 BOARD MEMBER APPLGATE: I think the last  
12 part of that phrase potentially poses problems, but I think  
13 it's better than the language that's here. I would suggest  
14 the federal language.

15 CHAIRPERSON BEDESSEM: Let's just  
16 substitute --

17 MR. TILLMAN: The entire passage or at --

18 CHAIRPERSON BEDESSEM: The second  
19 paragraph.

20 MR. TILLMAN: Where it picks up the  
21 owner/operator?

22 CHAIRPERSON BEDESSEM: Yes.

23 BOARD MEMBER APPLGATE: Giving 30 days'  
24 notice -- you're giving 30 days' notice prior to the first  
25 test, which I think is reasonable. And that's a schedule

1 of the tests as you plan to implement them. I think it's  
2 possible that those tests then could be affected by the  
3 schedule in drilling the well, but -- but I still think  
4 that's better language because it basically says you're  
5 giving a schedule 30 days prior to doing the test.

6 MR. TILLMAN: Okay. I think we can adopt  
7 that federal language in that section and replace that.

8 BOARD MEMBER APPLGATE: I will say I think  
9 your original language was the best language because your  
10 original language that you had in here basically said you  
11 spud a well, you've given them a schedule, and if you have  
12 any changes, you try to give them at least two days' notice  
13 prior to that.

14 So do you have any -- you're at the point where  
15 you don't want to do any more interactions with EPA,  
16 correct?

17 CHAIRPERSON BEDESSEM: That adds a lot of  
18 time.

19 MR. TILLMAN: We prefer not. They've had a  
20 chance to look at it and review it in its entirety. We've  
21 responded back. They kind of say, "We like that language."  
22 Our preference is not to go back and forth with them  
23 more --

24 BOARD MEMBER APPLGATE: I understand.

25 MR. TILLMAN: -- within reason, I suppose.

1                   CHAIRPERSON BEDESSEM: But if you just use  
2 the federal one for that paragraph, they should not have  
3 any objection.

4                   MR. TILLMAN: There shouldn't be any  
5 objection to that.

6                   CHAIRPERSON BEDESSEM: And you don't have  
7 to -- it doesn't have to go back for review.

8                   MR. TILLMAN: I would think not, Madam  
9 Chair.

10                  CHAIRPERSON BEDESSEM: Okay.

11                  MR. TILLMAN: Moving forward.

12                  CHAIRPERSON BEDESSEM: Uh-huh.

13                  MR. TILLMAN: I believe we're on --

14                  BOARD MEMBER CAHN: Let me ask a question,  
15 since we are trying to get exact language for moving this  
16 forward. I'm going to still make an assumption that  
17 editing that does not change the meaning does not have to  
18 be brought before the board. I can just provide those to  
19 Gina. Is that correct, or do we -- do I need to bring them  
20 up? I only have about a dozen of them.

21                  MR. TILLMAN: No, you can bring those to  
22 Gina, as we've previously done.

23                  BOARD MEMBER CAHN: Okay.

24                  CHAIRPERSON BEDESSEM: Uh-huh.

25                  MR. TILLMAN: Okay. Lines 1583 through

1 1585 were changed per EPA crosswalk.

2 Lines 1599 through 1601 changed per the EPA  
3 crosswalk.

4 Lines 1603 through 1608 changed per the EPA  
5 crosswalk.

6 In line 1621 we added the part "or formation  
7 fluids" to that paragraph per the EPA crosswalk.

8 And also in line 1624, we removed the part of  
9 discovery from that sentence. So it reads, "Notify the  
10 administrator within 24 hours."

11 Madam Chair, you had a look of confusion.

12 CHAIRPERSON BEDESSEM: I'm confused because  
13 the only change I see on Section 24 is capitalization  
14 change.

15 MR. TILLMAN: There was a part that was  
16 deleted and --

17 CHAIRPERSON BEDESSEM: So you need to have  
18 that strike-out in there.

19 MR. TILLMAN: Yes. I believe it previously  
20 read, "Notify the administrator within 24 hours of  
21 discovery," and we -- we removed the "of discovery" part.

22 MS. THOMPSON: We'll -- Madam Chair, we  
23 will correct that in the draft.

24 CHAIRPERSON BEDESSEM: And that's why my  
25 brow was furrowed. I was like --

1                   MR. TILLMAN: Okay. I noticed confusion.  
2 I had to stop.

3                   CHAIRPERSON BEDESSEM: Yes, thank you.

4                   MR. TILLMAN: Moving on in Section 13. In  
5 line 1642, we add the word "'continuously' monitor" at the  
6 end of that sentence -- or end of that part of that line.

7                   Lines 1646 through 1650 were changed per the EPA  
8 crosswalk.

9                   Lines 1652 through 1654 were added per the EPA  
10 crosswalk. Also, lines 1656 through 1658 were also added  
11 per the EPA crosswalk.

12                   BOARD MEMBER CAHN: Can we go back to line  
13 1642 where it's "continuously monitoring." So if we go to  
14 1600, we're continuously monitoring pressure, so I envision  
15 we have a transducer. When you get 1640 -- the only thing  
16 that we're continuously monitoring is the pressure -- it's  
17 only continuously monitoring the pressure, but not the  
18 rate. I mean, I don't know what kind of --

19                   THE REPORTER: Repeat that, Ms. Cahn.

20                   BOARD MEMBER CAHN: Excuse me?

21                   THE REPORTER: Can you repeat that.

22                   BOARD MEMBER CAHN: I'm on line 1642, and  
23 the word "continuously" was added, and I am trying to  
24 figure out if continuously only applies to pressure,  
25 because that's where we can put in a transducer and measure



1 the pressures. I'm not sure continuously measures the  
2 other in that sentence, injection volumes...but -- so can  
3 somebody tell me what -- DEQ, can you say what kind of  
4 instrumentation you're envisioning the some kind of  
5 continuous monitor other than a pressure transducer?

6 MR. TILLMAN: Ms. Cahn, I believe the  
7 comment from the EPA only regarded the injection pressure,  
8 so that would be a transducer that would continuously  
9 monitor that -- that would be the injection pressure.

10 BOARD MEMBER CAHN: Then --

11 CHAIRPERSON BEDESSEM: Lorie?

12 BOARD MEMBER CAHN: Yes.

13 CHAIRPERSON BEDESSEM: On line 1592, which  
14 is subsection (e), it says, "The owner or operator must  
15 install and use continuous recording devices to monitor,"  
16 both "injection pressure; and rate, volume, and temperature  
17 of the carbon dioxide stream."

18 BOARD MEMBER CAHN: What line are you on?

19 CHAIRPERSON BEDESSEM: It's 1592 through  
20 1597. It says, "...continuous recording device to monitor:  
21 injection pressure; and rate, volume and temperature of the  
22 carbon dioxide stream."

23 MR. TILLMAN: So it's everything.

24 MR. JENNINGS: It's everything.

25 BOARD MEMBER CAHN: Okay. Then the wording

1 is fine in 164 -- 1640 through 1644. Okay.

2 CHAIRPERSON BEDESSEM: Okay. Thank you.

3 I think you were up to maybe 1647.

4 MR. TILLMAN: Yes. I believe I'm on -- I  
5 believe I mentioned that 1652 through 1654 were added per  
6 the crosswalk.

7 And lines 1656 through 1658 were also added per  
8 the EPA crosswalk.

9 Moving on to Section 14. Lines 1692 through 1693  
10 were added per the EPA crosswalk.

11 Lines 1695 through 1698 were changed per the EPA  
12 crosswalk.

13 Line 1728 was added per the EPA crosswalk, and  
14 lines 1730 through 1731, part of that was removed per the  
15 EPA crosswalk. And also lines 1733 through 1737 part of  
16 that passage was removed per the EPA crosswalk.

17 Lines 1756 through 1759 were changed per the EPA  
18 crosswalk. Also, lines 1761 through 1764 were changed per  
19 the EPA crosswalk.

20 Lines 1773 through 1777 were added per the EPA  
21 crosswalk.

22 Lines 1783 through 1784 were also changed per the  
23 EPA crosswalk.

24 Lines 1793 through 1798 were changed per the EPA  
25 crosswalk. Hang on. Excuse me. In lines 1793 through

1 1798 we just changed references in that section. There was  
2 nothing added there. The part that was added was further  
3 down.

4 Lines 1807 through 1825 were added per the EPA  
5 crosswalk.

6 Lines 1835 through 1836, part of it was removed  
7 per the EPA crosswalk.

8 Lines 1866 through 1887 -- excuse me -- excuse  
9 me -- through 1890 were added per the EPA crosswalk.

10 MS. THOMPSON: And, Madam Chairman, I'll  
11 point out that the formatting -- there seems to be a  
12 formatting error. The additions that we made in the  
13 passage that he just mentioned, I'm not sure why, but the  
14 coloring didn't transfer over. It's in two places, so  
15 it's -- this is in a Word document, and had my "track  
16 changes" on, and underneath the track changes the  
17 formatting is supposed to appear, and for some reason it is  
18 not here.

19 CHAIRPERSON BEDESSEM: Starting on what  
20 line, Gina?

21 MR. TILLMAN: It would be lines 1866  
22 through 1890.

23 MS. THOMPSON: So the --

24 MR. TILLMAN: Should have been highlighted  
25 blue.

1 MS. THOMPSON: Yeah.

2 MR. TILLMAN: As a new --

3 MS. THOMPSON: Yeah. And the EPA requested  
4 that we add that "24-hour reporting" section because they  
5 found it confusing the way it had been distributed before.

6 CHAIRPERSON BEDESSEM: So it's the same  
7 requirements, it's just --

8 MS. THOMPSON: They're in one section.

9 CHAIRPERSON BEDESSEM: -- weird organized.

10 MS. THOMPSON: Yeah.

11 MR. TILLMAN: Lines 1895 through 1897 were  
12 also changed per the EPA crosswalk.

13 And lines 1906 through 1909, we changed the  
14 retention schedule from 3 years to 10 years per the EPA  
15 crosswalk.

16 In line 1945, the words "in writing" was added to  
17 that line. Where it reads, "The owner or operator must  
18 notify the administrator, in writing, at least 60 days  
19 prior.

20 Lines 1954 through 1956 were added per the EPA  
21 crosswalk.

22 Also lines 1964 through 1968 were added per the  
23 EPA crosswalk.

24 In lines 1975 through 1976, the part of the  
25 sentence, "The requirement to maintain and implement an

1 approved plan is directly enforceable regardless of whether  
2 a requirement is a condition of the permit," was added per  
3 the EPA crosswalk.

4 Lines 1998 through 1999 were changed per the EPA  
5 crosswalk.

6 Lines 2006 through 2014 were added per the EPA  
7 crosswalk.

8 CHAIRPERSON BEDESSEM: Again, like this is  
9 just a grammatical thing, 2021.

10 MR. TILLMAN: At --

11 CHAIRPERSON BEDESSEM: Make sure those  
12 apostrophes are not in it.

13 MS. THOMPSON: Thank you, Madam Chairman.

14 MR. TILLMAN: And lines 2019 through 2021  
15 were altered -- were also changed per the EPA crosswalk.  
16 We added parts to that sentence -- or to those sentences --  
17 or that passage, excuse me.

18 CHAIRPERSON BEDESSEM: Uh-huh.

19 MR. TILLMAN: Lines 2023 through 2025 were  
20 also changed per the EPA crosswalk.

21 Line 2043, the portion in writing was added to  
22 that line per the crosswalk.

23 Lines 2049 through 2051 were also changed per the  
24 EPA crosswalk.

25 Lines 2053 through 2056 were also changed per the

1 EPA crosswalk.

2 In lines 20 -- 2068 it was changed to read "US  
3 EPA regional administrator" per the crosswalk.

4 CHAIRPERSON BEDESSEM: We're almost getting  
5 to the end.

6 MR. TILLMAN: Yes. We're getting close.

7 And lines 2106 through 2110 were also changed per  
8 the EPA crosswalk.

9 In lines 2122 through 2123, that sentence was  
10 added per the EPA crosswalk.

11 Lines 2128 through 2130 were added per the  
12 crosswalk.

13 Additionally, lines 2132 through 2140 were added  
14 per the EPA crosswalk.

15 In line 2144 the word "may" was added per the EPA  
16 crosswalk.

17 Lines 2149 through 2150 were also changed per EPA  
18 crosswalk.

19 In line 2152 the words "as soon as practicable"  
20 were removed and replaced with "within 24 hours." Again,  
21 within the EPA crosswalk.

22 CHAIRPERSON BEDESSEM: Just a general  
23 question. Like in line 2144, EPA crosswalk they wanted you  
24 to say "may endanger drinking water," but they didn't put  
25 the "may" in front of threaten, may threaten. So they want

1 wiggle room on the drinking water, but not on the -- the  
2 remaining items. It seems inconsistent.

3 MR. TILLMAN: Madam Chair, I understand  
4 your concern. We noted that's where they would like that  
5 "may" positioned. Sometimes --

6 CHAIRPERSON BEDESSEM: I'm just --

7 MR. TILLMAN: I was going to say sometimes  
8 their comments don't necessarily make a lot of sense to us,  
9 but considering what they're considering, we consider that  
10 to be a minor change that we can accommodate.

11 CHAIRPERSON BEDESSEM: Thank you. You've  
12 answered my question.

13 MR. TILLMAN: And, again, I think Section  
14 19 is going to be somewhat confusing, being this is new to  
15 the chapter, but there were changes within that section  
16 that the EPA noted. So, again, as your previous comment as  
17 far as trying to --

18 CHAIRPERSON BEDESSEM: Right. We've  
19 already seen that.

20 MR. TILLMAN: -- do that in color, we will  
21 definitely do that next time.

22 CHAIRPERSON BEDESSEM: Yes. We saw this  
23 before, but, again, for future try to highlight the new  
24 changes.

25 MR. TILLMAN: Line 20 -- 2207 to 2208 were

1 changed to be consistent with the working group report.

2 BOARD MEMBER APPELEGATE: That was the  
3 State's working group report on financial assurance?

4 MR. TILLMAN: Yes.

5 BOARD MEMBER APPELEGATE: Has that been  
6 provided to this board?

7 MS. THOMPSON: I believe when they first  
8 promulgated the rule, they promulgated the reports. And I  
9 believe I have a copy of it available PDF, so if you'd like  
10 to revisit that, I can send that to you.

11 BOARD MEMBER APPELEGATE: Just I'd --

12 MS. THOMPSON: But it's not in your current  
13 packet.

14 BOARD MEMBER APPELEGATE: That's fine. If  
15 you can just send a link or a copy of the PDF, that would  
16 be appreciated.

17 MS. THOMPSON: It used to be on our  
18 website, and when we migrated websites, we pared down the  
19 information, but I can send that.

20 BOARD MEMBER APPELEGATE: Is this chapter,  
21 as written, consistent with that?

22 MR. TILLMAN: Yes. In line 2210 we removed  
23 long-term care for consistency with the statute and the  
24 working group, and we added the emergency and remedial  
25 response that meets the requirements of Section 18 to this



1 chapter per the EPA crosswalk.

2 Lines 2216 through 2221 were changed per the EPA  
3 crosswalk.

4 BOARD MEMBER CAHN: I have a question on  
5 lines 2220 to 2221, that last sentence, the cost estimate  
6 determines requirements -- "The cost estimate determines  
7 the submission requirements for the financial  
8 responsibility instruments," requirements should be set. I  
9 need you to explain how a cost estimate determines  
10 submission requirements.

11 CHAIRPERSON BEDESSEM: So I'm assuming that  
12 what form the financial responsibility instrument you use  
13 is dependent upon the results of the cost estimate.

14 MR. TILLMAN: Yes, ma'am.

15 CHAIRPERSON BEDESSEM: So the cost estimate  
16 comes to be within this range, then you can --

17 MR. TILLMAN: You can use --

18 CHAIRPERSON BEDESSEM: -- establish your  
19 financial responsibility using this type of instrument.  
20 And if the cost estimate is a -- comes to a different  
21 value, then you may have to use an alternative financial  
22 instrument.

23 MR. TILLMAN: Yes, Madam Chair. I believe  
24 that's the intent.

25 CHAIRPERSON BEDESSEM: I think that's what

1 they were getting at, Lorie.

2 BOARD MEMBER CAHN: Okay. Is that language  
3 that of EPA, or can we work on that language?

4 MR. TILLMAN: Let us check and see if we  
5 can find that real quick. I believe that's federal  
6 language, though.

7 CHAIRPERSON BEDESSEM: So is Gina checking  
8 to see if --

9 MS. THOMPSON: I am.

10 MR. TILLMAN: Yes.

11 CHAIRPERSON BEDESSEM: So we can  
12 continue --

13 MR. TILLMAN: Okay.

14 CHAIRPERSON BEDESSEM: -- in the interest  
15 of time, while Gina's checking, and we'll move back to  
16 that.

17 MR. TILLMAN: Yes, Madam Chair.

18 CHAIRPERSON BEDESSEM: Thank you.

19 MR. TILLMAN: Moving along. Lines 2249 to  
20 2250 were edited per Ms. Cahn's comments.

21 BOARD MEMBER CAHN: Okay. And I have  
22 question about that. And, again, I'd want to know language  
23 from the EPA or whether we can work on that.

24 MR. TILLMAN: In lines --

25 BOARD MEMBER CAHN: So I -- this is

1 something that we brought up before, that I really didn't  
2 understand how the risk activity matrix activity's being  
3 evaluated and feel that, first of all, there was another  
4 reference. So you've added the reference, but it's still  
5 unclear to me how it would be evaluated. So it's not that  
6 the act -- so I'm wondering if we could start the sentence  
7 with "The activities in the Risk Activity matrix in  
8 Appendix A shall be" -- now, you have, "shall be considered  
9 or evaluated," so you -- you don't want -- I mean, what's  
10 the difference? So is it and consider -- considered and  
11 evaluated, or is it that they should evaluate it?  
12 Obviously, if you evaluate them, they're considered, so...

13 MR. TILLMAN: Ms. Cahn, I believe the  
14 intent of that matrix was for them, there were certain  
15 activities that the working group had come up with that  
16 they deemed important to be considered when they were doing  
17 their risk activity matrix, and they wanted to make sure  
18 that certain things were included in those activities. So  
19 these are things to be considered. They may not apply in  
20 every case, so we have listed several things in all the  
21 different phases of the carbon sequestration project. And  
22 depending on where you're at, certain things may be  
23 considered, certain things may not be a part of what might  
24 be possible in the project going forward. So, again, they  
25 were -- they were things to be considered when coming up

1 with that risk assessment, which leads to the cost  
2 estimate, you know, for the financial assurance.

3 CHAIRPERSON BEDESSEM: Can you just delete  
4 "or evaluated," since it apparently is the same thing?

5 BOARD MEMBER CAHN: Yeah, I think --

6 MR. TILLMAN: Let me see what was -- I  
7 don't know if it was in the previous --

8 MS. THOMPSON: Oh, this is -- that's new.

9 MR. TILLMAN: Oh, the word "evaluated" is  
10 new?

11 MS. THOMPSON: No, the whole line is new  
12 because we -- we didn't call out the Appendix A and in  
13 the -- at the previous meeting, Ms. Cahn noted we didn't  
14 really talk about this appendix, and it's there and so --

15 CHAIRPERSON BEDESSEM: So this ties this  
16 in. So just take out the word "evaluated."

17 MR. TILLMAN: That's fine.

18 BOARD MEMBER CAHN: And add in the  
19 beginning of the sentence, say, "The activities in the risk  
20 activity matrix shall be -- in Appendix A shall be  
21 considered during the risk assessment process."

22 MR. TILLMAN: That sounds fine Ms. Cahn.  
23 We will make that change.

24 BOARD MEMBER APPLGATE: So is this chapter  
25 generally consistent with the federal rules?

1 MS. THOMPSON: In general, the -- we also  
2 took into consideration the carbon sequestration working  
3 group reports, and there's a lot more statutory  
4 requirements out of the Wyoming statutes that we had to  
5 account for as well. So that previous comment on 19(d),  
6 that -- that does not seem to be a direct quote out of the  
7 Federal Register. So it looks like we -- we might have  
8 some editing room.

9 MR. TILLMAN: Okay.

10 MS. THOMPSON: But, again, we were --

11 CHAIRPERSON BEDESSEM: What line is that?

12 MS. THOMPSON: That was --

13 MR. TILLMAN: 29 -- 2249, 2250, what we  
14 just looked at.

15 MS. THOMPSON: No, the --

16 BOARD MEMBER CAHN: Gina, you're talking  
17 about --

18 MR. TILLMAN: I'm sorry. She's talking  
19 about the previous.

20 MS. THOMPSON: The 21 -- 2221.

21 BOARD MEMBER CAHN: 22 --

22 CHAIRPERSON BEDESSEM: Let's figure out  
23 what it's going to be if we want to have the option  
24 involved to move this forward. Let's get everything tied  
25 down.

1 MS. THOMPSON: But for that item, we are  
2 not tied to the CFR. They did not -- we didn't pull all of  
3 our wording from there. So we combined -- we had to pull  
4 from the CFR, the working group report and the statutes to  
5 flesh that out.

6 BOARD MEMBER APPLGATE: Okay. So to that  
7 end, are you -- does that address your comment, Lorie?

8 BOARD MEMBER CAHN: How was the sentence  
9 worded?

10 BOARD MEMBER APPLGATE: I'm assuming the  
11 "or evaluated" to be deleted.

12 MR. TILLMAN: Yes. We've agreed to that.

13 CHAIRPERSON BEDESSEM: Yes. We've got --  
14 it says, "The activities and the risk activity matrix" --

15 BOARD MEMBER CAHN: I'm having a hard time  
16 hearing.

17 CHAIRPERSON BEDESSEM: Okay. The final on  
18 2249 was, "The activities in the risk activity matrix in  
19 Appendix A shall be considered during the risk assessment  
20 process."

21 BOARD MEMBER CAHN: Yes that was --

22 CHAIRPERSON BEDESSEM: That was on line  
23 2249.

24 MR. TILLMAN: I believe Gina was just going  
25 back to 2220, 2221 that last sentence, "The estimate

1 determines the" --

2 THE REPORTER: You're going to have to slow  
3 down.

4 MR. TILLMAN: "The cost estimate determines  
5 the submission requirements for the financial  
6 responsibility instruments." That is our language, so we  
7 do have some editing room, if -- if Ms. Cahn has --

8 BOARD MEMBER CAHN: How about rearranging  
9 it to just "The submission requirements for the financial  
10 responsibility instruments are determined after the cost  
11 estimate is submitted," or something like that?

12 BOARD MEMBER APPELEGATE: I think they are  
13 trying to imply that there's --

14 BOARD MEMBER CAHN: Or based on --

15 BOARD MEMBER APPELEGATE: -- consult -- it's  
16 not just a timing consideration, but also there's an aspect  
17 of cause and effect there.

18 CHAIRPERSON BEDESSEM: It's just based on  
19 results of the cost estimate.

20 BOARD MEMBER CAHN: Yeah, that would work.

21 CHAIRPERSON BEDESSEM: So, "The submission  
22 requirements for the financial responsibility instruments  
23 are based on results of the cost estimate."

24 MS. THOMPSON: Okay.

25 MR. TILLMAN: That sounds fine, yes.

1                   BOARD MEMBER APPLGATE:  So I think this is  
2 a really complex chapter.  And if you were in the  
3 regulatory -- if you were the regulated community --

4                   BOARD MEMBER CAHN:  Dave, I'm having a hard  
5 time hearing you.

6                   BOARD MEMBER APPLGATE:  I said this is a  
7 very complex chapter, and if you were in the regulated  
8 community, I think you would be left with some uncertainty  
9 about this, so I want to ask a couple questions along those  
10 lines.

11                   On line 2258, it says, "The probability  
12 distributions for potential damages should be identified  
13 for 50 percent, 95 percent and 99 percent of all cases."  
14 You're going to go through this exercise, and you're going  
15 to generate these different risk scenarios and you're going  
16 to identify costs associated with those.  And those costs  
17 are going to vary quite a bit, depending on whether or not  
18 it's somebody that has a high probability or 50 percent  
19 probability.  Maybe I have an accountant here, but the  
20 financial assurance is going to be attached to what  
21 probability or how -- how does one get from running this  
22 range of alternatives of risk scenarios and then get to the  
23 answer of what type of financial assurance one needs to  
24 apply?  Because I can assure you that when you go through  
25 this exercise, you're going to have a range of costs that



1 are quite variable. And for lower probability events, the  
2 costs are going to be quite high, much higher than for more  
3 probable events. And so I'm not enlightened by this text  
4 so far in understanding what amount of financial assurance  
5 I would need to get as I go through this process. I  
6 understand you can't tell me the dollar amount. I'm trying  
7 to understand the process. The process is not clear, in my  
8 opinion.

9 BOARD MEMBER CAHN: Dave, I share your  
10 concern. I had the same questions about that Section D.

11 BOARD MEMBER APPLGATE: So, again, just to  
12 put a point on the concern. It's a very sophisticated  
13 process. It's going to give a wide range of costs, and  
14 then the rubber meets the road, you're going to ask the  
15 person -- because of interest -- of course, this is all in  
16 anticipation of the market for CO2 sequestration, of which  
17 no one has employed the use of this set of regulations. I  
18 don't know if they've been employed. Has anyone  
19 nationally?

20 MR. TILLMAN: Not that we're aware of.

21 MS. THOMPSON: The State of North Dakota  
22 has their package in for primacy review, but it has not  
23 been approved, so...

24 BOARD MEMBER APPLGATE: Okay. So I don't  
25 know -- and when I look at this 2258, again, I guess

1 there's the question of is that federal language or is  
2 that -- where did we get the language? The language begs  
3 how do you apply these various -- you know, how does one  
4 choose what one needs financial assurance for? Because,  
5 again, if you have to provide financial assurance for  
6 something that has 50 percent probability, that's going to  
7 be a lot -- and I'm not saying -- I don't know what's  
8 reasonable here. I'm not sure I have a proposed answer.  
9 But the regulatory framework, as it's crafted, leaves a lot  
10 of uncertainty and discretion to the enforcers of the  
11 regulation enforcers.

12 MR. TILLMAN: This part -- this part of the  
13 regulation that we're discussing here basically comes from  
14 the -- the state working group. And they were the ones  
15 that -- I believe their intent was like you indicated,  
16 depending on the probability of an event occurring,  
17 determines what -- how much risk there is and the money  
18 associated to cover that risk of an event. And I believe  
19 they were just trying to capture, I guess, the most dollar  
20 amount that would cover those events that could happen,  
21 basically, to try not to leave the state, you know, holding  
22 the bag --

23 BOARD MEMBER APPLGATE: Sure.

24 MR. TILLMAN: -- to fix, I guess,  
25 environmental problems that may occur from sequestration.

1 And, honestly, I'm not a financial guy, so interpreting,  
2 you know, the probabilities and this curve, I'm not really  
3 sure how to address that answer, but my understanding is  
4 that, basically, they're trying to cover all the known  
5 probability -- known risks for the project as best they  
6 could. And, again, I agree, I don't know how this would  
7 actually take place in industry, being that no one has  
8 started to do this.

9 BOARD MEMBER APPELEGATE: So I'm not going  
10 to -- I don't have a suggested change.

11 MS. THOMPSON: Okay.

12 BOARD MEMBER APPELEGATE: I'm not going to  
13 not approve or move forward the regulations. I just simply  
14 want to highlight I think it's part of the regulatory  
15 framework I think is very uncertain, and I think it --  
16 implementationwise, it's going to be challenging.

17 CHAIRPERSON BEDESSEM: And you may come  
18 back with revisions to this rule after you have the first  
19 applicant.

20 MR. TILLMAN: I would say that I'm almost  
21 sure if we had some people that would try this and we've  
22 gone through a scenario, that we would have a better idea  
23 as to what the concerns are, what we need to fix because,  
24 again, we had no comments from industry. We were hoping we  
25 would get comments from some of the financial people

1 associated with these projects, so they can kind of tell  
2 us, "Hey, we understand that," and, "That makes sense," or,  
3 Mr. Applegate, as you suggested, "It's kind of confusing  
4 how to put that all together." We haven't had any  
5 comments, so we're not really sure --

6 BOARD MEMBER APPELEGATE: You have no  
7 industrial response because you have no one out there  
8 that's --

9 CHAIRPERSON BEDESSEM: That's looking to do  
10 this.

11 BOARD MEMBER APPELEGATE: -- looking to do  
12 it.

13 MR. TILLMAN: Exactly.

14 BOARD MEMBER APPELEGATE: And if people are  
15 doing it, are doing it in the context of enhanced oil  
16 recovery, so they're falling under a different --

17 MR. TILLMAN: Different --

18 BOARD MEMBER APPELEGATE: -- regulatory --

19 MR. TILLMAN: Sure. We share your concerns  
20 about --

21 CHAIRPERSON BEDESSEM: So there's a reason  
22 it's nebulous at the moment.

23 BOARD MEMBER APPELEGATE: Right.

24 BOARD MEMBER CAHN: I have some just  
25 re-wording of that sentence to at least make it

1 understandable to me what you're expecting, and it would  
2 read maybe -- because I didn't understand the sentence. My  
3 rewrite could be wrong, but...

4 CHAIRPERSON BEDESSEM: Which line?

5 BOARD MEMBER CAHN: That -- line 2258,  
6 2259. So if it started out, "For all cases of" --

7 THE REPORTER: Can you repeat that?

8 BOARD MEMBER CAHN: -- "the probability  
9 distributions should be identified for 50 percent,  
10 95 percent, and 99 percent probabilities of occurrence."

11 CHAIRPERSON BEDESSEM: I will read that  
12 back. Say, "For all cases of potential damages, the  
13 probability distributions should be identified for  
14 50 percent, 95 percent, and 99 percent of all probabilities  
15 of occurrence."

16 BOARD MEMBER CAHN: Not of all, just  
17 "99 percent probabilities of occurrence."

18 CHAIRPERSON BEDESSEM: Okay. Deleting the  
19 "of all."

20 MR. TILLMAN: The part doesn't make sense  
21 for me is for all --

22 BOARD MEMBER CAHN: Is that what you're  
23 trying to say?

24 MR. TILLMAN: I have a suggested  
25 correction. I would say, "For all cases, potential

1 damages," not, "all cases for potential damages." That for  
2 potential damages throws me off.

3 BOARD MEMBER CAHN: Of, I had, "for all  
4 cases of."

5 MR. TILLMAN: Okay. I misheard you.

6 CHAIRPERSON BEDESSEM: "For all cases of  
7 potential damages, the probability distributions should be  
8 identified for 50 percent, 95 percent, and 99 percent  
9 probabilities of occurrence."

10 MR. TILLMAN: That sounds --

11 CHAIRPERSON BEDESSEM: Everyone seems fine  
12 with that.

13 BOARD MEMBER CAHN: Dave, does that give  
14 you a better comfort feeling or not?

15 BOARD MEMBER APPLGATE: Well, I -- I think  
16 that's a -- a better rewrite of the sentence. I'm not sure  
17 it addresses my conceptual concerns, but I don't think they  
18 can be resolved today. I think you're going to have to run  
19 a project through this to really understand. I just think  
20 fundamentally what could happen is you go forward, you do  
21 this very complex analysis, and you have a range of cost  
22 assurance -- cost -- financial assurance, and some of those  
23 numbers could make the project unfeasible. I mean, how  
24 risk averse do you want to be? I mean, at some point  
25 you're going to have some scenarios that you'll never do a

1 project because there's some hypothetical outcome that is  
2 unaffordable. We can't get there today.

3 CHAIRPERSON BEDESSEM: Uh-huh. So proceed  
4 on.

5 MR. TILLMAN: Okay. Lines 2261 through  
6 2263 will also change for consistency in the statute and  
7 the working group.

8 Lines 2265 through 2268 were changed per the EPA  
9 crosswalk.

10 MS. THOMPSON: And on that particular  
11 change, they wanted us to explain what we meant by a third  
12 party, so we added the passage describing a third party.

13 MR. TILLMAN: Lines 2281 through 2283 was  
14 added for consistency with statute and the working group.

15 Lines 22 -- or excuse me, 2348 through 2354, we  
16 added part in quotations to cover the cost of corrective  
17 action as required by Section 8 injection well plugging as  
18 required by Section 16, and so on. This is all added per  
19 the EPA crosswalk. They wanted to make sure we delineated  
20 exactly how that was spelled out.

21 Almost there. Line 22 -- excuse me, 2356 through  
22 2364 were changed per the EPA crosswalk.

23 MS. THOMPSON: Again, that one we were --  
24 we were adding our cross-section references in instead of  
25 just stating that you have to have your postinjection site

1 care and site disclosure plan. They wanted the specific  
2 cross-references in there as well.

3 MR. TILLMAN: And lines 23 -- excuse me,  
4 lines 2395 through 2396, we deleted the self-bonds shall be  
5 permitted as a -- for post-closure. Again, that's a  
6 deletion per the EPA crosswalk.

7 In line 2506 we corrected the cross-reference  
8 there.

9 BOARD MEMBER CAHN: Can we go over 2452 to  
10 2455?

11 MR. TILLMAN: Could you repeat that? You  
12 broke up.

13 BOARD MEMBER CAHN: I had a question about  
14 2452 to 2455. Is that EPA language or is that your  
15 language?

16 MS. THOMPSON: One moment, Ms. Cahn. I'll  
17 have to check that reference.

18 BOARD MEMBER CAHN: While Gina's checking  
19 that, my concern is wording, "or presents a risk."  
20 Everything presents a risk, so it's really how is that  
21 defined and what is considered acceptable, because if it  
22 presents an acceptable risk, depending on how that's  
23 defined, then it should be okay. So I just -- the language  
24 seemed -- you know, showing that the carbon dioxide  
25 injected into the site will not present a risk to human



1 health, safety, the environment or drinking water supplies,  
2 I think if we can -- I mean, everything presents -- so  
3 you've got to have some threshold that's acceptable, or,  
4 like Dave says, nothing ever go forward.

5                   And so my question is how was risk defined and  
6 how -- and what is acceptable?

7                   MR. TILLMAN: I guess, Ms. Cahn, I'm not  
8 sure how to address that, what risk is acceptable.

9                   BOARD MEMBER APPELEGATE: I think the  
10 language could just be modified. Well, first off, can  
11 language be modified?

12                   MS. THOMPSON: I think it --

13                   MR. TILLMAN: That's ours.

14                   CHAIRPERSON BEDESSEM: Yes, it can.

15                   BOARD MEMBER APPELEGATE: So Lorie will  
16 probably have a better recommendation than this, but I  
17 would just say something "will not present" -- site --

18                   THE REPORTER: I'm sorry?

19                   BOARD MEMBER CAHN: Dave, I'm having a hard  
20 time hearing you.

21                   BOARD MEMBER APPELEGATE: I'm not --

22                   CHAIRPERSON BEDESSEM: Can you say --

23                   BOARD MEMBER APPELEGATE: I'm just talking  
24 to myself right now.

25                   CHAIRPERSON BEDESSEM: Can you say

1 unacceptable risk?

2 BOARD MEMBER APPLGATE: I would do "will  
3 not harm." I will just say "would not present" --

4 BOARD MEMBER CAHN: Yeah, take out "or  
5 present a risk" and put in "will not harm."

6 BOARD MEMBER APPLGATE: You could say  
7 "will not harm" or you can do it the other way and say  
8 "will not present an unacceptable risk."

9 BOARD MEMBER CAHN: But then the question  
10 is what's considered acceptable; an occurrence of one in a  
11 million or one in 10,000 or one in 10 million. So maybe we  
12 can just say "will not harm" --

13 CHAIRPERSON BEDESSEM: Harm human health,  
14 safety --

15 BOARD MEMBER CAHN: In place of "or present  
16 a risk."

17 CHAIRPERSON BEDESSEM: I think preferable  
18 will be "will not harm."

19 BOARD MEMBER APPLGATE: I agree.

20 CHAIRPERSON BEDESSEM: Because everything  
21 poses a risk.

22 MR. TILLMAN: Sure.

23 CHAIRPERSON BEDESSEM: So if we just delete  
24 "present a risk" and add to -- say "will not harm human  
25 health, safety, environment or drinking water supplies."

1 MR. TILLMAN: I think that's acceptable.

2 CHAIRPERSON BEDESSEM: And, Dave, did you  
3 have a question on the --

4 THE REPORTER: On the what?

5 BOARD MEMBER APPLGATE: No.

6 CHAIRPERSON BEDESSEM: Let's move on.

7 MR. TILLMAN: Again, on line 2506, we  
8 corrected cross-reference there.

9 BOARD MEMBER CAHN: Before we move on, how  
10 did we decide? Are we going to delete the line -- the  
11 words "present a risk"?

12 CHAIRPERSON BEDESSEM: Yes. It's going to  
13 say, "...carbon dioxide injected into the geologic  
14 sequestration site will not harm human health, safety, the  
15 environment, or drinking water supplies."

16 BOARD MEMBER CAHN: Great. Thank you.

17 CHAIRPERSON BEDESSEM: Okay?

18 BOARD MEMBER CAHN: Yep.

19 CHAIRPERSON BEDESSEM: Okay.

20 MR. TILLMAN: Lines, finally, 2522 to 2536  
21 were changed per EPA crosswalk.

22 MS. THOMPSON: So they wanted us to add in  
23 the Land Quality Division because they regulate our  
24 Class -- the Class III UIC wells, and they wanted us to  
25 spell out -- or I believe we divided out that we were

1 notifying the drinking water program at Region 8, and also  
2 the UIC program at Region 8, they have didn't want just one  
3 Region 8 notification, they wanted to break those out.

4 CHAIRPERSON BEDESSEM: Okay.

5 MR. TILLMAN: Those are all the changes.

6 CHAIRPERSON BEDESSEM: Okay. So now this  
7 comment period for this went through today's meeting?

8 MS. THOMPSON: Correct.

9 CHAIRPERSON BEDESSEM: Are there any  
10 members of the audience that had any comment with regard to  
11 this rule?

12 Hearing none, you did not receive any public  
13 comments since the last meeting or prior?

14 MS. THOMPSON: That is correct, we did not  
15 receive any written comments or notifications to our  
16 office, no.

17 CHAIRPERSON BEDESSEM: Okay.

18 BOARD MEMBER CAHN: Marge.

19 CHAIRPERSON BEDESSEM: Yes, Lorie.

20 BOARD MEMBER CAHN: Excuse me.

21 CHAIRPERSON BEDESSEM: Uh-huh.

22 BOARD MEMBER CAHN: Can we talk about  
23 Appendix A?

24 CHAIRPERSON BEDESSEM: Yes.

25 BOARD MEMBER CAHN: Okay. Some of the

1 things that we requested in the last meeting were not made.  
2 Risk activity and CO2, the 2 needs to be a subscript, and  
3 that's a global. On line 7.1, the word "contaminate"  
4 should be contaminant. So EG concentration contaminant,  
5 carbon diox -- CO subscript 2, it says.

6 CHAIRPERSON BEDESSEM: Uh-huh.

7 BOARD MEMBER CAHN: And then I still, with  
8 this -- so let me --

9 CHAIRPERSON BEDESSEM: Can you repeat what  
10 you just said?

11 BOARD MEMBER CAHN: On line 1.6, and this  
12 is a number of things. See also contributing causes 3.1,  
13 et cetera, does that mean and thus also contributing  
14 causes?

15 (Telephone connection was lost.)

16 CHAIRPERSON BEDESSEM: Uh-oh.

17 BOARD MEMBER APPLGATE: We were so close.  
18 Let's see.

19 CHAIRPERSON BEDESSEM: I didn't understand  
20 that last question.

21 Let's take a five-minute break until  
22 we get back online

23 (Meeting proceedings recessed

24 11:14 a.m. to 11:32 a.m.)

25 CHAIRPERSON BEDESSEM: So let's reconvene

1 the meeting.

2 And, Lorie, if you will continue on with your  
3 comments regarding Appendix A.

4 BOARD MEMBER CAHN: Yeah, Appendix A. So  
5 can you hear me all right?

6 CHAIRPERSON BEDESSEM: You sound great.

7 BOARD MEMBER CAHN: Okay. Good.

8 Okay. So on line 1.6, it says, "See also  
9 contributing causes..." And I guess I'm thinking does that  
10 mean address also contributing causes? And so the same  
11 thing occurs on line 2.6, same thing occurs -- well, then  
12 in line 12, line 5.4 with an un -- unnumbered line, it  
13 says, "Will also require..." And I think the line should  
14 be part of -- should be new line 5.5. And then under --  
15 the blank line with no number, it says, "Will also require  
16 primary contributing causes..."

17 So I think what you mean -- they mean is also  
18 addressed contributing causes, and maybe we could be -- if  
19 that's what is meant, maybe we could be consistent on all  
20 those lines.

21 MR. TILLMAN: Ms. Cahn, I believe that's  
22 correct, where it says, "Also see contributing causes,"  
23 those other things can also contribute to, for instance,  
24 the mineral rights infringement things listed under there.  
25 Also, those things in 3.1 through, you know, 3.2, 3.3, also

1 could contribute to mineral rights infringement. So I  
2 guess whatever wording -- I didn't quite catch all the  
3 wording change for line 1.6. How would you -- would you  
4 suggest that line read or make that better understood?

5 BOARD MEMBER CAHN: I mean, maybe just say,  
6 "Address also contributing causes 3.1," et cetera -- you  
7 know, et cetera.

8 MR. TILLMAN: That sounds fine.

9 BOARD MEMBER CAHN: Okay. And then 2.6,  
10 change the same.

11 MR. TILLMAN: Okay.

12 BOARD MEMBER CAHN: And then there's --  
13 there's 5.5, and there is -- and it would also say address  
14 also -- here it has primary contributing causes. So before  
15 we didn't have primary.

16 BOARD MEMBER APPELEGATE: Go over to 5.4 and  
17 look for the line right under 5.4.

18 MR. TILLMAN: Yes.

19 BOARD MEMBER APPELEGATE: I think she's just  
20 seeking consistency.

21 MR. TILLMAN: That's fine. We're not sure  
22 where the primary part came from, so we can -- we can  
23 delete that -- that word.

24 BOARD MEMBER CAHN: And that would now  
25 become line 5.5?

1 MR. TILLMAN: Yes.

2 BOARD MEMBER CAHN: And same with a new  
3 line 7.3?

4 MR. TILLMAN: Okay.

5 BOARD MEMBER CAHN: Okay. All right. And  
6 then I -- did you catch -- was I cut off when I said line  
7 7.1, carbon dioxide, the 2 should be subscript and  
8 contaminate/contaminant, A-N-T?

9 CHAIRPERSON BEDESSEM: Uh-huh. They got  
10 it.

11 BOARD MEMBER CAHN: Okay. Then also on --  
12 and that's carbon dioxide, CO, the global -- all need to be  
13 substituted.

14 And then on line 4, it says potential  
15 asphyxiation, your word, ecological contaminant. So who or  
16 what would have potential asphyxiation? Who are they --  
17 what are they supposed to be addressing? Asphyxiation of  
18 what or who?

19 MR. TILLMAN: I believe that's people.

20 BOARD MEMBER APPLGATE: Lorie, if you had  
21 CO2 at the surface, I think they're indicating the two  
22 types of risks you would have from a surface release.  
23 Ecological damage due to low-level releases. CO2 is  
24 heavier than air, so you have the potential for  
25 asphyxiation if you were to have CO2 concentrate in a low-



1 lying area.

2 BOARD MEMBER CAHN: So that would be of --

3 CHAIRPERSON BEDESSEM: Animals.

4 BOARD MEMBER CAHN: -- and/or -- of human  
5 and ecological receptors?

6 MR. TILLMAN: That could be people or  
7 animals.

8 BOARD MEMBER APPLGATE: Yeah.

9 BOARD MEMBER CAHN: Okay. So why don't we  
10 say in -- of human or ecological receptors so we know what  
11 they're supposed to be addressing?

12 MR. TILLMAN: That sounds fine.

13 BOARD MEMBER CAHN: Okay. Then on line  
14 6.1, under "Induced seismicity," it says, "Pressure of  
15 geochemistry..." I didn't understand that.

16 CHAIRPERSON BEDESSEM: I think it's  
17 geochemistry induced, so there should a dash between  
18 geochemistry and induced so you know --

19 BOARD MEMBER CAHN: But what's the pressure  
20 of chemistry? It's the "of," "the pressure of," I'm not --  
21 I don't understand.

22 CHAIRPERSON BEDESSEM: It should say  
23 "pressure from."

24 MR. TILLMAN: That's --

25 CHAIRPERSON BEDESSEM: It should say, "from

1 geochemistry induced reactivation --

2 THE REPORTER: I'm sorry. Can you repeat  
3 that?

4 CHAIRPERSON BEDESSEM: "Pressure from  
5 geochemistry-induced reactivation of historic fault..."

6 BOARD MEMBER CAHN: Okay. And then  
7 geochemistry-induced?

8 MR. TILLMAN: Induced.

9 CHAIRPERSON BEDESSEM: Uh-huh.

10 BOARD MEMBER CAHN: Okay. That makes that  
11 clear.

12 Okay. That's all I had on the --

13 MR. TILLMAN: That's the summary of the  
14 changes, Madam Chair.

15 CHAIRPERSON BEDESSEM: Okay. Any other  
16 comments from any board members or --

17 BOARD MEMBER APPLGATE: I have none.

18 CHAIRPERSON BEDESSEM: Okay. And the  
19 agency is requesting that we move this forward with the  
20 understanding that there may be an additional revision,  
21 just to make it consistent with what might be passed in the  
22 next legislative session with respect to Section 3(c), I  
23 believe?

24 MR. TILLMAN: Yes. And we're not sure  
25 exactly when that timing would be, but we're anticipating

1     sometime next year.

2                     CHAIRPERSON BEDESSEM:   If this rule was  
3     moved forward to the EQC now, that timing would allow you  
4     to -- in other words, what's your -- what's your schedule,  
5     meaning that doesn't have to go back to EPA for approval as  
6     well?

7                     MR. TILLMAN:   I believe once the rule is  
8     promulgated, it will go to the EPA for review again.   So I  
9     believe that the schedule as far as what I envision,  
10    speaking off the top of my head, I think we may be able to  
11    go to the EQC --

12                    MS. THOMPSON:   January.

13                    MR. TILLMAN:   -- first quarter next year,  
14    so if it -- presuming it passes there, then you've got 75  
15    days, which is roughly about two and a half, three months,  
16    so now you're into April, May.

17                    CHAIRPERSON BEDESSEM:   For a spring --

18                    MR. TILLMAN:   Right.

19                    CHAIRPERSON BEDESSEM:   -- submission and  
20    spring approval from EPA.

21                    MS. THOMPSON:   Right.

22                    MR. TILLMAN:   Yes.

23                    MS. THOMPSON:   About the time we're sending  
24    it for approval, then we'll receive our statutory language  
25    to start crafting and come back to you.

1                   CHAIRPERSON BEDESSEM: Uh-huh. Uh-huh. So  
2 can I entertain a motion?

3                   BOARD MEMBER APPLGATE: I -- for approval  
4 of the -- I move that we approve the Chapter 24 revisions  
5 for submittal to the EQC.

6                   CHAIRPERSON BEDESSEM: I'll second. All  
7 those in favor?

8                   BOARD MEMBER APPLGATE: Aye.

9                   CHAIRPERSON BEDESSEM: Aye.

10                  BOARD MEMBER CAHN: Aye.

11                  CHAIRPERSON BEDESSEM: Okay. Motion  
12 passes.

13                  MR. TILLMAN: Thank you.

14                  BOARD MEMBER CAHN: Madam Chair, I have a  
15 question. I didn't hear an introduction of who was here  
16 from the board. Is it three of us?

17                  CHAIRPERSON BEDESSEM: That is correct.  
18 That is correct. Mr. Applegate, myself and you. We have a  
19 quorum. Our members representing agriculture and local  
20 governance were not able to attend today.

21                  BOARD MEMBER CAHN: Thank you.

22                  CHAIRPERSON BEDESSEM: Uh-huh. Now, with  
23 respect to the public notice, I believe next up, then,  
24 would be the Solid Waste Division. So thank you very much  
25 for presenting your packet today, in all its glorious

1 detail, and we look forward to seeing the finalized  
2 version. Thank you.

3 MR. TILLMAN: Thank you for your patience.

4 BOARD MEMBER CAHN: Gina, do you prefer to  
5 have me mail you the dozen editorials, or do you want to  
6 just go over them with the phone separate from this  
7 meeting?

8 MS. THOMPSON: I think perhaps mailing them  
9 would be a little easier, and then that way I'm not  
10 interrupting your work, so...

11 BOARD MEMBER CAHN: Okay.

12 MS. THOMPSON: If you send me the package,  
13 or I can send you prepaid envelope or -- we can get those  
14 shipped down to Cheyenne.

15 BOARD MEMBER CAHN: Yeah, I'll just go to  
16 the post office. That's no problem. You'll get them  
17 quickly.

18 MS. THOMPSON: And I can return them as  
19 well.

20 CHAIRPERSON BEDESSEM: Okay. Sounds good,  
21 thank you.

22 Mr. Jennings, you're up.

23 (Meeting proceedings recessed

24 11:42 a.m. to 12:09 p.m.)

25 BOARD MEMBER CAHN: Madam Chair, is Bill

1 still there?

2 CHAIRPERSON BEDESSEM: Who are you asking  
3 for, Lorie?

4 BOARD MEMBER CAHN: Bill Tillman, is he  
5 still --

6 CHAIRPERSON BEDESSEM: Yes, Bill Tillman is  
7 still in the room.

8 BOARD MEMBER CAHN: Maybe before a lunch  
9 break we can get an update. I think he was in Buffalo  
10 yesterday -- or the day before or for the --

11 THE REPORTER: I can't hear.

12 BOARD MEMBER CAHN: Maybe he can just  
13 update the board on where that's at.

14 CHAIRPERSON BEDESSEM: Can you speak slowly  
15 and louder so that it can be transcribed.

16 BOARD MEMBER CAHN: Okay. I would see if  
17 Mr. Tillman can give the board an update on what happened  
18 on Chapter 25 in Buffalo yesterday -- or this week with the  
19 EQC.

20 CHAIRPERSON BEDESSEM: Ms. Cahn is  
21 requesting an update on what happened on Chapter 25 with  
22 the EQC.

23 BOARD MEMBER CAHN: Chapter 25.

24 CHAIRPERSON BEDESSEM: Can we allow that  
25 for five minutes so that Water Quality is done and then we

1 can move on to the VRP?

2 So, Bill, you just provide -- take a couple  
3 minutes to provide that.

4 MR. TILLMAN: Madam Chair, I believe  
5 Director Parfitt was at the EQC meeting -- hearing on  
6 Wednesday. And what we offered -- or what we submitted was  
7 a letter to rescind the current package, being it was  
8 tabled at the past EQC hearing. Basically, we pulled the  
9 package back.

10 Our intentions -- basically, we've updated  
11 them with some changes where we're considering changes  
12 to the dimensions of the tanks. There was some changes  
13 to -- possibly to the permitting of the greywater and  
14 privies, as well as simplification of the greywater  
15 section. Those were things that we're investigating right  
16 now.

17 CHAIRPERSON BEDESSEM: I believe -- I  
18 thought I heard something about potentially conducting a  
19 survey to get some additional information.

20 MR. TILLMAN: Yes. Yes. With the tanks,  
21 like I say, we don't anticipate anybody -- any hardships,  
22 but we're going to offer a survey, go out and basically  
23 talk to all the tank manufacturers that we have in our  
24 database, basically, and ensure they don't have any issues  
25 with the new regulations.

1 CHAIRPERSON BEDESSEM: Uh-huh.

2 MR. TILLMAN: And go forward from there,  
3 but we plan to present the rule again to the EQC in January  
4 with these modifications, and we don't anticipate any  
5 issues.

6 CHAIRPERSON BEDESSEM: I believe that it  
7 may come before this Advisory Board again.

8 MR. TILLMAN: I'm not sure. From what --  
9 from what we understand, being that we will present to the  
10 EQC again, I believe, at least from our Attorney General,  
11 that we can go basically to public notice and go forward,  
12 because we're not substantially changing the content of  
13 what was presented before.

14 CHAIRPERSON BEDESSEM: I guess -- I  
15 guess it depends on the results of your survey and your  
16 changes if -- if you are changing it -- if there are  
17 substantive changes, it will come back through that advice  
18 by board.

19 MR. TILLMAN: If they're substantive, yes.

20 CHAIRPERSON BEDESSEM: So I'm not to make  
21 the assumption there are no substantive changes. So based  
22 on what comes out of -- out of your re-look at the chapter,  
23 then we will either see a public notice to the EQC or it  
24 will come back to the Advisory Board.

25 MR. TILLMAN: Correct, Madam Chair.



1                   CHAIRPERSON BEDESSEM:   Okay.   Thank you.

2                   Lorie, did you have any additional questions?

3                   BOARD MEMBER CAHN:   Not at this time.   I  
4   did -- I am kind of curious about the categorical UAA, that  
5   seems to be getting a lot of press right now.   Somebody at  
6   DEQ could talk to that, because I know there's a hearing in  
7   front of the EPA next week on that in Casper.   Anybody  
8   there that can --

9                   CHAIRPERSON BEDESSEM:   I don't think  
10   there's anybody present from WQD at this time that can talk  
11   with respect to that.

12                  Gina?

13                  MS. THOMPSON:   I guess I would recommend  
14   contacting Administrator Frederick next week, when he's  
15   back in the office, because I would say either he or  
16   Mr. Waterstreet from the watershed program would be the  
17   best spokespeople for that matter, since they're actively  
18   working on it.   And we have not been involved in that at  
19   all, but, you know, Mr. Frederick is very reachable by  
20   phone or email.

21                  CHAIRPERSON BEDESSEM:   Uh-huh.   Uh-huh.

22                  Okay.   Thank you.

23                                       (Meeting proceedings concluded  
24                                       12:14 p.m., September 11, 2015.)

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C E R T I F I C A T E

I, KATHY J. KENDRICK, a Registered Professional Reporter, do hereby certify that I reported by machine shorthand the foregoing proceedings contained herein, constituting a full, true and correct transcript.

Dated this 21st day of October, 2015.

  
KATHY J. KENDRICK  
Registered Professional Reporter

