

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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STATE OF ILLINOIS  
Pollution Control Board

IN THE MATTER OF: )  
COAL COMBUSTION WASTE (CCW) ) R14-10  
AND SURFACE IMPOUNDMENT ) (Rulemaking-Water)  
POWER GENERATING )  
FACILITIES: PROPOSED NEW )  
35 ILL. ADM. CODE 841 )

REPORT OF THE PROCEEDINGS held in the  
above entitled cause before Hearing Officer  
Timothy Fox, called by the Illinois Pollution  
Control Board, taken by Steven Brickey, CSR, for  
the State of Illinois, 100 West Randolph Street,  
Chicago, Illinois, on the 24th day of July, 2014,  
commencing at the hour of 9:05 a.m.

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A P P E A R A N C E S

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MS. ALISA LIU  
MR. JERRY O'LEARY  
MS. JENNIFER BURKE  
MS. DEANNA GLOSSER  
MS. CARRIE ZALEWSKI

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21 CSR License No. 084-004675  
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23  
24

1 HEARING OFFICER FOX: Good morning  
2 and welcome to this Illinois Pollution Control  
3 Board hearing. My name is Tim Fox and I am the  
4 Hearing Officer for this rulemaking proceeding  
5 which is entitled Coal Combustion Waste CCW and  
6 Surface Impoundments at Power Generating  
7 Facilities. Proposed new 35 Ill. Adm. Code 841.  
8 The Board docket number for this proceeding is  
9 R14-10.

10 I want to note that present from  
11 the Board today are Board Member Jerry O'Leary at  
12 my immediate right who is the lead Board Member  
13 for this rulemaking and to his right Board Member  
14 Carrie Zalewski and to my far left is Board Member  
15 Jennifer Burke and at my immediate left are the  
16 Board's technical staff Anand Rao and Alisa Liu.

17 I want to note that in an order  
18 dated June 20th of 2014 the Hearing Officer  
19 scheduled this fourth hearing and set a deadline  
20 for The Environmental Groups to pre-file written  
21 answers to specify questions on June 17th -- I'm  
22 sorry. On July 17th, the Board received timely  
23 answers from The Environmental Groups. That  
24 filing included among other exhibits a revised

1 version of the group's proposal and the groups  
2 filed further revision of the proposal on July  
3 21st, on Monday of this week.

4 Also on June 17th the Board  
5 received the Agency's answer to questions by the  
6 Board that were contained in a June 11th Hearing  
7 Officer order and that filing included the  
8 Agency's revised rule language. There was comment  
9 at the last hearing about the helpfulness of those  
10 revised proposals both in terms of preparing for  
11 hearing and ultimately in preparing post-hearing  
12 comments and I certainly want the record to  
13 reflect the Board's appreciation for the filing of  
14 those revised proposals both on the part of the  
15 Agency and on the part of The Environmental  
16 Groups.

17 This is as I mentioned the  
18 fourth hearing in this rulemaking. We will turn  
19 first to The Environmental Groups answers to the  
20 Agency's questions that were filed on June 11th.  
21 Second, we will address The Environmental Groups  
22 answers to the Agency's questions that were posed  
23 to Ms. Barkley and to Dr. Soderberg. Those were  
24 filed on April 30th, 2014, for the May hearing.

1 Third, we will turn to the Board's questions, The  
2 Environmental Groups answers to the Board's  
3 questions filed on June 11th and the Board's  
4 questions for Ms. Barkley that were filed on April  
5 30th before finally fourth turning to the Agency's  
6 responses to the Board's questions that were filed  
7 on June 11th.

8 I stress that under Section  
9 102.424(f) of the Board's procedural rules  
10 pre-filed testimony and questions and answers and  
11 other responses submitted prior to hearing are  
12 entered into the record as if read so that we can  
13 generally I believe proceed directly to any  
14 follow-up questions that are based on those  
15 written answers. There will also be an  
16 opportunity to offer testimony on the Board's  
17 request that the Department of Commerce and  
18 Economic Opportunity perform an Economic Impact  
19 Study of the proposal.

20 I do want to stress on the  
21 record that the Board's meeting, regularly  
22 scheduled meeting, will begin at 11:00 and we will  
23 be required, of course, to break at approximately  
24 10:45. It is our current intent to resume the

1 hearing at 12:15 so that the Board can meet and  
2 the participants can have a break for lunch. I  
3 also want to note that the Agency on June 11th  
4 filed a motion to sever and open a subdocket. The  
5 Board has received three responses to that motion.  
6 One filed by The Environmental Groups, a second  
7 filed by Ameren and a third filed by the City of  
8 Springfield which was accompanied by a motion for  
9 leave to file instanter. The Board will not take  
10 action, of course, during this hearing on that  
11 motion or the regularly scheduled meeting later  
12 this morning.

13 I do want to note quickly that  
14 Board on July 21st also received Ameren's proposed  
15 amendments which address two sections in the  
16 applicability of the proposed rules. Any  
17 questions about our proceedings here this morning?  
18 I believe then that we're ready to turn to The  
19 Environmental Group's answers to the Agency's  
20 questions. Those were filed on June 11th.

21 Mr. Armstrong, are The  
22 Environmental Groups witnesses ready to be sworn  
23 in at this point?

24 MR. ARMSTRONG: Yes, we are.

1 HEARING OFFICER FOX: Very good. If  
2 you would just identify for the record who you  
3 intend to have sworn in, we can proceed to have  
4 that take place.

5 MR. ARMSTRONG: Andrew Armstrong on  
6 behalf of The Environmental Law and Policy Center,  
7 Dr. Keir Soderberg and Traci Barkley of the  
8 Prairie Rivers Network.

9 HEARING OFFICER FOX: Mr. Armstrong,  
10 thank you. If the court reporter would swear in  
11 the witnesses, please.

12 WHEREUPON:

13 ANDREW ARMSTRONG, KEIR SODERBERG and TRACI BARKLEY  
14 called as witnesses herein, having been first duly  
15 sworn, deposeth and saith as follows:

16 HEARING OFFICER FOX: Mr. Armstrong,  
17 I believe you suggested you have a copy of the  
18 written answers that were filed on the 17th to  
19 admit as a hearing exhibit, is that correct?

20 MR. ARMSTRONG: Yes, I have a copy  
21 of The Environmental Groups answers filed July  
22 17th, 2014, and this would be Hearing Exhibit 55.

23 HEARING OFFICER FOX: Fifty-seven.

24 MR. ARMSTRONG: Fifty-seven.

1 HEARING OFFICER FOX: You have heard  
2 the motion to admit The Environmental Groups  
3 written answers as Exhibit 57. Is there any  
4 objection to the motion? Neither seeing nor  
5 hearing any, Mr. Armstrong, it will be marked as  
6 Exhibit 57 and admitted into the record.

7 (Document marked as Hearing  
8 Exhibit No. 57 for  
9 identification.)

10 MR. ARMSTRONG: Additionally, we had  
11 filed a number of exhibits with the answers from  
12 The Environmental Groups and -- as pre-filed  
13 exhibits if they're to be admitted for  
14 testimony -- admitted as evidence, do they also  
15 need to be admitted as hearing exhibits?

16 HEARING OFFICER FOX: It is not  
17 absolutely necessary, but if you wish to move them  
18 into the record as hearing exhibits, we can  
19 entertain motions to that effect I think fairly  
20 quickly, Mr. Armstrong.

21 MR. ARMSTRONG: Okay. We actually  
22 only have one copy with us right now. So,  
23 perhaps, we can printout another copy and have  
24 that brought later today.

1 HEARING OFFICER FOX: Let's plan to  
2 do that then. They are, of course, filed with the  
3 Board clerk and a part of the Board's record in  
4 the proceeding, but I think with the number of  
5 participants present it would be more helpful to  
6 entertain those motions when there are copies to  
7 provide to those participants.

8 MR. ARMSTRONG: Okay.

9 HEARING OFFICER FOX: Very good.  
10 The witnesses are sworn in. Are they ready to  
11 begin with the Agency's follow ups to the  
12 pre-filed questions that it submitted to the  
13 Board?

14 MR. ARMSTRONG: I'm sorry?

15 HEARING OFFICER FOX: The witnesses  
16 are, of course, sworn in. Are they ready to  
17 proceed with any follow-up questions to the  
18 Agency's questions that were submitted to the  
19 Board?

20 MR. ARMSTRONG: Yes.

21 HEARING OFFICER FOX: Very good.  
22 Ms. Olson, I think we are in order to begin with  
23 the questions of the Agency to The Environmental  
24 Groups and the written responses that were

1 submitted to the Board on July 17th. If you have  
2 follow up, we can start with number one.

3 MS. OLSON: Good. Thank you. My  
4 name is Joanne Olson and I work for Illinois EPA,  
5 assistant counsel, and with me today I have  
6 members from Illinois EPA's groundwater section.  
7 We filed questions I believe in June and you guys  
8 pre-filed answers and my first follow-up question  
9 is not until question 6.1. So if anyone has a  
10 follow up before that, I'm happy to concede the  
11 floor.

12 MR. RAO: It's not a follow up. I  
13 just want to note in response to question number  
14 one you may have a typo when you refer to Section  
15 841.410. Should that be 841.110?

16 MR. ARMSTRONG: Yes.

17 MR. RAO: Okay.

18 HEARING OFFICER FOX: Mr. Rieser, it  
19 appears you had a follow up on one of the  
20 questions before question six as Ms. Olson  
21 indicated?

22 MR. RIESER: I had a preliminary  
23 question that sort of goes to the entire what is  
24 now an exhibit which is who wrote these answers?

1 MR. ARMSTRONG: The answers were  
2 drafted primarily by myself and also reviewed by  
3 all of The Environmental Groups.

4 MR. RIESER: Okay. There are some  
5 points where Dr. Soderberg's testimony is quoted.  
6 Is it accurate Dr. Soderberg did not draft any of  
7 the answers?

8 MR. ARMSTRONG: I actually drafted  
9 these in collaboration with Dr. Soderberg.

10 MR. RIESER: What does that mean?

11 MR. ARMSTRONG: He -- the  
12 questions -- I presented the questions to  
13 Dr. Soderberg and he -- we discussed them and he  
14 in some cases drafted answers, which I then put  
15 into my draft of the document.

16 MR. RIESER: But there is nothing  
17 within the answers themselves that reflects who  
18 drafted each individual answer?

19 MR. ARMSTRONG: That is correct.

20 MR. RIESER: There are a number of  
21 technical statements -- no. I'll withdraw that.  
22 Thank you.

23 HEARING OFFICER FOX: Nothing  
24 further, Mr. Rieser?

1 MR. RIESER: Not on that point.

2 HEARING OFFICER FOX: Ms. Franzetti?

3 MS. FRANZETTI: I have a follow up  
4 on The Environmental Groups response to Agency  
5 question number two on the definition of surface  
6 impoundments.

7 HEARING OFFICER FOX: Ms. Franzetti,  
8 an odd question since I just referred to you by  
9 name, but if you would identify yourself for the  
10 record, please.

11 MS. FRANZETTI: Certainly. Susan  
12 Franzetti of Nijman & Franzetti, LLP, counsel for  
13 Midwest Generation. With respect to the  
14 definition of surface impoundments, I understand  
15 that you have stated that you do not intend to  
16 include tanks, piping or leachate collection  
17 systems in the definition of surface impoundment,  
18 correct?

19 MR. ARMSTRONG: Correct.

20 MS. FRANZETTI: So in your -- in the  
21 currently proposed definition of surface  
22 impoundment in Section 841.110, is it correct that  
23 that proposed definition does not include any  
24 portion of the wet ash conveyance system at a

1 facility other than the CCW surface impoundment  
2 itself?

3 MR. ARMSTRONG: That is correct.

4 MS. FRANZETTI: Thank you. No  
5 further questions.

6 HEARING OFFICER FOX: Very good.  
7 Ms. Olson, I believe we're ready for you to  
8 address the follow up to question number six you  
9 referred to.

10 MS. OLSON: In question 6.1, we ask  
11 why the requirement that surface impoundment  
12 derive its structural integrity from earth and  
13 materials was deleted and the response was that  
14 the language was deleted to be consistent with  
15 language in 615.102 and Section 810.103. And then  
16 the answer goes on to say The Environmental Groups  
17 will consider any language proposed by the Agency  
18 in response to question two from the Board's  
19 pre-filed questions.

20 Question two from the Board's  
21 pre-filed questions references Section 720.110.  
22 So my first question is did you consider the  
23 definition in Section 720.110 when drafting the  
24 definition of surface impoundment?

1 MR. ARMSTRONG: So I do not recall  
2 whether The Environmental Groups considered the  
3 definition of surface impoundment in 720.110 when  
4 drafting our proposed definition at this time.  
5 The intent of the answer that The Environmental  
6 Groups would consider language proposed by the  
7 Agency was to indicate that we wanted to see what  
8 the Agency would propose in response to the  
9 Board's rule and we have seen the Agency's  
10 response. I have not discussed it yet with The  
11 Environmental Groups, but we will consider it.

12 MS. OLSON: Do you know whether or  
13 not -- let me read you the definition of surface  
14 impoundment from 720.110. It says "Surface  
15 impoundment or impoundment means a facility or  
16 part of a facility that is a natural topographic  
17 depression, manmade excavation or diked area  
18 formed primarily of earth and materials although  
19 it may be lined with manmade materials."

20 Does that definition -- do you  
21 think that definition would change The  
22 Environmental Groups choice to delete the  
23 requirements that the impoundment derive its  
24 structural integrity from earth and materials from

1 the Agency's definition?

2 MR. ARMSTRONG: As I've said, I can  
3 discuss the Agency's recently proposed definition  
4 in response to question number two of the Board's  
5 questions and determine whether that would be  
6 acceptable. As I noted before at the last  
7 hearing, part of our intent was to -- part of the  
8 original intent of The Environmental Groups was to  
9 encompass some of the wet ash transfer facilities  
10 at -- that are intended to impoundments and,  
11 therefore, a structural support by earth and  
12 materials did not necessarily jive with our  
13 original interests in bringing those within the  
14 scope of the rule. So, therefore, I will discuss  
15 the Agency's answer to Board question two with The  
16 Environmental Groups and we'll respond in  
17 post-hearing comments.

18 MS. OLSON: Do you know whether the  
19 proposed federal definition of CCR surface  
20 impoundment includes a reference to earth and  
21 materials?

22 MR. ARMSTRONG: I believe it does.

23 MS. OLSON: My next follow up is  
24 question 7.3 so if anyone has one before then?

1 HEARING OFFICER FOX: Mr. Rieser?

2 MR. RIESER: I'm sorry. I had one  
3 way before then, number four, which I should have  
4 asked before your prior question, but this will  
5 work.

6 This has to do with the records  
7 that exempts CCW units that need maintaining and  
8 it was in the context of questions asking if there  
9 was an exempt unit, would it have to do a  
10 hydrological site characterization, et cetera, and  
11 the answer under four had to do with, you know,  
12 what do these exempted comments have to do by way  
13 of testing assessment, if any, and the answer is  
14 nothing, but you do have to keep records.

15 So what are the -- what is your  
16 expectation of the records that need to be kept to  
17 document that the unit is exempt?

18 MR. ARMSTRONG: So to be exempt  
19 under one of the proposed exemptions the  
20 impoundment must not be causing exceedances of  
21 groundwater quality standards and in order to  
22 qualify for that exemption it is the expectation  
23 of The Environmental Groups that the owners and  
24 operators will have some basis for claiming that

1 exemption and, therefore, The Environmental Groups  
2 would intend that whatever such evidence that the  
3 owner or operators have that the impoundment is  
4 not causing or contributing to a groundwater  
5 quality violation would be kept in the form of  
6 records. And it then -- those records would be  
7 available for the Agency to determine whether the  
8 evidence, in fact, does demonstrate that the  
9 impoundment qualifies for the exemption.

10 MR. RIESER: And is it accurate that  
11 in 841.105(c) this evidence also has to be  
12 included in this hydrologic site characterization  
13 for other -- I assume for other units at the  
14 facilities, is that correct?

15 MR. ARMSTRONG: Correct.

16 MR. RIESER: If those  
17 characterizations are submitted some years after  
18 the original justification, would it be the  
19 expectation that those -- that that information be  
20 updated to be current?

21 MR. ARMSTRONG: Again, there is no  
22 requirement of that in the proposed rule, but the  
23 intent is that whatever evidence that the operator  
24 or owner claims supports the exemption is kept and

1 then also provided to the Agency. So if, you  
2 know, the owner or operator's justification for  
3 the exemption is groundwater monitoring results  
4 from 15 years ago that is provided to the Agency,  
5 that would satisfy the bare requirements of that  
6 rule, but we would also expect them that the  
7 Agency might question whether there is, in fact,  
8 more -- any better evidence than that for the  
9 claimed exemption for that impoundment.

10 MR. RIESER: So, from your  
11 perspective, is there any way for that  
12 justification to be supported other than by  
13 ongoing groundwater monitoring?

14 MR. ARMSTRONG: I don't believe I  
15 testified that ongoing groundwater monitoring is  
16 necessary, but I believe that there would be  
17 several different types of evidence that the owner  
18 or operators could submit in support of their  
19 claim of an exemption for the specific  
20 impoundment. I don't mean to be prescriptive, but  
21 whatever the owner or operator has should be  
22 submitted to the Agency or available through  
23 records.

24 MR. RIESER: Thank you.

1 HEARING OFFICER FOX: Ms. Olson, I  
2 think we are prepared to move onto the next  
3 question. You had identified it by number as --

4 MS. OLSON: 7.3.

5 HEARING OFFICER FOX: -- 7.3. I'm  
6 not seeing anything between 6.1 and 7.3 that  
7 anyone wishes to present so please go ahead.

8 MS. OLSON: In response to question  
9 7.3, you provide definitions from 35 Ill. Adm.  
10 Code Section 810.103. One of the definitions is  
11 disposal and there is a phrase that is underlined  
12 that says there is no certain plan for disposal  
13 elsewhere. Such accumulation will constitute  
14 disposal. And this is related to the definition  
15 of operator which says a person who is responsible  
16 for the operation of a waste disposal facility.

17 So my question is under the  
18 definitions that you provide in response to  
19 question 7.3, would operate under proposed 841  
20 include facilities closed in place since -- since  
21 there will be no plan for disposal elsewhere? So,  
22 in other words, after you've placed a cap over the  
23 coal ash, would it still be considered to be in  
24 operation since there is no other place for it to

1 be disposed?

2 MR. ARMSTRONG: I think that once  
3 you have a -- once you have an impoundment that  
4 has been closed by a cap, then the disposal has  
5 occurred and that there is a -- that there has  
6 been disposal. I guess in terms of our definition  
7 of operate, the question was are you aware of any  
8 other regulations where operates is defined as a  
9 unit that is open to the atmosphere and our point  
10 is if you have an impoundment that has an  
11 accumulation of CCW in it that is open to the  
12 atmosphere and it has not been closed yet, then it  
13 is possible to argue that that is -- then it is  
14 reasonable to state that the owner or operator at  
15 that point is operating a disposal facility.

16 MS. OLSON: I'm trying to understand  
17 how when we look back at this rulemaking and we  
18 look through the record we're supposed to construe  
19 the definitions if adopted as you proposed and in  
20 the response you give further definitions of other  
21 citations which contain language which I think is  
22 confusing. So I think the answer is that we're  
23 supposed to read operate and disposal as you  
24 provide here kind of selectively and not on an all

1 case basis. So, in other words, if there is a  
2 site closed in place with a cap on it, we  
3 shouldn't look to the terms that you defined here,  
4 is that right?

5 MR. ARMSTRONG: I'm not proposing --  
6 we're not proposing to incorporate these  
7 definitions into the rule. This was just in  
8 response to the question from the Agency whether  
9 operate could be used as referring to a unit that  
10 is open to the atmosphere and I think it is  
11 reasonable to use that in this rule as has been  
12 set out and defined within these regulations.

13 MS. OLSON: Thank you. My next  
14 follow up is on question 10.4 so if there is a  
15 question before that?

16 HEARING OFFICER FOX: Not seeing any  
17 indication of that nature, Ms. Olson, 10.4 it is.

18 MS. OLSON: In response to question  
19 10.4, there is a discussion of what nearby to  
20 surface water means in The Environmental Group's  
21 interpretation and it states they intend nearby to  
22 refer to any surface water that could be impacted  
23 by groundwater contaminated by the unit. So my  
24 question is if you intend nearby to mean impacted,

1 would saying impacted be a better term than nearby  
2 in the proposal?

3 MR. ARMSTRONG: Substituting  
4 impacted for nearby?

5 MS. OLSON: If that is your intent,  
6 would that make your proposal more clear if you  
7 substituted the word impacted for nearby --  
8 nearby, excuse me, for impacted?

9 MR. ARMSTRONG: Well, impacted to me  
10 would imply that it is being currently impacted  
11 and our definition of nearby also tried to bring  
12 in a potential impact so far as it could be  
13 impacted by groundwater contaminated by the unit.

14 MS. OLSON: So would it be clearer  
15 to substitute nearby for could be impacted?

16 MR. ARMSTRONG: We could consider  
17 that. I'd like to discuss that with the groups.

18 MS. OLSON: I'm just trying to get a  
19 handle on what your proposal means. I'm not  
20 intending that -- I'm not advocating that nearby  
21 be substituted for could be impacted. I'm just  
22 making a request that if that is your intention  
23 that the language be reflective of that.

24 MR. ARMSTRONG: Okay.

1 MS. OLSON: My next question is --

2 MR. RAO: I have a follow up  
3 question. Mr. Armstrong, can you describe what  
4 impacted means whether it is above groundwater  
5 quality standard or if it's a detection of a  
6 contaminant construed as impacted?

7 MR. ARMSTRONG: So as we -- as  
8 proposed in our rules we noted, you know, there is  
9 some other Board regulations that just use the  
10 term nearby in reference to surface waters or, you  
11 know, wells, for example, without defining what  
12 exactly means nearby and in response to the  
13 Agency's questions we wanted to try to provide a  
14 little bit more detail.

15 So in terms of impacted our  
16 thought would be not to prescribe a certain level  
17 of impact, but rather to have that as something  
18 that the Agency could evaluate in determining what  
19 type of groundwater monitoring plant is necessary  
20 and what sort of information would be useful to  
21 it.

22 In terms of -- in terms of  
23 wells, for example, I don't believe that the  
24 exceedance of any particular standard would be

1 necessary to constitute an impact insofar as the  
2 presence of contaminants below the exceedance of a  
3 limit would still be of concern. Similarly for  
4 surface waters, I believe you would want to know  
5 whether the impact of contaminants even if it is  
6 not violative of a surface water quality standard.

7 So our intent was that it would  
8 be a flexible standard that the Agency could  
9 consider in determining what information would be  
10 helpful in evaluating a site.

11 MR. RAO: Thank you.

12 HEARING OFFICER FOX: Mr. Rieser,  
13 you have a question?

14 MR. RIESER: Considering that most  
15 of the power plants are located on -- well, on if  
16 not near surface waterbodies, does this in any way  
17 limit the scope of the assessment? In other  
18 words, is it conceivable that a power plant and  
19 its associated ash ponds wouldn't under this  
20 definition be nearby surface water?

21 MR. ARMSTRONG: Well, I think it is  
22 important first to consider where nearby is used  
23 within the rule. It is used, for example, in  
24 841.200 for the hydrogeologic site

1 characterization. It is used in our proposal in  
2 841.205 groundwater -- groundwater monitoring  
3 systems and the idea is that there should be  
4 information developed in this process to determine  
5 whether the power plant is impacting nearby  
6 waterbodies. So if a power plant is located next  
7 to a river, it would be The Environmental Group's  
8 expectation that the hydrogeologic site  
9 characterization would reflect whether that power  
10 plant is impacting the adjacent waterbody.

11 MR. RIESER: And you're not aware of  
12 any power plants that aren't located adjacent to  
13 surface waterbodies?

14 MR. ARMSTRONG: In terms of coal  
15 fired power plants?

16 MR. RIESER: Correct.

17 MR. ARMSTRONG: They generally are,  
18 correct.

19 MR. RIESER: Thank you.

20 HEARING OFFICER FOX: Nothing else,  
21 Mr. Rieser?

22 MR. RIESER: (Negative nod.)

23 HEARING OFFICER FOX: Very good.

24 Ms. Olson, I believe we're back to you.

1 MS. OLSON: Question 16.1. The  
2 question was what is meant by, quote, any  
3 potential hydrologic connection, close quote.  
4 Response "Ideally, quote, any potentially  
5 hydrologic connection, close quote, means any  
6 hydrologic connection. The term potential is  
7 meant to take into account the possibility that  
8 the existence of a connection may not have been  
9 fully established. The follow-up question is does  
10 anyone on the panel know whether all geologic  
11 material has a hydrologic -- hydraulic  
12 conductivity?

13 MR. ARMSTRONG: So to answer that I  
14 think it would be appropriate to refer to 16.2,  
15 the following question. Must the hydrologic  
16 connection be significant?

17 MS. OLSON: I just want you to  
18 answer the question I asked.

19 MR. ARMSTRONG: Okay. Which is --

20 MS. OLSON: Does anyone on the panel  
21 know whether all geologic material has a hydraulic  
22 conductivity?

23 MR. SODERBERG: Yes, it does.

24 MS. OLSON: Then my follow-up

1 question is to 16.2. The question was must the  
2 hydrologic connection be significant? And in  
3 response you say "Similarly to the definition of  
4 nearby, The Environmental Groups interpret any  
5 potential hydrologic connection to mean that if a  
6 impact could not impact a surface waterbody or  
7 pumping well, there is not a hydrologic connection  
8 for the purposes of this rule."

9           So my question is if both the  
10 term nearby and the term hydrologic connection  
11 mean that the unit would impact or have an impact  
12 on surface water my question is, why are both of  
13 those subsections necessary? So why is Section  
14 841.200(c)(5), which says you have to identify  
15 nearby surface waters, and Subsection 841(c)(3),  
16 which says you have to identify surface waters  
17 with a hydrologic connection, why are they both  
18 necessary if they are both asking for water that  
19 could be impacted by the unit?

20           MR. ARMSTRONG: So it is -- there is  
21 a potential that it could be combined to some  
22 extent. (c)(3) calls for the identification of  
23 nearby surface waterbodies. (c)(5) calls for the  
24 identification of the potential connection between

1 the unit and the surface waterbody as well as  
2 between the unit and pumping wells.

3 So pumping wells, number one,  
4 isn't mentioned in (c) (3). And (c) (3) and --  
5 additionally, (c) (5) talks about the hydrologic  
6 connection as opposed to the nearby surface  
7 waterbody.

8 MS. OLSON: Does Subsection (c) (4)  
9 talk about pumping wells?

10 MR. ARMSTRONG: Yes. But, again,  
11 the idea would be that the -- another point is  
12 that the potential hydrologic connection is -- the  
13 identification is supposed to be how exactly the  
14 unit is connected with the surface waterbody or  
15 the nearby pumping well.

16 MS. OLSON: Can you say that again?

17 MR. ARMSTRONG: How the unit is  
18 connected with the surface waterbody or the  
19 pumping well.

20 MS. OLSON: So it's not what you  
21 have written here that if a unit could not impact  
22 a surface waterbody it is not hydrologically  
23 connected?

24 MR. ARMSTRONG: Could you repeat

1 that?

2 MS. OLSON: Can you explain how the  
3 testimony you just gave relates to the statement  
4 that you made in response to question 6.2  
5 referring that -- referring potential hydrologic  
6 connection to the concept of impact?

7 MR. ARMSTRONG: That is correct.  
8 The idea of identifying the potential hydrologic  
9 connection would be to explain how the unit could  
10 impact the surface waterbody or pumping well.  
11 That is what is meant by the term potential  
12 hydrologic connection. That is distinct from  
13 surface waterbody and pumping well. Therefore, if  
14 there is not a potential hydrologic connection  
15 between the waterbody and pumping well, it would  
16 not have to be discussed.

17 MS. OLSON: I'm trying to understand  
18 from an entity that is going to be carrying out  
19 this program how to explain the difference if  
20 nearby means impacted and hydrologic connection  
21 means lack of an impact, how do I tell somebody  
22 the difference between the information that they  
23 have to submit in Section (c) (3) and (c) (4) and  
24 the information required by (c) (5)?

1 MR. ARMSTRONG: Well, as I was  
2 reading (c) (3) and (c) (4), identification of a  
3 nearby surface waterbody, that could be limited to  
4 saying, well, this river is nearby.

5 MS. OLSON: I thought you just  
6 testified that it had to be impacted?

7 MR. ARMSTRONG: I'm just -- okay.  
8 So we were talking about The Environmental Groups'  
9 proposal (c) (3), (c) (4), (c) (5). The way I'm  
10 reading these is hypothetically if (c) (3) and  
11 (c) (4) were in here without (c) (5) and you had an  
12 identification of a nearby surface waterbody an  
13 owner or operator could simply say "Okay. The  
14 Mississippi is a nearby surface waterbody that  
15 could be impacted." (c) (5) would call for a  
16 further explanation of what the potential  
17 connection between the unit and the Mississippi  
18 River is. Is the outfall -- you know, is the  
19 connection through a direct outfall? Is the  
20 connection through a groundwater? If there is --  
21 (c) (5) would ask the owner or operator to  
22 characterize the potential connection.

23 MS. OLSON: Is it possible that by  
24 nearby you're thinking of distance and by

1 hydrologic connection you're thinking of impact?  
2 Is that a possibility? Is that a possible way to  
3 explain your proposal?

4 MR. ARMSTRONG: I don't think that  
5 is what we are intending because we have defined  
6 nearby as -- what we're proposing is that nearby  
7 be defined as a surface water that could be  
8 impacted. It is the same -- as you pointed out,  
9 it is the same standard that we're talking about  
10 with the hydrologic connection. So there is no  
11 difference there. I agree with you on that point.

12 MS. OLSON: Along the same lines, do  
13 you have an opinion as to whether institutional  
14 controls such as a deed restriction on using  
15 groundwater for potable use would eliminate  
16 hydrologic connection to a source of primary  
17 drinking water?

18 MR. ARMSTRONG: So would a deed  
19 restriction obviate the need to identify that well  
20 within the hydrologic --

21 MS. OLSON: Sure.

22 MR. ARMSTRONG: -- site  
23 characterization?

24 MS. OLSON: Yeah. So in response to

1 16.2 you say the term, quote, any hydrologic  
2 connection with groundwater sources of drinking  
3 water. So in response to that phrase, would an  
4 institutional control prohibiting the use of water  
5 for drinking sever the connection for underground  
6 sources of drinking water?

7 MR. ARMSTRONG: It is our -- I  
8 believe that an institutional control would not be  
9 sufficient to mean that there is no longer an  
10 impact to that pumping well. There will be a  
11 physical impact on the pumping well that will  
12 compromise the use of the well for drinking water.

13 MS. OLSON: Question 16.4.

14 HEARING OFFICER FOX: I do see  
15 Ms. Franzetti raising her hand.

16 MS. FRANZETTI: I'm sorry. I wasn't  
17 fast enough before. I did have a question on --  
18 follow-up question on 12.1.

19 HEARING OFFICER FOX: Let's turn to  
20 that one.

21 MS. FRANZETTI: Do you want to keep  
22 going?

23 MS. OLSON: This is along the very  
24 same thought.

1 MS. FRANZETTI: Right. That's what  
2 I thought might be the case.

3 MS. OLSON: 16.4 asks whether or not  
4 an engineered barrier such as a liner would sever  
5 any hydraulic connection between a unit and a  
6 surface waterbody and the response was, yes, that  
7 it is possible.

8 Can you tell me the hydraulic  
9 conductivity of a liner that would in your opinion  
10 sever the hydrologic connection?

11 MR. ARMSTRONG: This -- we're not --  
12 we don't have an opinion on a specific  
13 conductivity of a liner that would sever a  
14 hydrologic connection for purposes of this  
15 subsection of the rule. Again, the idea is that  
16 there should be -- if there is going to be an  
17 impact, then that should be identified. If in the  
18 Agency's review of the site it concludes that  
19 there will not be an impact, then that is within  
20 the Agency's discretion as it applies to our  
21 proposed rule.

22 MS. OLSON: In Section 841.450 of  
23 your proposal, you propose requiring a liner with  
24 a hydraulic conductivity of no more than  $1 \times 10^{-7}$

1 cm/s. So is your testimony here today that you  
2 can't tell me whether this liner in your opinion  
3 would sever the hydraulic conductivity?

4 MR. ARMSTRONG: Again, this is  
5 something that under the rule would be left to the  
6 Agency to determine, but in The Environmental  
7 Groups' view if there is an impoundment built  
8 within the requirements of the design standards,  
9 then that would be sufficient to sever a  
10 hydrologic connection for purposes of Subsection  
11 841.200.

12 MS. OLSON: So if a liner was built  
13 with this hydrologic conductivity according to  
14 these design standards as proposed, would the unit  
15 need to include any surface water that is nearby  
16 under proposed Section (c) (5)? And let me  
17 clarify. When I say Section (c) (5), I'm referring  
18 to the hydraulic -- or the hydrogeologic site  
19 characterization section.

20 MR. ARMSTRONG: Right. Yes, I  
21 believe it would because I think an important  
22 caveat that the liner is effective in so as long  
23 as it is intact and had not failed. So if we're  
24 talking about doing, for example, a hydrogeologic

1 site characterization for a new impoundment that  
2 is located right next to a waterbody, you would  
3 want to have that waterbody included in the  
4 characterization for the possibility that the  
5 liner would fail one day, but, again, this is  
6 meant to be a site specific determination by the  
7 Agency of ultimately what information is useful  
8 for a site characterization and monitoring plan.

9           Additionally, we would note that  
10 the liner is not the only way that there could be  
11 a hydrologic connection between -- that would not  
12 be the only way for there to be a connection  
13 between the unit and the surface impoundment.  
14 There could be issues with flooding, wall failure.

15           MS. OLSON: So are you changing your  
16 response to question 16.4 that a liner would sever  
17 the hydrologic connection?

18           MR. ARMSTRONG: No. Because it is  
19 possible that an engineered barrier could sever a  
20 hydrologic connection at least during the time the  
21 barrier remains intact and in place and adequate  
22 to actually slow contamination. It is possible.  
23 That doesn't mean that you wouldn't want to look  
24 at surface waterbodies in a hydrogeologic site

1 characterization.

2 MS. OLSON: I'm happy to concede my  
3 line of questioning at this point.

4 MS. FRANZETTI: Mr. Armstrong, I'm  
5 actually going to stay with question 16.4 because  
6 I have follow up on that, too. The last sentence  
7 of the answer "The Agency has testified that  
8 earlier in this proceeding that it is expected  
9 that the liners at some Midwest Generation  
10 impoundments were, in fact, incapable of severing  
11 the connection between the impoundment and  
12 groundwater."

13 First, was that your  
14 contribution to the answer? Are you the main  
15 drafter of that?

16 MR. ARMSTRONG: Yes.

17 MS. FRANZETTI: Do you recall  
18 whether -- excuse me.

19 Do you recall what hearing date,  
20 what transcript reference, you're referring to  
21 there?

22 MR. ARMSTRONG: I don't have the  
23 specific reference, but it was from the first set  
24 of hearings in Springfield. The Environmental

1 Groups asked the Agency whether it suspected  
2 whether there were any impoundments that were  
3 lined that had caused groundwater contamination  
4 and the Agency responded ultimately that it  
5 thought there were -- had been issues with the  
6 liners at the Midwest Gen sites. So I don't want  
7 to characterize the Agency's testimony more than  
8 that, but I will provide the reference that I'm  
9 referring to.

10 MS. FRANZETTI: And I'm going to try  
11 to fish through it in that regard. You may not be  
12 able to confirm it today, but I'm going to suggest  
13 you look at the February 26th hearing transcript  
14 pages 226 through 228 where the -- you are  
15 questioning the Agency with respect to the Midwest  
16 Generation ash pond regarding the time period  
17 before they were relined with their current HDPE  
18 synthetic liners and am I correct that your  
19 statement here in the answer should be referring  
20 to the fact that the Agency suspected that the  
21 former liners, not the current liners, at the  
22 Midwest Generation impoundments were a potential  
23 source of release?

24 MS. OLSON: Correct.

1 MS. FRANZETTI: Thank you.

2 HEARING OFFICER FOX: Ms. Franzetti,  
3 I think Ms. Olson was going to step aside for you  
4 to return to I believe question 10.1?

5 MS. FRANZETTI: No, it is exactly --  
6 it is 12.1.

7 HEARING OFFICER FOX: 12.1. My  
8 mistake.

9 MS. FRANZETTI: This is in regard to  
10 I believe monitoring and the question of the use  
11 of piezometers and I may be directing this at  
12 Dr. Soderberg or whoever is appropriate, please  
13 answer. With respect to doing this hyporheic zone  
14 monitoring, will it be necessary at times to  
15 install the piezometers in the stream bed rather  
16 than being on land is my question?

17 MR. ARMSTRONG: Just to clarify very  
18 quickly. This was one of the questions where I  
19 did consult with Dr. Soderberg and he drafted this  
20 answer. So he is the appropriate person to talk  
21 to.

22 MS. FRANZETTI: Okay.

23 MR. SODERBERG: Yes, it is possible  
24 that you would need to install -- well, that you

1 could install piezometers within the stream bed to  
2 perform this monitoring.

3 MS. FRANZETTI: What I'm trying to  
4 get a sense of, Dr. Soderberg, is how typical is  
5 that or how often is that necessary in order to  
6 conduct the type of hyporheic zone monitoring that  
7 The Environmental Groups proposed rules language  
8 intends?

9 MR. SODERBERG: I think it is  
10 becoming more common to do that. I think more  
11 common in smaller rivers or wetlands, but there is  
12 certainly plenty of examples where there are  
13 questions about groundwater discharge to larger  
14 river systems and in that case it is much more  
15 difficult to do this monitoring with installed  
16 piezometers. You may have some combination of  
17 modeling and other types of monitoring of  
18 potential seepage zones within the stream bed.

19 MS. FRANZETTI: I'm sorry. I'm not  
20 sure I understood the last part. Is it more  
21 difficult to use the piezometers when you're  
22 dealing with a larger surface water, is that what  
23 you're saying?

24 MR. SODERBERG: Yes.

1 MS. FRANZETTI: Okay. And in that  
2 instance -- in that instance, and I'm referring to  
3 your response to the Agency's question 13.2 where  
4 you say typically it is quite inexpensive to  
5 install piezometers.

6 Is that not the case when you're  
7 dealing with a surface water larger than what you  
8 were talking about in terms of the very small  
9 stream or wetland area?

10 MR. SODERBERG: Yes, if piezometers  
11 are the choice. So the Agency recommends that for  
12 the monitoring I would expect that to be a  
13 relatively inexpensive -- inexpensive relative to  
14 say nested monitoring wells that they're deeper  
15 and require, you know, a more involved  
16 installation. In larger river systems, that  
17 installation of piezometers is probably not going  
18 to be the selection of choice for monitoring.

19 MS. FRANZETTI: And is that both  
20 because it is difficult to do it as well as it  
21 could get quite expensive and it may be hard to  
22 maintain them in the waterbody?

23 MR. SODERBERG: Yes.

24 MS. FRANZETTI: Thank you. No

1 further questions.

2 HEARING OFFICER FOX: Mr. Rieser  
3 looks like he has a follow up.

4 MR. RIESER: Just as a follow up.  
5 What permits, if any, would be required to install  
6 a piezometer in a stream?

7 MR. SODERBERG: I'm sorry. Can you  
8 repeat?

9 MR. RIESER: What permits, if any,  
10 would be required to install a piezometer in a  
11 stream?

12 MR. SODERBERG: I'm not aware of  
13 which permits would be required.

14 MR. RIESER: Thank you.

15 HEARING OFFICER FOX: Anything  
16 further, Mr. Rieser?

17 MR. RIESER: (Negative nod.)

18 MS. OLSON: Would anyone -- just to  
19 follow up on Mr. Rieser's. Would any one of The  
20 Environmental Groups witnesses care to follow up  
21 to that response in a post-hearing comment?

22 MR. ARMSTRONG: Yes, we can do that.

23 HEARING OFFICER FOX: Ms. Franzetti,  
24 I believe we've wrapped up her questions.

1 Ms. Olson, I believe we're prepared to turn back  
2 to you for the next question you wish to raise.

3 MS. OLSON: Sure. Having listened  
4 to Ms. Franzetti's questions and earlier questions  
5 from the Board on nearby, I kind of want to jump  
6 back if that's okay to question 12.1, which is  
7 where Ms. Franzetti was.

8 The last sentence of your  
9 response to that question says "If modeling shows  
10 there is going to be an interaction, though, then  
11 The Environmental Groups urge that hyporheic zone  
12 monitoring be needed.

13 So am I correct to assume that  
14 by interaction you don't mean an exceedance of  
15 standards, either surface water standards or  
16 groundwater water standards or groundwater quality  
17 standards? Is that a correct assumption?

18 MR. ARMSTRONG: Yes, that's The  
19 Environmental Groups' intent.

20 MS. OLSON: So would interaction --  
21 would it be fair to characterize what you mean by  
22 interaction here down to kind of a molecular level  
23 like if water that, you know, is sitting under the  
24 unit where there may have been a leak breaches, no

1 matter how small, reaches a surface water would,  
2 in your opinion, hyporheic zone monitoring be  
3 needed?

4 MR. ARMSTRONG: Well, again, I think  
5 this goes to the idea of nearby and having an  
6 impact on the surface water and we're not talking  
7 about a molecular impact. We're talking about an  
8 impact that is significant enough that the Agency  
9 believes should be considered in the monitoring  
10 plan and the site characterization.

11 We're not referring to, you  
12 know, if a single molecule could potentially pass  
13 through from -- if a single molecule from a unit  
14 could potentially pass through into a surface  
15 water. What we're talking about is situations  
16 where the surface water could be impacted by the  
17 unit.

18 MS. OLSON: So if the Agency chose  
19 to use the standards that are currently adopted by  
20 the Board, either groundwater quality standards or  
21 surface water quality standards, as its benchmark  
22 for interaction or impacted, is it fair to say  
23 that that is not what you are intending here?

24 MR. ARMSTRONG: So could you refer

1 to the benchmark that you're talking about?

2 MS. OLSON: There is some  
3 groundwater quality standards in Section -- excuse  
4 me. Part 620 of the Ill. Adm. Code Title 35 --

5 MR. ARMSTRONG: Correct.

6 MS. OLSON: There is also water  
7 quality standards in Subtitle (c) of Title 35. So  
8 those are the standards that I'm referring to.

9 MR. ARMSTRONG: Okay. Again, what  
10 our intent with the monitoring plan would be just  
11 to characterize the site and to determine what is  
12 going on with the site and to determine what type  
13 of monitoring is necessary, what The Environmental  
14 Groups are proposing is that there be monitoring  
15 conducted to see not just where the Agency knows  
16 that there is a violation, but whether there will  
17 be a violation.

18 MS. OLSON: How is the Agency  
19 supposed to know when hyporheic zone monitoring is  
20 required?

21 MR. ARMSTRONG: Under The  
22 Environmental Groups proposed rules, in  
23 841.205(c)(6) what would be required would be that  
24 this would be sufficient information to establish

1 the hydraulic gradient between the unit and any  
2 nearby surface water.

3           And, again, this refers to the  
4 definition of nearby, which would be a surface  
5 water that could be impacted by the unit. In  
6 order to determine whether a surface water could  
7 be impacted by the unit, the Agency would have  
8 information available to it from a hydrogeologic  
9 site characterization and modeling, for example,  
10 information about the site layout. This could all  
11 be useful in determining whether the surface water  
12 could be impacted by the unit.

13           MS. OLSON: Can you finish reading  
14 Section 841.205? You stopped. You said  
15 "establishing the hydraulic gradient between the  
16 unit and nearby surface water." Can you go ahead  
17 and finish reading that.

18           MR. ARMSTRONG: Sure. "Including as  
19 necessary the installation and/or identification  
20 of monitoring points for measuring water levels  
21 and collecting water samples from multiple depths  
22 within the hyporheic zone where exchange between  
23 groundwater and surface water occurs."

24           MS. OLSON: So my question is as

1 necessary. Is this something that is left to the  
2 Agency's discretion?

3 MR. ARMSTRONG: As necessary would  
4 refer to whether it is necessary to -- yes,  
5 install or identify monitoring points to establish  
6 hydraulic gradient between the unit and a nearby  
7 surface water. So, yes, it's left to the Agency's  
8 discretion.

9 MR. SODERBERG: I would just add to  
10 that this assessment of groundwater discharge  
11 potential to surface water is typically a  
12 multistage approach where you're combining various  
13 lines of evidence thinking about the watershed and  
14 the overall system as well as any potential  
15 monitoring data that you have.

16 MS. OLSON: Moving onto question  
17 22.1 if there is anything before that?

18 HEARING OFFICER FOX: Ms. Olson, I'm  
19 not seeing an indication that there is. 22.1 is  
20 ready for your follow up.

21 MS. FRANZETTI: Can you give us just  
22 a second?

23 HEARING OFFICER FOX: Ms. Franzetti,  
24 we can hold for a second. Absolutely.

1 MS. FRANZETTI: I have a question on  
2 19.

3 HEARING OFFICER FOX: Ms. Olson,  
4 would you object if we went ahead with  
5 Ms. Franzetti?

6 MS. OLSON: No.

7 HEARING OFFICER FOX: Ms. Franzetti,  
8 please go ahead with 19.

9 MS. FRANZETTI: Question 19 dealt  
10 with corrective action and asked you to list any  
11 other regulatory programs, state or federal, that  
12 requires closure when there has been a release  
13 from surface impoundment or landfill causing  
14 groundwater contamination and does not allow  
15 corrective action to achieve compliance.

16 With respect to your answer to  
17 the -- to that question, does your proposed  
18 modification to the language of the proposed rules  
19 on this issue of corrective action distinguish  
20 between unlined or inadequately lined impoundments  
21 versus adequately lined impoundments so that the  
22 requirement you're proposing to initiate closure  
23 when there has been a release from surface  
24 impoundment does not apply to releases from

1 impoundments that have installed an adequate liner  
2 and any release predates that installation?

3 MR. ARMSTRONG: So in response to  
4 this line of questioning from I believe --  
5 actually, from Midwest Generation at the last  
6 proceeding. The Environmental Groups did propose  
7 a modification to 841.405 (a) (2) (b) .

8 MS. FRANZETTI: (a) (2) (b) .

9 MR. ARMSTRONG: And a new Subsection  
10 841.405 (a) (2) (b) (2), which states that the  
11 requirement to close the impoundment following the  
12 exceedance of an applicable groundwater quality  
13 standard is waived if the unit meets the  
14 requirements of Section 841.450 which is the  
15 design standard within five years following the  
16 groundwater monitoring results confirming the  
17 exceedance.

18 So, therefore, if the  
19 impoundment is lined in accordance with The  
20 Environmental Groups proposed design standards  
21 within five years of the exceedance it would not  
22 be required to close.

23 MS. FRANZETTI: I understand. That  
24 will just pose a problem if the design standards

1 are not in place by the time these rules are  
2 adopted?

3 MR. ARMSTRONG: Correct.

4 MS. FRANZETTI: But it is your  
5 intent then to give some relief to adequately  
6 lined impoundments?

7 MR. ARMSTRONG: Yes, it is the  
8 intent that if an impoundment is adequately lined  
9 within five years that it would not need to close.

10 MS. FRANZETTI: Thank you.

11 HEARING OFFICER FOX: Anything  
12 further, Ms. Franzetti?

13 MS. FRANZETTI: No.

14 HEARING OFFICER FOX: Ms. Olson, I  
15 believe we're back to you. You mentioned question  
16 number --

17 MS. OLSON: 22.1. And these  
18 questions are related to corrective action. So in  
19 response to question 22.1, you say that it's a  
20 possibility that corrective action could achieve  
21 the groundwater quality standards and that the  
22 proposed rule requires units to close within five  
23 years if any previous attempts at corrective  
24 action have proven ineffective.

1                   And then your response goes onto  
2 say "If through whatever selective method  
3 corrective action is effective in ending the  
4 exceedance of the numerical groundwater quality  
5 standards for four straight quarters, then closure  
6 would not be required."

7                   So I'm just trying to nail down  
8 how much time a unit may have to effectively  
9 remediate groundwater. So if you have to have  
10 four straight quarters of groundwater monitoring  
11 results in compliance, would it be fair to say  
12 that takes one year away from the five years?

13                   MR. ARMSTRONG: Correct.

14                   MS. OLSON: And then if a facility  
15 chose to do an alternative cause demonstration,  
16 under your rule they would have 180 days, is that  
17 right?

18                   MR. ARMSTRONG: Let me just check  
19 that. Yes.

20                   MS. OLSON: And the Agency  
21 response -- the Agency would have another 90 days  
22 to provide its response, is that right?

23                   MR. ARMSTRONG: Correct.

24                   MS. OLSON: And if the unit was

1 unable to show an alternative cause, they would  
2 then be given another 90 days to submit a  
3 corrective action plan, is that right?

4 MR. ARMSTRONG: Correct.

5 MS. OLSON: Then pursuant to the  
6 proposal, your proposal, the Agency would then  
7 have 120 days to review that plan, is that right?

8 MR. ARMSTRONG: Correct.

9 MS. OLSON: So if you add up all  
10 those days it equals 480 days, which is  
11 approximately 16 months. So under your proposal  
12 they would have to come into compliance within  
13 four years of a confirmed exceedance and the  
14 timeframe set forth in this rule provides for 16  
15 months of planned development and/or back and  
16 forth evaluation. That leaves approximately 32  
17 months. So this question is for Dr. Soderberg.

18 In your opinion, is it realistic  
19 to remediate groundwater in two years and eight  
20 months? Is that a realistic expectation?

21 MR. SODERBERG: Obviously, there are  
22 many variables involved and you have to consider  
23 site specific parameters, but that would be a  
24 short timeframe.

1 MS. OLSON: In any of the projects  
2 that you have worked on, has the groundwater been  
3 remediated in two years and eight months?

4 MR. SODERBERG: I cannot recall  
5 specifically if that's the case.

6 MS. OLSON: And do you recall the  
7 quickest time on any of the projects that you have  
8 been involved in where the groundwater has been  
9 remediated to the point of meeting either  
10 groundwater quality standards or other drinking  
11 water standards?

12 MR. SODERBERG: I would have to go  
13 back and check. I don't know. I wouldn't put a  
14 number on that.

15 MS. OLSON: Would you be willing to  
16 provide that number in a post-hearing comment?

17 MR. SODERBERG: Sure.

18 MS. OLSON: Thank you. In your  
19 response to question 22.1, you reference any  
20 previous attempts at corrective action and so in  
21 thinking about the language that you proposed you  
22 setup a situation where you have five years from a  
23 confirmed exceedance. That is the language in  
24 your rule.

1                   So my question is, is it a  
2 confirmed exceedance after the effective date of  
3 the rule or is it any confirmed exceedance? So,  
4 for example, if you had a confirmed exceedance in  
5 2009, how would that be handled under your rule?

6                   MR. ARMSTRONG: You know, actually  
7 looking at this, I think I have to walk back a  
8 little bit from your previous line of questioning  
9 because our proposed rule requires that the unit  
10 shall be closed within five years of the Agency's  
11 approval of the closure plan or within five years  
12 from the submission of groundwater monitoring  
13 results confirming exceedance of the applicable  
14 groundwater quality standard, whichever occurs  
15 later. So this is in 405(a)(2)(b).

16                   MS. OLSON: Mr. Armstrong, I'm not  
17 asking when it needs to be closed. I'm asking how  
18 much time is given for corrective action?

19                   MR. ARMSTRONG: For corrective  
20 action?

21                   MS. OLSON: I'm not disputing how  
22 much time you have to close the facility.

23                   MR. ARMSTRONG: Right.

24                   MS. OLSON: My questions revolve

1 around how much time does a unit have to fix the  
2 groundwater problem and in your rule 405 it says  
3 five years from a confirmed exceedance if you have  
4 four consecutive quarters of non-detect or  
5 compliance with the standard.

6 MR. ARMSTRONG: Right. You're  
7 correct. As drafted there would be a -- if there  
8 was an exceedance that -- so the exceedance that  
9 is referred to in 841.405(a)(2)(b)(i) in our  
10 proposal refers back to the exceedance that is  
11 called out in 841.405(a) at the top. Whenever any  
12 applicable groundwater standards under 35 Ill.  
13 Adm. Code 620 Subpart (e) are exceeded this  
14 exceedance is confirmed pursuant to Section  
15 841.300 of this part. If the owner and operator  
16 has not made an alternative cause demonstration  
17 pursuant to Section 841.305 under this part, the  
18 owner or operator shall close the unit according  
19 to the following schedule.

20 So if there was an exceedance  
21 that occurred before the adoption of the rule, it  
22 would not fall into this -- it would not fall  
23 under this rule because you would need to have it  
24 confirmed under 841.305, which is not yet in

1 effect.

2 MS. OLSON: So if the exceedance was  
3 detected in 2009 and the site started corrective  
4 action, are you telling me that this section does  
5 not apply to them and they would not have to close  
6 if they didn't remediate within four years?

7 MR. ARMSTRONG: This section applies  
8 to an exceedance that has been confirmed under  
9 841.300. So if there is an exceedance that is  
10 detected after the rule has been put into place  
11 and is confirmed, then the fact that it's a  
12 pre-existing exceedance would not insulate the  
13 unit from being closed.

14 MS. OLSON: So if there is an  
15 exceedance in 2009 and it is confirmed in 2009,  
16 would they have to follow proposed Section  
17 841.405(a)(2)?

18 MR. ARMSTRONG: If the exceedance is  
19 still -- if there is still an exceedance detected  
20 after the rules are put in place, then, yes, the  
21 unit would have to close.

22 MS. OLSON: If that exceedance was  
23 confirmed in 2009, would they be foreclosed from  
24 big B -- Subsection (B)(i)?

1 MR. ARMSTRONG: I'm sorry. I didn't  
2 catch the last part.

3 MS. OLSON: So if the exceedance was  
4 confirmed in 2009, would they -- would the unit be  
5 allowed to do -- would the waivers contained in  
6 Subsection (a)(2)(b)(1) and (2) apply?

7 MR. ARMSTRONG: If there was -- no,  
8 our intent would be that if there is a confirmed  
9 exceedance after the rules go into effect at a  
10 site, then the unit would be required to close.  
11 So regardless of whether there has been an earlier  
12 exceedance that has been confirmed, if there is an  
13 exceedance after the adoption of the rules at the  
14 site, then the unit would have to close in  
15 accordance with the timeline set out in 841.405  
16 and the exceedance would refer to the exceedance  
17 that occurred after the adoption of the rules.

18 MS. OLSON: What if that exceedance  
19 is not confirmed again because it's been confirmed  
20 since 2009? My confusion is the phrase "five  
21 years following the groundwater monitoring results  
22 confirming the exceedance."

23 That may very well have happened  
24 before the rule started. So do they get five

1 years from the date that they first found out that  
2 the exceedance was there, was confirmed, or do  
3 they get five years from the date this rule is  
4 effective?

5 MR. ARMSTRONG: Our intent was five  
6 years from the effective date of this rule.

7 MS. OLSON: Thank you.

8 MR. ARMSTRONG: That's what we're  
9 intending.

10 MS. OLSON: My next question is not  
11 until 35.

12 HEARING OFFICER FOX: Ms. Olson,  
13 Mr. Rieser appears to have a question either on  
14 this one or one of the questions between 22.1 and  
15 35.

16 MR. RIESER: Question 24 to be  
17 precise.

18 HEARING OFFICER FOX: Very good.

19 MR. RIESER: Thank you. In  
20 responding to question 24 which has to do with the  
21 ability to identify whether there is a requirement  
22 to identify the specific cause or contamination in  
23 the context of the alternative cause  
24 demonstration, the answer draws a distinction

1 between describe and justify on the one hand and  
2 identify on the other and I'm trying to figure out  
3 as a practical matter what that distinction means.  
4 So I'm hoping you can answer that question.

5 MR. ARMSTRONG: Sure. The  
6 Environmental Groups' answer reflects a situation  
7 where it may not be within the owner or operator's  
8 ability to identify with a hundred percent  
9 certainty that this former operation, that this  
10 offsite factory, caused the groundwater  
11 contamination at our site. Therefore, we're not  
12 proposing that an owner or operator have to point  
13 the finger at a specific source. However, in our  
14 proposed language, what we would require is that  
15 the owner's report describe and justify a specific  
16 alternative cause using the documentation  
17 available to it to provide the information that  
18 causes it to believe that that site or any other  
19 specific sites were the alternative source of the  
20 contamination.

21 So the difference is between  
22 identifying with certainty a single source or just  
23 describing and justifying the reason for the owner  
24 or operator's belief that there is an alternative

1 source.

2 MR. RIESER: So that description and  
3 justification could include a discussion that  
4 given the types of contaminants that are the  
5 subject of concern, those contaminants could not  
6 have come from the CCW impoundment and that would  
7 be sufficient?

8 MR. ARMSTRONG: I think that  
9 certainly if there is, for example, contamination  
10 with a chemical that is not in any way associated  
11 with the CCW surface impoundment, then that is  
12 certainly evidence that the contamination came  
13 from elsewhere.

14 Ideally, in our view, the owner  
15 or operator would attempt to find publically  
16 available information about where this  
17 contamination might have originated from offsite,  
18 but, again, our proposed standard does not specify  
19 a specific level of information.

20 So we would -- we would -- you  
21 know, I think ideally the report would include  
22 information about where the contamination might  
23 have come from, but offsite in that case is a good  
24 explanation.

1 MR. RIESER: Okay. Thank you.

2 HEARING OFFICER FOX: Anything  
3 further, Mr. Rieser?

4 MR. RIESER: No.

5 HEARING OFFICER FOX: Did we have  
6 anyone that wished to address a question between  
7 22.1 and 35, which Ms. Olson indicated was the  
8 next follow up she wished to raise?

9 MS. OLSON: I actually have one  
10 question in response to Mr. Rieser.

11 HEARING OFFICER FOX: Please go  
12 ahead.

13 MS. OLSON: Do you believe there  
14 will be documentation for every potential offsite  
15 alternative source.

16 MR. ARMSTRONG: I don't believe  
17 there will be documentation for every possible  
18 offsite source, but I do believe that there is a  
19 significant amount of publically available  
20 documentation that should be considered and --  
21 that should be considered and provided.

22 MS. OLSON: Do you believe it is  
23 acceptable to say there is an alternative source  
24 when there is no documentation of offsite

1 alternative sources should the modeling show that  
2 it is not coming from the unit?

3 MR. ARMSTRONG: If there is a case  
4 where -- I mean, I think it really depends upon  
5 the circumstances of the site and what  
6 contaminants are we talking about and is there any  
7 chance that contamination is coming from the CCW  
8 surface impoundment.

9 MS. OLSON: Let's assume, though,  
10 that there is also no documentation of a potential  
11 offsite source available.

12 MR. ARMSTRONG: If there is no  
13 documentation available, then the owner or  
14 operator can't provide documentation.

15 MS. OLSON: Okay. Moving onto  
16 question 35.

17 HEARING OFFICER FOX: Ms. Olson,  
18 Mr. Rieser did indicate he had a question.

19 MR. RIESER: I'm sorry. I have a  
20 question on 26.4, which is to ask what does it  
21 mean -- the language that you proposed says "For  
22 the purposes of this section, concentration of  
23 chemical constituents due to natural causes are  
24 not considered in determining the applicable

1 groundwater quality standard" and I'm asking what  
2 does that mean?

3 MR. ARMSTRONG: So that means in  
4 determining what the applicable groundwater  
5 quality standard is for purposes of that section  
6 the presence of constituents due to natural causes  
7 should not be considered in determining the  
8 applicable standard and what I mean by that is  
9 let's refer, for example, to Section 620.410  
10 groundwater quality standards for Class 1  
11 groundwaters and 620.410(a) provides that "except  
12 due to natural causes or as provided in Section  
13 624.050 concentrations of the following chemical  
14 constituents must not be exceeded in Class 1  
15 groundwater."

16 What that means is that in  
17 determining whether under 841.300 it is necessary  
18 to confirm the detection of an exceedance of a  
19 groundwater quality standard, the groundwater  
20 quality standard that should be applied should be  
21 the numeric standard rather than a standard that  
22 is elevated due to natural causes and the reason  
23 for that is that if natural causes were  
24 responsible for an exceedance that had to be

1 confirmed under 841.300, then that should be  
2 resolved later under Section 841.305 in an  
3 alternative cause demonstration.

4 MR. RIESER: Why?

5 MR. ARMSTRONG: If there is -- if  
6 there is -- if the contamination is due to natural  
7 causes, then that should be reviewed as part of  
8 the alternative cause demonstration 841.305,  
9 otherwise there would be no need for the  
10 alternative cause demonstration 841.305 for  
11 natural causes.

12 MR. RIESER: If the Board's rule  
13 with respect to groundwater which is what this  
14 whole thing is supposed to be about say  
15 specifically that there isn't a groundwater  
16 exceedance when the natural condition of the  
17 groundwater is elevated above the Board standards,  
18 then why do we rewrite that rule by requiring a  
19 significant amount of activity when that condition  
20 occurs?

21 MR. ARMSTRONG: At a specific site,  
22 how would one know? I guess not to answer your  
23 question with a question, but at a specific site,  
24 how would one know whether the -- whether natural

1 causes have elevated the level of groundwater  
2 contamination before some sort of alternative  
3 cause demonstration has taken place?

4 MR. RIESER: And the question in  
5 response to that is that if the Board's rules  
6 say -- in those circumstances, if the Board's  
7 rules say that there is not a groundwater quality  
8 violation in that circumstance, why does an entity  
9 have to go through this long involved process if  
10 they can document that consistent with the Board's  
11 rule at 620 there is not a groundwater quality  
12 exceedance?

13 MR. ARMSTRONG: In our view, the  
14 documentation that there is not an exceedance  
15 would be part of the alternative cause  
16 demonstration. You're just merely providing the  
17 information that the exceedance -- again, this  
18 rule is talking about exceedances, not violations,  
19 this section of the rule. So if the owner or  
20 operator --

21 MR. RIESER: I'm sorry. Does that  
22 matter?

23 MR. ARMSTRONG: Well, because we're  
24 not saying that there is a violation of the

1 regulation. What we're saying is there is an  
2 exceedance of numeric standards that the owner or  
3 operator should show is due to natural causes and  
4 I think as you just said why should the owner or  
5 operator -- why should this be considered a  
6 violation if the owner or operator can show this  
7 is due to natural causes, that is the point of  
8 841.305, to give the owner/operator an opportunity  
9 to show this exceedance should not be considered a  
10 violation. It is just the result of natural  
11 causes.

12 MR. RIESER: So these rules  
13 establish requirements even in situations for  
14 operators -- even in those situations where  
15 they're in complete compliance with the 620 rules,  
16 is that correct?

17 MR. ARMSTRONG: The rules require an  
18 owner or operator to show that they're in  
19 compliance with the 620 rules because the baseline  
20 would be that if you don't meet the numeric  
21 standards you're out of compliance. The rule  
22 would just require the owner or operator to show  
23 that there is not a violation because due to  
24 natural causes.

1 MR. RIESER: How is this different  
2 from the statement you made about the groundwater  
3 management zone that facilities that add  
4 groundwater compliance -- excuse me -- groundwater  
5 management zones this rule wouldn't apply to them  
6 because they were in compliance with the 620  
7 standards?

8 MR. ARMSTRONG: One moment, please.  
9 So what we're asking for is just that there be  
10 some sort of documentation that if you've got a  
11 site that has elevated constituents due to natural  
12 causes that the cause of that is natural causes.  
13 That is the purpose of the alternative cause  
14 demonstration.

15 MR. RIESER: Why wouldn't it be  
16 sufficient to say rather than in this instance the  
17 Board rules don't apply, the Board's 620 rules  
18 don't apply, to say if it is the owner or  
19 operator's belief that the Board rules do apply  
20 that there is an exceedance based on the natural  
21 causes that they make that demonstration from the  
22 get-go and then they're exempt from the other  
23 requirements?

24 MR. ARMSTRONG: So I think the -- I

1 mean, the alternative cause demonstration I think  
2 is what we're talking about. I think we're  
3 talking about the same thing. Are you referring  
4 to something different? Because what we're  
5 talking about is we're talking about if the rules  
6 are applicable to a unit and they have to go  
7 through the 841.300 process. So the rules are  
8 already applicable to that unit as they're going  
9 through the 841.300 process, right?

10 MR. RIESER: I guess the answer is  
11 they may not be if they don't have a groundwater  
12 exceedance because it is by natural causes and the  
13 point I'm trying to make and I'm going to leave  
14 right here is if the Board's rules say, 620 rules  
15 say, that if there is not an exceedance of the  
16 groundwater quality standards, if people want to  
17 setup a measure -- method for documenting that  
18 under the Board's rules, but to say that a unit  
19 has to be involved in corrective action and  
20 involved in a long corrective process to get to  
21 the point of documenting that they don't have to  
22 do any of that, that doesn't seem consistent with  
23 the Board's rules and by saying specifically --  
24 rather than saying specifically here is a

1 demonstration you have to make saying the Board's  
2 rules don't apply in this instance for determining  
3 whether the groundwater quality standards exceed  
4 it seems like it's a real attempt to circumvent  
5 what the 620 rules actually say.

6 MR. ARMSTRONG: Is that a question?

7 MR. RIESER: No, it wasn't. I'm  
8 going to stop there.

9 HEARING OFFICER FOX: Ms. Olson, you  
10 had indicated you had a follow up, is that  
11 correct?

12 MS. OLSON: Yeah, I have a few  
13 questions that I think maybe will help this line.

14 HEARING OFFICER FOX: Please go  
15 ahead.

16 MS. OLSON: These questions are for  
17 Dr. Soderberg. Dr. Soderberg, in your opinion,  
18 would natural occurring constituents be  
19 representative of the background determination?

20 MR. SODERBERG: Yes, background  
21 could be due to other things other than natural  
22 causes, but yes.

23 MS. OLSON: You may not know the  
24 answer to this, but do you know whether or not

1 units have to submit information on their  
2 background concentrations as part of the proposal  
3 by The Environmental Groups? And I can help you  
4 out. Section 841.220(a) might have that answer.

5 MR. SODERBERG: Yes.

6 MS. OLSON: So would that be  
7 documentation submitted to the Agency that levels  
8 of constituents are naturally occurring and,  
9 therefore, not violations of the groundwater  
10 quality standards in your opinion?

11 MR. SODERBERG: Yeah, the  
12 information and the statistical analysis could be  
13 used for that purpose, but I guess it's not clear  
14 to me when that determination would be made by the  
15 Agency.

16 MS. OLSON: If background  
17 determination values were submitted pursuant to  
18 proposed Section 841.220, the information used to  
19 calculate background would reflect naturally  
20 occurring levels, is that right?

21 MR. SODERBERG: Yes, the information  
22 would be there. That could be used for that  
23 purpose.

24 MS. OLSON: And if the next

1 quarterly monitoring came in and showed those  
2 exact same levels that are at background, do you  
3 believe a separate determination would need to be  
4 made other than the submission of the background  
5 results?

6 MR. ARMSTRONG: I think that is, you  
7 know, getting into how this is regulated under the  
8 rules.

9 MS. OLSON: I was actually just  
10 asking for Dr. Soderberg's opinion.

11 MR. SODERBERG: So my opinion is if  
12 the next quarterly monitoring results in that  
13 hypothetical did not show an exceedance of  
14 background then, yes, that would be sufficient  
15 information that you're still within background.

16 MS. OLSON: And if let's say five  
17 years down the road there was an increase from  
18 that background concentration, is it possible that  
19 that increase could be due to natural causes?

20 MR. SODERBERG: It's possible. It  
21 is not likely to be statistically significant, but  
22 it is possible to be statistically significant.

23 MS. OLSON: And, at that point,  
24 would you need further documentation that that

1 increase is actually naturally occurring?

2 MR. SODERBERG: Yes, you'd have to  
3 recalculate your background and reevaluate at that  
4 point.

5 MS. OLSON: That's all I have.

6 HEARING OFFICER FOX: Very good.  
7 Did anyone else have questions between number 24,  
8 which we have just been addressing, and number 35?  
9 Ms. Olson, next question. I'm not seeing any  
10 indication that there is and, Ms. Olson, we will  
11 run out of time soon, but why don't we at least  
12 begin with number 35 of the Agency's questions.

13 MS. OLSON: So the question was  
14 whether or not The Environmental Groups performed  
15 an economic analysis of the impact of requiring  
16 all coal combustion waste surface impoundments to  
17 submit a closure plan within one year of the  
18 effective date.

19 And the response was that the  
20 impact would be limited to the time value of the  
21 cost of the plan between the deadline and the time  
22 at which the plan would have been needed to be  
23 produced under the Agency's proposed regulations  
24 and so my question is did you consider the fact

1 that these plans might have to be revised and  
2 re-reviewed multiple times throughout the course  
3 of a unit's life expectancy when you drafted this  
4 response.

5 MR. ARMSTRONG: No, I was -- I  
6 drafted this response after responding  
7 specifically to the question of the requirement of  
8 submitting the closure plan within one year, but,  
9 yes, you're correct. If plans are revised, that  
10 would be an additional cost.

11 MS. OLSON: And then did you  
12 consider the cost to the Agency of reviewing  
13 potentially 94 plans within 120 days as required  
14 by the proposal when drafting your response to  
15 question 35?

16 MR. ARMSTRONG: I did not consider  
17 specifically the cost to the Agency in terms of  
18 what I identified the time value of the cost as  
19 the sole cost of the plan and as we noted, though,  
20 in response to question 31 if the Agency needed  
21 more time to review closure and post-closure plans  
22 The Environmental Groups would support allowing  
23 such time as the Agency originally required.

24 MS. OLSON: Would that be an

1 amendment to the proposed regulation in your view?  
2 In other words, would 120 days in Section --  
3 proposed Section 841.500 be increased to 180 days  
4 or 360 days?

5 MR. ARMSTRONG: I think not knowing  
6 what the Agency would need in terms of time to  
7 review plans, I couldn't put a specific date on  
8 it, but, yes, there could be a potential amendment  
9 to the rules.

10 MS. OLSON: Did you consult with the  
11 Agency on the time that it would need to review  
12 all the plans submitted within one year before  
13 drafting your proposal?

14 MR. ARMSTRONG: No, we did not.

15 MS. OLSON: Do you know  
16 approximately how many coal combustion waste  
17 surface impoundments are in the State of Illinois?

18 MR. ARMSTRONG: I believe the Agency  
19 has identified it as 91.

20 MS. OLSON: And if there were 91  
21 surface impoundments and each of those surface  
22 impoundments submitted a closure plan, would it be  
23 fair to say there would be 91 closure plans  
24 potentially?

1 MR. ARMSTRONG: Yes.

2 MS. OLSON: And if under your rules  
3 a public hearing was requested for each of those  
4 91 sites, would the Agency have any time to review  
5 the closure plans if it was attending a public  
6 hearing for 91 sites within 120 days of the  
7 submission of the plan?

8 MR. ARMSTRONG: I should say when  
9 we're talking about plans, I mean I anticipate  
10 that closure plans could be submitted for each of  
11 the impoundments at a particular site. So it  
12 would be less than 91 plans and I don't think  
13 there would necessarily then be 91 hearings, but I  
14 do agree that is a lot of travel for the Agency.

15 MS. OLSON: Would you agree that if  
16 you had a hearing, it would take most of the  
17 entire day to attend that hearing?

18 MR. ARMSTRONG: Probably depending  
19 on where the impoundment is located and the length  
20 of the hearing, it could.

21 MS. OLSON: And that the Agency  
22 personnel would be out of the office  
23 potentially -- if all 91 units submitted 91  
24 separate closure plans, they would be out of the

1 office for 91 days?

2 MR. ARMSTRONG: I don't -- I mean, I  
3 think the Agency could if it got significant  
4 requests for a public hearing on specific  
5 impoundments, it could hold those hearings on a  
6 combined -- you know, for each of the units in a  
7 facility, hold a combined hearing on each of those  
8 units, for example. So I wouldn't agree that the  
9 Agency needs to be out of the office for 91 days.

10 MS. OLSON: So if there is 24  
11 facilities, that would be 24 days, is that right?

12 MR. ARMSTRONG: If there were 24  
13 facilities, correct.

14 MS. OLSON: And the proposed public  
15 comment period is 60 days, is that right?

16 MR. ARMSTRONG: Correct.

17 MS. OLSON: So the Agency would  
18 receive comments up until the 60th day at which  
19 point they would have to decide to hold the  
20 hearing, is that right?

21 MR. ARMSTRONG: Correct.

22 MS. OLSON: And then if there was 24  
23 facilities, they would hold 24 hearings possibly?

24 MR. ARMSTRONG: Right. If there

1 were significant public interest and if there were  
2 24 facilities, then The Environmental Groups would  
3 ask that the Agency hold public hearings for each  
4 of the facilities.

5 MS. OLSON: And then the Agency  
6 would have to produce a response within 120 days  
7 of the submission, is that right?

8 MR. ARMSTRONG: Correct.

9 MS. OLSON: That's all I have.

10 HEARING OFFICER FOX: On question  
11 35, Ms. Olson, is that right?

12 MS. OLSON: Yes.

13 HEARING OFFICER FOX: While we have  
14 just a moment before we do need to break for the  
15 Board's meeting, can you identify the next  
16 question on which you have some follow ups for The  
17 Environmental Groups?

18 MS. OLSON: Forty-two.

19 HEARING OFFICER FOX: Forty-two. We  
20 can certainly check to see whether there is  
21 anything between 36 and 42 that raises any  
22 questions, but let's break now for the Board's  
23 meeting and for lunch and resume as originally  
24 planned at 12:15. Let's go off the record and I

1 have a very quick procedural question to raise  
2 with the participants.

3 (Whereupon, a break was taken  
4 after which the following  
5 proceedings were had.)

6 HEARING OFFICER FOX: The time of  
7 12:15 having come we're ready to go back on the  
8 record. I thank you all for your punctuality in  
9 returning so we can get started.

10 I think we're ready to dive  
11 right in, Ms. Olson, to the Agency's follow-up  
12 questions. You had indicated that you were  
13 prepared to turn to follow-up question. Question  
14 42 if I am not mistaken. Please correct me if I'm  
15 wrong.

16 MS. OLSON: I probably did, but  
17 actually I'm going to jump ahead to 55.

18 HEARING OFFICER FOX: To 55?

19 MS. OLSON: Yes.

20 HEARING OFFICER FOX: Let's do this.  
21 The last question you had addressed was number 35.  
22 Is there anyone who wishes to raise a follow-up  
23 question to any of the questions between 36 and 54  
24 between -- before we turn to the Agency's question

1 number 55? I'm not seeing any, Ms. Olson. We're  
2 good to turn to question number 55 in your follow  
3 ups.

4 MS. OLSON: So question 55 asks  
5 whether or not a CCW surface impoundment closed by  
6 removal would be considered a waste disposal  
7 operation. I have a follow-up question to that  
8 and it is, do you agree that there is a difference  
9 between a treatment operation and a waste disposal  
10 operation?

11 MR. ARMSTRONG: Yes, I agree that  
12 those are two separate categories.

13 MS. OLSON: And can you explain the  
14 difference?

15 MR. ARMSTRONG: I do not have those  
16 definitions before me. I can address that in  
17 post-hearing comments.

18 MS. OLSON: Great. Thank you.  
19 Fifty-seven. You refer in your response to three  
20 sections. It is 841.300(b)(2), 841.305(c)(1) and  
21 841.400 and you say that there has been changes  
22 made to those three sections and I'm confused. I  
23 think there is maybe a typo for 841.400. Did you  
24 mean 841.405?

1 MR. ARMSTRONG: Let me check. Yes.

2 MS. OLSON: Question 68.

3 MS. FRANZETTI: I have a question on  
4 55, another question on 55. Would you clarify  
5 whether it is sufficient for purposes of avoiding  
6 the five-year requirement to close in the event of  
7 a confirmed exceedance to have a liner that  
8 satisfies your proposed design criteria or must  
9 you have both a liner and a leachate collection  
10 system to avoid the requirement to close in five  
11 years?

12 MR. ARMSTRONG: Our proposal would  
13 require both the liner and the leachate collection  
14 system to avoid removal and I can just expound  
15 upon that a little bit. I mean, under our  
16 proposed design standard every impoundment would  
17 need to meet that requirement within five years of  
18 any case.

19 HEARING OFFICER FOX: Anything  
20 further, Ms. Franzetti?

21 MS. FRANZETTI: No.

22 HEARING OFFICER FOX: Very good.  
23 Mr. Rieser, I thought I saw your hand.

24 MR. RIESER: Yeah, I have a question

1 on 66.

2 MS. OLSON: I have one follow up on  
3 Ms. Franzetti's line.

4 MR. RIESER: Okay. What was your  
5 next question?

6 MS. OLSON: Sixty-five-ish.

7 MR. RIESER: You go first.

8 MS. OLSON: To follow up  
9 Ms. Franzetti's line of questioning, anyone on the  
10 panel, Andrew, would it be okay if the leachate  
11 collection system was below the liner in terms of  
12 not having to close?

13 MR. ARMSTRONG: If the leachate  
14 collection system -- and I should first clarify  
15 one possibility under Ms. Franzetti's question,  
16 which was that under our proposed design standard  
17 there can be a determination that any particular  
18 liner system is equally protective as the leachate  
19 collection liner system that is required in the  
20 design standard and in answer to your question,  
21 Ms. Olson, our proposed design standard does not  
22 specify the placement of a leachate collection  
23 system.

24 MS. OLSON: So just to make sure I'm

1 clear. I think you're saying, yes, it is okay if  
2 the leachate collection system is underneath the  
3 composite liner and they would not have to close?

4 MR. ARMSTRONG: Yes. Because our  
5 proposed design standard does not require that the  
6 leachate collection system be below or above the  
7 system -- the liner system.

8 MS. OLSON: Thank you. My next  
9 question was 68.

10 MR. REESE: Sixty-eight. That's  
11 what I thought. I was on 66.1.

12 HEARING OFFICER FOX: Please go  
13 ahead, Mr. Rieser.

14 MR. RIESER: Thank you. 66.1 you  
15 all were asked a question about how does the class  
16 of groundwater impact whether a preventive  
17 response is required and you responded by saying  
18 the class of groundwater does not impact whether  
19 preventive response is required. Instead, the  
20 response is determined based on the existing or  
21 potential use of the water. Is it your contention  
22 that the Board's classifications of different  
23 types of groundwaters set out in 620 aren't  
24 related to the existing or potential use of the

1 water?

2 MR. ARMSTRONG: No.

3 MR. RIESER: Okay. Then could you  
4 explain the answer that you gave?

5 MR. ARMSTRONG: Sure. The classes  
6 of groundwater under the Board's rules do relate  
7 to types of existing or potential uses. However,  
8 our proposal is not based upon looking at uses  
9 reflected through the class of groundwater, but  
10 rather simply the use itself.

11 MR. RIESER: I don't understand what  
12 that means. How is the use of groundwater itself  
13 different from the uses identified by the Board as  
14 part of this classification system?

15 MR. ARMSTRONG: Our point was rather  
16 to say you should take a preventive -- you should  
17 undertake a preventive response if a Class 1 water  
18 is impacted, we expanded that to include any use  
19 or potential use of any class of groundwater  
20 regardless of the class.

21 MR. RIESER: So the Board's  
22 classifications of groundwater are really  
23 irrelevant to the requirement to perform  
24 preventive response?

1 MR. ARMSTRONG: In our proposed  
2 Section 841.235(c)(2), correct, we took out the  
3 reference to classes of groundwater.

4 MR. RIESER: Because the Board's  
5 categorization was inadequate for what you were  
6 attempting to do with these rules?

7 MR. ARMSTRONG: I wouldn't say it's  
8 adequate. Again, we're just concentrating on  
9 whether there is a use or potential use of the  
10 groundwater.

11 MR. RIESER: Thank you.

12 HEARING OFFICER FOX: Anything  
13 further, Mr. Rieser?

14 MR. RIESER: No.

15 HEARING OFFICER FOX: Ms. Olson, I  
16 believe we're back to you for question 68 I  
17 believe is your indication.

18 MS. OLSON: Yes, thank you. In  
19 response to question 68, The Environmental Group's  
20 proposed language regarding the low permeability  
21 layer concerning all of the unit, are you -- do  
22 you know what I'm talking about, Andrew, or  
23 Mr. Armstrong?

24 MR. ARMSTRONG: Yes, we proposed

1 incorporating a requirement from the landfill  
2 regulations.

3 MS. OLSON: Did you have a chance to  
4 review the Agency's responses to the Board's  
5 questions?

6 MR. ARMSTRONG: I did review that.  
7 I have not had a chance to discuss with the groups  
8 and we can discuss whether that would be a good  
9 solution to our concern as well.

10 MS. OLSON: Thank you.

11 MS. FRANZETTI: I'm sorry. I have  
12 one on 67.

13 HEARING OFFICER FOX: Ms. Franzetti,  
14 please go ahead.

15 MS. FRANZETTI: Okay. Thank you.  
16 Mr. Armstrong, I'm having trouble reconciling and,  
17 hence, understanding the answer to question 67  
18 regarding submitting potentiometric surface maps.  
19 The -- I'm going to ask the general question.

20 At the end of that answer you  
21 referred to Section 841.235(g) as requiring the  
22 production of such maps every quarter, but your  
23 answer to the question as to whether or not they  
24 have to be submitted every quarter begins with the

1 word no. So that's what I'm having trouble  
2 reconciling. Can you explain to me what is  
3 required with respect to the frequency of  
4 submission of those maps?

5 MR. ARMSTRONG: Sure. And I  
6 actually should clarify the last sentence insofar  
7 as it says The Environmental Groups proposed  
8 Section 841.235(g) requires the production of a  
9 potentiometric surface map every quarter. Our  
10 proposal requires that -- would require a  
11 potentiometric surface map is produced along with  
12 every statistical analysis which would be  
13 quarterly or annual in terms of the submission of  
14 the potentiometric map along with that statistical  
15 analysis itself. That is governed in --

16 MS. FRANZETTI: 841.210?

17 MR. ARMSTRONG: Correct. (b) (9).

18 MS. FRANZETTI: So that's the  
19 distinction you're drawing?

20 MR. ARMSTRONG: Right.

21 MS. FRANZETTI: The owner or  
22 operator has to prepare --

23 MR. ARMSTRONG: Correct.

24 MS. FRANZETTI: -- the

1 potentiometric map every quarter under your  
2 proposal if they have to do statistical analysis  
3 every time they monitor and they are monitoring it  
4 every quarter, correct?

5 MR. ARMSTRONG: Correct.

6 MS. FRANZETTI: But the owner or  
7 operator does not have to submit those maps to the  
8 agency more frequently than on an annual basis?

9 MR. ARMSTRONG: Insofar as the  
10 proposal requires the submission of an annual  
11 statistical report, correct.

12 MS. FRANZETTI: Okay.

13 MR. ARMSTRONG: So you're right.  
14 The distinction is between production of the map  
15 and submission of it to the Agency or it is -- you  
16 know, the preparation of the map versus the  
17 submission to the Agency.

18 HEARING OFFICER FOX: Anything  
19 further, Ms. Franzetti?

20 MS. FRANZETTI: I'm done. Thank  
21 you.

22 HEARING OFFICER FOX: Ms. Olson, I  
23 think we're back to you.

24 MS. OLSON: Question 70. The

1 Environmental Groups stated they didn't understand  
2 the question and I apologize. I worded the  
3 question incorrectly so let me try again.

4 Please explain why it would be  
5 necessary to revise a closure, corrective action  
6 or preventive response plan if an NPDES or  
7 operating permit is denied instead of allowing the  
8 owner or operator to modify the permit application  
9 that was denied.

10 MR. ARMSTRONG: So that refers to  
11 Section 841.150 and just to clarify. Our slightly  
12 revised language that we proposed is that if any  
13 activities required under the proposed preventive  
14 response, corrective action or closure plan cannot  
15 be completed because of the denial of an operating  
16 permit or NPDES permit revision, then the owner or  
17 operator must submit a revised preventive  
18 response, corrective action or closure plan to the  
19 Agency within 90 days of the denial or the  
20 conclusion of an unsuccessful subsequent appeal by  
21 the owner or operator, whichever is later.

22 Our intent is that if a permit  
23 application has been submitted and the Agency has  
24 rejected the permit application for inactivity

1 that would be required under the plan, then there  
2 is a problem with the plan and the plan should be  
3 resubmitted.

4 MS. OLSON: So if you have an NPDES  
5 discharge that would be discharging waste water,  
6 right?

7 MR. ARMSTRONG: Correct.

8 MS. OLSON: Is it possible that you  
9 could reroute your waste stream such that you  
10 don't discharge the same level of contaminants?

11 MR. ARMSTRONG: Yes.

12 MS. OLSON: So my question is why  
13 are you pinpointing the owner or operator into  
14 making them resubmit a preventive response,  
15 corrective action or closure plan instead of  
16 allowing them to go back and make the decision for  
17 themselves if they want to reroute a waste stream  
18 or make some other modification to their  
19 operations in an NPDES permit application?

20 MR. ARMSTRONG: My answer would be  
21 that in that case I would not view that the  
22 activity required by the preventive response,  
23 corrective action or closure plan could not be  
24 completed because you could still perform that

1 activity consistent with the corrective action  
2 closure plan.

3 This is supposed -- this is  
4 meant to apply to cases where the denial of a  
5 permit means you cannot fulfill the corrective  
6 action, closure or preventive response plan as has  
7 been submitted and approved by the Agency.

8 MS. OLSON: Do you anticipate the  
9 Agency is going to be approving a discharge under  
10 a closure plan or a discharge under an NPDES  
11 permit application?

12 MR. ARMSTRONG: The Agency would be  
13 approving a discharge under an NPDES permit  
14 application.

15 MS. OLSON: So if a closure plan  
16 resulted in a discharge and the Agency approved  
17 the closure plan and later an NPDES permit comes  
18 in and we deny the NPDES permit application, what  
19 would have to happen under your rules?

20 MR. ARMSTRONG: If the -- if the  
21 denial of the discharge meant that the corrective  
22 action, closure plan or preventive response plan  
23 could not be carried out as earlier approved by  
24 the Agency, then that plan would need to be

1 amended.

2 MS. OLSON: Why couldn't they change  
3 their operation and, therefore, change their NPDES  
4 application? Why are you forcing them to change  
5 the closure plan or corrective action plan?

6 MR. ARMSTRONG: So as long as the  
7 amended -- so as long as the hypothetical amended  
8 NPDES application you're talking about here could  
9 be done in accordance with the preventive  
10 response, corrective action or closure plan, then  
11 there wouldn't be a problem under our rule.

12 MS. OLSON: But your rule requires  
13 resubmission upon the denial of a permit  
14 application or an NPDES permit modification  
15 request. So I don't understand how you're giving  
16 them any choice.

17 MR. ARMSTRONG: Under the modified  
18 language, if you've got a corrective action,  
19 closure or preventive response plan that would  
20 allow -- that has a required discharge in it, say  
21 this plan said that the only way this works is if  
22 you have a discharge of a million gallons per day  
23 or some hypothetical number and then the Agency  
24 rejects the NPDES permit application for discharge

1 of a million gallons a day, well, then you can't  
2 carry out that proposed plan.

3 If the corrective action,  
4 closure or preventive response plan is more  
5 flexible and not so specific, then there is a  
6 possibility that you could just amend the NPDES  
7 permit application in that case.

8 MS. OLSON: How is a person who owns  
9 one of these facilities that reads this section  
10 supposed to know when it has to reapply for a  
11 closure plan modification versus when it's allowed  
12 to resubmit its NPDES permit application and/or  
13 state operating permit application?

14 MR. ARMSTRONG: I would say that if  
15 you needed a specific NPDES permit in order to  
16 carry out the proposed plan, a specific discharge,  
17 and you could not carry out your proposed plan  
18 without that permit, that permit is denied, then  
19 you have to go back to the drawing board and  
20 submit another plan. That is how the owner or  
21 operator would know.

22 MS. OLSON: What if you're not  
23 planning on changing your corrective action or  
24 closure plan, but you're going to reroute a waste

1 stream or recycle a waste stream or do something  
2 else with your discharge? What do you have to do  
3 then?

4 MR. ARMSTRONG: Well, if you could  
5 reroute your discharge and it is consistent with  
6 the original plan, then this would not apply.

7 MS. OLSON: But my question is that  
8 you submit an application, it's been denied, as  
9 the owner or operator I would think I should have  
10 the ability to look at what got denied and say  
11 "Okay. I have a choice here." I can make changes  
12 to my operation and resubmit a different NPDES  
13 modification request or I can change my corrective  
14 action, but it seems to me when I read Section  
15 841.150 as soon as the Agency denies an operating  
16 permit request or an NPDES permit application,  
17 this seems to me to be clearly to say you have no  
18 choice and you must revise your corrective action  
19 plan or your closure plan, is that not correct?

20 MR. ARMSTRONG: One moment, please.  
21 So just to reiterate what I was saying before. If  
22 you have an NPDES permit that is denied and then  
23 you want to go back and you want to reapply for  
24 the permit and either one of these applications is

1 consistent with the original closure plan, then  
2 this section doesn't apply.

3 MS. OLSON: Thanks. Thank you. My  
4 next question is 88.

5 HEARING OFFICER FOX: Ms. Olson, why  
6 don't we see if anyone has any follow ups to  
7 question between 71 and 87 before we move on. I'm  
8 not seeing any indication that anyone does so we  
9 are going to 88, Ms. Olson.

10 MS. OLSON: In response to  
11 question -- excuse me. I lost my -- in 88, you  
12 cite 25 Pa. code 290.410 and 25 Pa. code 289.531.  
13 Is this what was entered into the record as  
14 Exhibit 55?

15 MR. ARMSTRONG: 290.410 was entered  
16 in.

17 MS. OLSON: For chapter 290, do you  
18 know the title of chapter 290?

19 MR. ARMSTRONG: The title is  
20 Beneficial Use of Coal Ash.

21 MS. OLSON: Are you familiar with 25  
22 Pa. code 290.402?

23 MR. ARMSTRONG: Could you tell me  
24 what the title of that is? I think I have the

1 title of it right here.

2 MS. OLSON: Duration of Storage.

3 MR. ARMSTRONG: Yes, I have it right  
4 here.

5 MS. OLSON: And do you know how long  
6 coal ash may be stored in one of these  
7 impoundments designed pursuant to 25 Pa. code  
8 chapter 290?

9 MR. ARMSTRONG: According to  
10 290.402(a), it may not be stored for more than one  
11 year unless a minimum of 75 percent of the volume  
12 of the coal ash being stored is used to process  
13 for beneficial use in the previous calendar year  
14 commencing on January 1st.

15 MS. OLSON: Do you know whether or  
16 not surface impoundments designed for a coal  
17 combustion waste beneficial reuse where the  
18 coal must -- 75 percent of the coal ash must be  
19 removed within one year would be designed  
20 differently than coal combustion waste surface  
21 impoundments where there is an indefinite storage  
22 period?

23 MR. ARMSTRONG: They would be  
24 subject to a different section of the Pennsylvania

1 code.

2 MS. OLSON: And do you know the  
3 section of that code?

4 MR. ARMSTRONG: I can clarify this  
5 in post-hearing comments. I believe it is  
6 actually the Class 2 residual waste disposal  
7 impoundment Section 29 -- Pa. code 289.531.

8 MS. OLSON: Is that what you're  
9 referring to in response to question 88?

10 MR. ARMSTRONG: Yes.

11 MS. OLSON: That is the last  
12 question I have for our questions that were  
13 submitted in June.

14 HEARING OFFICER FOX: The last of  
15 the 93 that were submitted?

16 MS. OLSON: Yes.

17 HEARING OFFICER FOX: Very well.  
18 Let's see. Before we move on, you had last  
19 addressed question number 88. Is there anyone who  
20 wished to address any of the questions number 88  
21 through 93? I'm not seeing that there is anyone.  
22 Did we pass by anyone who wished to raise any  
23 follow-up questions regarding any of the previous  
24 follow-up questions 1 through 87? I'm not seeing

1 a hand, Ms. Olson, so I appreciate your patience  
2 that those questions have been exhausted.

3 At the top of the day what we  
4 had planned on proceeding with now was The  
5 Environmental Group's answers specifically to  
6 those that were filed for Ms. Barkley or  
7 Dr. Soderberg filed on April 30th for the hearings  
8 that were held in May. Obviously, Ms. Barkley and  
9 Dr. Soderberg are present. If you want to take a  
10 moment to shift gears, Ms. Olson, we can do that.  
11 If the witnesses are prepared to respond to those  
12 questions, we can turn to them fairly quickly, I  
13 think.

14 MS. OLSON: I only have one question  
15 and I am ready whenever The Environmental Groups  
16 are.

17 HEARING OFFICER FOX: It looks like  
18 Ms. Barkley at the very least and Mr. Armstrong  
19 are ready to go. Were you planning, Ms. Olson,  
20 just for my own benefit with questions for  
21 Ms. Barkley or for Dr. Soderberg?

22 MS. OLSON: Ms. Barkley.

23 HEARING OFFICER FOX: Very good.  
24 Why don't we turn to those and if you would give

1 me, frankly, just a moment to find those written  
2 responses, I would appreciate your indulgence.

3 Ms. Olson, thank you. Those  
4 begin with question number 39. You had indicated  
5 you had one follow up with regard to question --

6 MS. OLSON: Fifty-four.

7 HEARING OFFICER FOX: -- 54. Why  
8 don't we see before you turn to that, is there  
9 anyone who wishes to raise a follow-up question  
10 for Ms. Barkley based on the responses to  
11 questions number 39 to 53?

12 MS. FRANZETTI: Fifty-three.

13 HEARING OFFICER FOX: Ms. Olson, if  
14 you don't object, let's turn to Ms. Franzetti for  
15 a question on 53.

16 MS. FRANZETTI: Ms. Barkley, in part  
17 of your answer to 53 and it comes in the first  
18 paragraph of your answer that is on page 16, you  
19 refer to Exhibit A to Richard Cobb's pre-filed  
20 testimony noting violations are shown for the  
21 Midwest Generation Power Plant for arsenic,  
22 selenium and mercury. I understand from your  
23 answers generally that The Environmental Groups  
24 have at times done FOIA requests to the Illinois

1 EPA requesting documents relating to the various  
2 ash ponds.

3                   So do you recall seeing a  
4 submission in any of the responses to your FOIA  
5 requests by Midwest Gen which advised the Agency  
6 that the selenium and mercury values referred to  
7 in Mr. Cobb's pre-filed testimony Exhibit A were  
8 typographical errors and you had supplied the  
9 corrected values showing there were no exceedances  
10 of the Part 620 groundwater standards for selenium  
11 and mercury?

12                   MS. BARKLEY: At the power station  
13 facility?

14                   MS. FRANZETTI: Yes.

15                   MS. BARKLEY: I do not recall seeing  
16 those.

17                   MS. FRANZETTI: Okay. Nothing else.

18                   HEARING OFFICER FOX: Ms. Olson,  
19 Ms. Franzetti indicates she has wrapped up her  
20 question, but -- I'm sorry. Mr. Rieser indicates  
21 he has one.

22                   MR. RIESER: I have a question on  
23 another part of that same answer and this relates  
24 to the interim report of Prairie Rivers Network

1 dated July 16th, 2014, that was submitted as part  
2 of the answers on July 17th.

3 So I have some questions about  
4 that. I can hold that until Ms. Olson is done or  
5 dive in right now. However, you --

6 HEARING OFFICER FOX: If it was  
7 submitted as a part of Ms. Barkley's testimony, it  
8 seems it would be an appropriate time at this  
9 time, Mr. Rieser, to proceed with those.

10 MR. RIESER: Okay. So, Ms. Barkley,  
11 in discussing this study you say that you are  
12 overseeing work conducted by two ecotoxicologists  
13 from the Illinois Natural History Survey and study  
14 itself refers -- states as one of the headings it  
15 says Interim Report to the Prairie Rivers Network.

16 Not knowing how the Illinois  
17 Natural History Survey does what it does, can you  
18 explain how it is that the Illinois Natural  
19 History Survey, which is a part of the Department  
20 of Natural Resources, is preparing a report on  
21 behalf of Prairie Rivers Network and that you were  
22 overseeing the work of scientists, their  
23 scientists?

24 MS. BARKLEY: So they're not -- they

1 have been hired as state scientists to conduct  
2 research. That means that we ask for -- we talk  
3 to them about the research we want to have  
4 conducted. We worked out what the research plan  
5 would be. We are paying for the research.  
6 They're not doing the work on behalf of Prairie  
7 Rivers Network. They're doing the work for -- for  
8 hire just as they would -- and I know one of these  
9 researchers has been hired by the Illinois  
10 Environmental Protection Agency also to be working  
11 on water quality standards development.

12 MR. RIESER: So, in other words, as  
13 a private entity Prairie Rivers Network entered  
14 into a contract or some other type of arrangement  
15 to pay for the work that was being done in this --  
16 that was reflected in this report, is that  
17 correct?

18 MS. BARKLEY: That's right.

19 MR. RIESER: Okay.

20 MR. ARMSTRONG: Can I just make a  
21 quick clarifying comment?

22 MR. RIESER: Sure.

23 MR. ARMSTRONG: I don't believe the  
24 Illinois Natural History Survey is an arm of IDNR.

1 They're actually associated with the University of  
2 Illinois at Urbana-Champaign.

3 MS. BARKLEY: That's right.

4 MR. ARMSTRONG: They're a research  
5 institution. So I don't believe they're an  
6 adjunct to a state agency.

7 MR. RIESER: It is my understanding,  
8 and we can certainly correct this -- for one  
9 thing, it says Illinois Natural History Survey  
10 Prairie River Institute. It is my understanding  
11 that there is a group of institutes of these types  
12 of scientific entities including the water --  
13 Illinois State Water Survey and some of the others  
14 that were collected under the rubric of the  
15 Prairie State Institute, but are still under the  
16 direction of some sort by the Department of  
17 Natural Resources. I could be corrected on that,  
18 but when I look that was my observation.

19 MS. BARKLEY: I'd be happy to submit  
20 something to the record to the extent showing that  
21 the Natural History Survey was once under the  
22 direction of the Department of Natural Resources.  
23 They are now associated, and I'm not sure what  
24 that relationship is, but they are now an entity

1 of the University of Illinois under the Prairie  
2 Rivers Institute and are not under the direction  
3 of IDNR any longer.

4 MR. RIESER: Thank you. With  
5 respect to this report itself, what was your  
6 direction to the Prairie Research Institute  
7 performing the study?

8 MS. BARKLEY: So we asked Jeff  
9 Levengood and Dave Soucek to sample water  
10 sediment, snails, mussels, fish and  
11 macroinvertebrates upstream and downstream of the  
12 Dynegy Vermilion Power Station in the Middle Fork  
13 River System and I think due to some budget  
14 constraints we ended up stepping back from some of  
15 the biological sampling and some of the water  
16 sampling. I would like to note the reason this is  
17 an interim report is because this is not complete.  
18 There is still more data to be collected; water  
19 samples, sediment samples, but largely we were  
20 asking them to do what is standard sampling for  
21 them to investigate whether there is an impact to  
22 the biology of the Middle Fork River System from  
23 pollutants that may have come from the Dynegy  
24 Vermilion Power Station.

1 MR. REESE: I'm sorry. What was the  
2 nature of the work that is still to be done? Is  
3 it data collection or assessment or both?

4 MS. BARKLEY: We wanted to make sure  
5 that we had enough samples to make this  
6 statistically significant and also several  
7 different sampling dates so that you could look  
8 over a longer season and because it's a very  
9 flashy river system which does flood frequently in  
10 the Spring and Fall they've had trouble going out  
11 and getting additional water samples. So I think  
12 that's something that when mercury levels drop  
13 we'll have additional data.

14 MR. RIESER: Was there a direction  
15 to the scientists in terms of how far upstream or  
16 downstream they were to collect the samples?

17 MS. BARKLEY: We discussed sampling  
18 location, but largely our direction to them was to  
19 make sure that it was representative of the river  
20 system. They were able to get samples upstream  
21 that are less likely to be impacted by Dynegy  
22 Vermilion discharging downstream where they would  
23 likely be able to detect impact.

24 MR. RIESER: As part of the

1 assessment, was there any effort to measure the  
2 relative size of the aquatic community population  
3 upstream relative to downstream?

4 MS. BARKLEY: Can you be more  
5 specific about aquatic community and size?

6 MR. RIESER: Well, looking just at  
7 the organisms you looked at, did you identify or  
8 was there some quantification about the number of  
9 mussels at the upstream sampling site compared to  
10 the number of mussels at the downstream sampling  
11 site?

12 MS. BARKLEY: I don't think I can  
13 answer that. I can -- I can follow up with them  
14 and ask for their justification on why they  
15 selected the sample size they did, but I can't  
16 answer why they selected the number they did or  
17 what that means relative to what exists in that  
18 waterbody as an overall aquatic community.

19 MR. REESE: Is it correct that there  
20 was no direction to them to evaluate the number of  
21 organisms that they were studying, that there was  
22 no direction to evaluate the size of the  
23 population upstream relative to downstream?

24 MS. BARKLEY: Our direction to them

1 with them being state scientists they are held to  
2 pretty high standards in terms of scientific work,  
3 they're well-published, I don't believe it is my  
4 place to tell them how to do their study.

5                   What we asked for them to do was  
6 a scientific study that meets their standards that  
7 would be representative of the conditions upstream  
8 and downstream. So, no, I did not prescribe for  
9 them exactly what that sample size should look  
10 like.

11                   MR. RIESER: And would it also be  
12 accurate that there was no evaluation of the  
13 relative diversity --

14                   MS. BARKLEY: Excuse me. I did not  
15 say there was not an evaluation. I said I was not  
16 qualified to answer whether there was an  
17 evaluation or not of their sample size related to  
18 the community upstream and community downstream.  
19 I just want to make it clear I'm not answering,  
20 no, that it wasn't done. I'm saying I don't know  
21 if that was done or what their reasoning was for  
22 the sample size.

23                   MR. RIESER: Was that part of your  
24 direction to them to evaluate that specific issue?

1 MS. BARKLEY: No.

2 MR. RIESER: Was it part of your  
3 direction to them to evaluate the relative  
4 diversity of the aquatic communities at the  
5 upstream and downstream sampling location?

6 MS. BARKLEY: No, that was not part  
7 of the research question. They are biologists,  
8 toxicologists that did review biological data from  
9 the Middle Fork Vermilion River from other  
10 samplings that have been done within the system by  
11 Illinois, DNR, Natural History Survey. It's a  
12 well studied river. There is a fair amount of  
13 data that has been collected on that system. They  
14 are familiar with what the community looks like.  
15 They were specifically looking at organisms that  
16 are representative of different parts of the food  
17 chain that can be analyzed for constituents, you  
18 know, like heavy metals that would be coming from  
19 coal ash discharges. So their job was not to do a  
20 biological community study on the Middle Fork of  
21 the Vermilion River. They are specifically to be  
22 looking at concentrations of selected elements in  
23 different organisms.

24 MS. OLSON: Can you repeat that last

1 bit?

2 MS. BARKLEY: We did not hire them  
3 to do a full on ecological evaluation of the  
4 Middle Fork of the Vermilion River of, you know,  
5 the different trophic levels, what the diversity  
6 is. That data is available from the Department of  
7 Natural Resources and the Illinois Environmental  
8 Protection Agency from the intensive basin surveys  
9 that are done every three years.

10 Their job was to specifically  
11 look at the concentration of selected elements  
12 that are likely to come from coal ash pollution in  
13 different organisms that are representative of  
14 different trophic levels.

15 MS. OLSON: Thanks.

16 MS. BARKLEY: Mm-hmm.

17 HEARING OFFICER FOX: Mr. Rieser,  
18 did you have any additional questions?

19 MR. RIESER: Yes. I think so. Is  
20 it accurate that their conclusion is that they  
21 didn't observe a significant impact with respect  
22 to the snails and saw no impact with respect to  
23 the sunfish?

24 MS. BARKLEY: Well, their

1 conclusions are this is going to sound funny, but  
2 not entirely conclusive right now because they  
3 have not completed the study. These are  
4 preliminary conclusions that are basically showing  
5 differences in concentrations upstream and  
6 downstream in water samples and snails. I think  
7 they have been careful to say what those levels  
8 are and in comparison to reference sites. Though,  
9 in talking to both Dr. Soucek and Dr. Levensgood, I  
10 think it is important to share from them that this  
11 is not a -- this is an interim study. So they  
12 have not -- they really can't say given what  
13 they've done right now that is an incomplete study  
14 what the impacts may or may not be.

15 MR. RIESER: So this should really  
16 be withdrawn from the Board's record because it  
17 doesn't -- it's not a complete study and doesn't  
18 reflect all of their conclusions, is that correct?

19 MS. BARKLEY: It is an interim  
20 report that shows the date it has been collected  
21 to date. The data speaks for itself in terms of  
22 what the actual hard numbers are for  
23 concentrations, but when we're talking about  
24 impacts and conclusions based -- their findings

1 based on the data, we will be submitting a final  
2 report so that you see the full study in  
3 completion with the researchers evaluating the  
4 data that has been selected so that those  
5 conclusions are final and based on what the entire  
6 project was designed to be.

7 MR. RIESER: So they submitted a  
8 draft report that has data and conclusions, but  
9 those conclusions may change in the future based  
10 on additional evaluation?

11 MS. BARKLEY: I don't believe the  
12 findings will change. I believe that they'll be  
13 additional conclusions and I would not conclude --  
14 I will not say this is a draft report. This is a  
15 final interim report.

16 MR. ARMSTRONG: We have submitted a  
17 report that documents the work that has been done  
18 so far and the results. There is additional work  
19 that will be done that could provide additional  
20 information, but the report stands on its own as a  
21 document that demonstrates what these researchers  
22 have found and we will not withdraw it.

23 HEARING OFFICER FOX: Mr. Rieser,  
24 perhaps anticipating a question you had.

1 Ms. Barkley, do you expect by a particular date to  
2 have the final report that you referred to? Is  
3 there a deadline that you're looking to?

4 MS. BARKLEY: We have not set a  
5 deadline, but I'm hoping by mid to late August for  
6 the final report.

7 HEARING OFFICER FOX: Very well.  
8 Thank you. Anything further, Mr. Rieser?

9 MR. RIESER: Just a minute, please.

10 HEARING OFFICER FOX: Absolutely.

11 MR. RIESER: No.

12 HEARING OFFICER FOX: Ms. Olson, I  
13 believe you indicated that you had one follow-up  
14 question based on The Environmental Groups of  
15 Ms. Barkley's written responses to your question.  
16 Was I correct it was 55 that you referred to?

17 MS. OLSON: Close. Fifty-four.

18 HEARING OFFICER FOX: Fifty-four.

19 MS. OLSON: I'm going to go ahead  
20 and read the question and the response and then  
21 give my follow-up question. So question 54.

22 On the top of page four in your  
23 testimony, what do you mean by, quote, those data  
24 have shown contamination progressing in nearly

1 every instance? Response. By, quote,  
2 contamination progressing, close quote, I meant  
3 that the contamination plume was moving, advancing  
4 or permeating the underlying or adjacent strata to  
5 the coal ash pits.

6 The follow-up question is at  
7 which sites do you consider the contaminant plumes  
8 to be advancing.

9 MS. BARKLEY: I do want to clarify.  
10 I think the question originally was maybe getting  
11 at concentrations increasing, progressing  
12 numerically and my clarification on this is that  
13 we are seeing that the constituents of coal ash  
14 are moving from where they're supposed to be which  
15 is in the disposal pit surface impoundment into an  
16 underlying or adjacent layer. I'm not sure what  
17 the two years worth of data that's been collected  
18 and submitted to the Agency to date that it can be  
19 determined at each of these sites how those plumes  
20 are moving.

21 MS. OLSON: So do you contend that  
22 contamination progressing includes advancement?

23 MS. BARKLEY: I think in each of the  
24 incidents where contamination has been found, that

1 the pollutants are advancing, they're moving,  
2 they're progressing out of where they're supposed  
3 to be into adjacent underlying groundwater and  
4 that is really the extent of what I meant by that  
5 statement.

6 MS. OLSON: So every location I  
7 think is what you're saying?

8 MS. BARKLEY: I think this is in  
9 another question by the Agency, follow up to my  
10 testimony. I want to clarify that I didn't -- not  
11 mean to say there is contamination at every single  
12 coal ash impoundment, but at every single power  
13 plant. So when I say every site, I don't mean  
14 every single cell, every single ash impoundment.  
15 I mean, at every single power plant it has been  
16 found there are exceedances of groundwater quality  
17 standards for constituents that are found in coal  
18 ash.

19 MS. OLSON: And is it also your  
20 testimony that at every single site that  
21 contamination is advancing?

22 MS. BARKLEY: To the extent that it  
23 is in the groundwater outside of the disposal  
24 facility, yes.

1 MS. OLSON: That's all I have.

2 HEARING OFFICER FOX: Was there  
3 anyone else who wished to raise follow-up  
4 questions for Ms. Barkley on the basis of the  
5 written responses she had provided based on the  
6 Agency's questions? I'm neither seeing nor  
7 hearing any, Ms. Barkley.

8 It appears that under the plan  
9 we described at the beginning of the day we would  
10 be prepared to turn to any follow-up questions for  
11 Dr. Soderberg based on the written answers that he  
12 had supplied to questions 24 to 38. And  
13 Dr. Soderberg, of course, has been sworn in. If  
14 he is prepared to begin, we can see where the  
15 Agency may like to begin with any follow ups that  
16 it has.

17 MS. OLSON: We have none.

18 HEARING OFFICER FOX: None  
19 whatsoever. Did any of the other participants  
20 wish to raise a follow-up question to  
21 Dr. Soderberg on the basis of the written answers  
22 that were submitted? Neither seeing nor hearing  
23 any, that is, in effect, the second leg of our  
24 agenda for today.

1                   The Board had indicated that it  
2 would defer its follow-up questions to this point  
3 having wrapped those up and we can turn to The  
4 Environmental Group's answers to the Board's  
5 questions that were filed on June 11th. That  
6 would be questions number 11 to 24 and also  
7 questions specifically for Ms. Barkley that were  
8 filed on April 30th and I believe that Mr. Rao has  
9 a limited number of questions on the basis of  
10 those written responses and, Mr. Rao, we can turn  
11 to you and see, of course, if any of the other  
12 participants have follow-up questions.

13                   MR. RAO: I have just one follow up  
14 and it relates to question 13 from your July 17th  
15 response to the Board's questions and earlier I  
16 thought the Agency mentioned that they had follow  
17 ups based on our questions?

18                   MS. OLSON: Yes.

19                   MR. RAO: So should I start with  
20 question 13 or do you have any others before?

21                   MS. OLSON: I have one on question  
22 11 and then -- yeah, one on question 11.

23                   MR. RAO: Do you want to go ahead  
24 and do 11 and then I'll go?

1 MS. OLSON: Sure. In response to  
2 question 11, the first paragraph you're referring  
3 to the Agency's proposed Section (b) (2). Under  
4 the Agency's proposed Section (b) (2), it refers to  
5 exempt landfills. So I'm wondering if maybe you  
6 meant The Environmental Groups proposed Section  
7 (b) (2)?

8 MR. ARMSTRONG: Yes, you're correct.

9 MS. OLSON: I have questions  
10 related, but it's on the language they proposed so  
11 I'll save those.

12 MR. RAO: Okay. The Board's  
13 question number 13. "Please explain the rationale  
14 for increasing the retention time period for an  
15 approved closure report from 10 years to 30 years  
16 at Subsection (a) (6) of Section 841.135" and in  
17 your response you noted that increasing the time  
18 period was consistent with US EPA's proposed  
19 Subtitle D regulations.

20 Are you aware of the Board's  
21 chemical waste landfill rules proposed  
22 post-closure care period under Part 811?

23 MR. ARMSTRONG: I am not as I sit  
24 here today.

1 MR. RAO: Those rules have a  
2 post-closure care period I think for groundwater  
3 monitoring of 15 years and for post-closure care  
4 maintenance of a minimum of five years for  
5 chemical waste landfills.

6 So I just wanted to ask you  
7 whether you considered that in the post-closure  
8 care period for chemical waste landfills in  
9 proposing your 30-year post-closure care period  
10 under 841.135?

11 MR. ARMSTRONG: When originally  
12 proposing the post-closure care period, we did  
13 examine various Board rules, but ultimately we  
14 determined that we wanted to keep our proposal in  
15 line with US EPA's proposal.

16 MR. RAO: All right.

17 MR. ARMSTRONG: Thank you.

18 MR. RAO: Thank you. That's it.

19 HEARING OFFICER FOX: Ms. Olson, if  
20 you had a follow-up question, please go ahead.

21 MS. OLSON: My next question is 15.  
22 So if anybody has something on 14, I'd happily  
23 defer.

24 HEARING OFFICER FOX: I'm not seeing

1 anybody who wishes to do so, Ms. Olson. Please go  
2 ahead.

3 MS. OLSON: So my first question  
4 is -- 15 is asking about the installation of  
5 monitoring and dams to monitor the pore water  
6 pressures.

7 So my first question is do you  
8 know whether it is possible that dams can be  
9 designed or constructed such that it is  
10 intentional that there is a high pore pressure?

11 MR. SODERBERG: I believe that there  
12 is somewhat -- from what I've seen some design --  
13 some portion of the dam to have a high pore  
14 pressure.

15 MS. OLSON: Why would a dam be  
16 designed that way? What are some of the reasons?

17 MR. SODERBERG: Well, I'm not  
18 prepared to go into the reasons for why there  
19 would be high pore pressure in earth and dams.  
20 The intent here was to point to the water content  
21 as -- water potential as an indicator of potential  
22 failure and this is from a US EPA Tailings Dam  
23 document that I referenced in my testimony.

24 MS. OLSON: Do you think it is an

1 important consideration that some dams are  
2 designed to have high water pore content -- pore  
3 water pressure?

4 MR. SODERBERG: From what I recall  
5 from that guidance document, I don't recall, you  
6 know, why that would be important to have that  
7 high water content.

8 MS. OLSON: One of the other  
9 questions the Board asked was, was there a  
10 threshold, a moisture content or pore water  
11 threshold, and the response is that they're not  
12 proposing a specific threshold.

13 My question is for The  
14 Environmental Groups as the Agency will be  
15 implementing these regulations, how should the  
16 Agency evaluate the information submitted about  
17 the water content or the pore water pressure if  
18 there is not a threshold contained in these rules?

19 MR. SODERBERG: I think the  
20 threshold would depend on the type of material. I  
21 don't think that the guidance document that I  
22 referenced had thresholds, but it did reference  
23 some dynamics of the soil moisture or the moisture  
24 within the earth and dams. So you would

1 potentially rather than looking at a threshold be  
2 looking at the changes in the water content over  
3 time.

4 MS. OLSON: Can you elaborate on  
5 what you mean there?

6 MR. SODERBERG: Depending on the  
7 earth and dam and maybe the vegetation that is the  
8 type of material and the vegetation that might be  
9 growing on earth and dam, there could be some  
10 seasonal dynamics within the moisture content  
11 within the earth and dam and it would also depend  
12 on the amount of hydraulic head that is in the  
13 impoundment itself. Monitoring that zone of  
14 having more saturated conditions in the earth and  
15 dam and movement of that zone would be an  
16 important indicator of change within the earth and  
17 dam and potentially some failure.

18 MS. OLSON: Would the Agency have to  
19 know if the dam would -- was designed to have a  
20 high pore water pressure to evaluate this  
21 information?

22 MR. SODERBERG: Yes.

23 MS. OLSON: Do you believe that you  
24 would have to have a geotechnical specialty, civil

1 engineering background, to evaluate this  
2 information?

3 MR. SODERBERG: Certainly the design  
4 of the system would be -- would be something that  
5 would be reviewed by a professional engineer. So,  
6 for example, the CQA officer referenced in the  
7 proposed rules.

8 MS. OLSON: When the Agency gets  
9 this information since it is monitoring what is  
10 going to be conducted, would the person at the  
11 Agency reviewing this information have to have  
12 special training, be a geotechnical engineer?

13 MR. SODERBERG: I don't believe so.  
14 I think there can be some use of a guidance  
15 document to give some indication of what changes  
16 are occurring in the water content.

17 MS. OLSON: So do you believe the  
18 guidance document should be incorporated by  
19 reference to provide some sort of indication on  
20 how this information should be used?

21 MR. SODERBERG: Yes, I think that  
22 would be reasonable.

23 MS. OLSON: Dr. Soderberg, did you  
24 author the proposed revisions to The Environmental

1 Group's Section 841.170 specifically Subsection  
2 (e)?

3 MR. ARMSTRONG: Dr. Soderberg  
4 discussed that with The Environmental Groups. I  
5 think he might have proposed some of this language  
6 at least. I can't recall the exact authorship of  
7 it, though. It is definitely in consultation with  
8 Dr. Soderberg, though.

9 MS. OLSON: But Dr. Soderberg didn't  
10 write this, is that right?

11 MR. ARMSTRONG: That's not what I  
12 said, but he had a part in writing it, yes.

13 MS. OLSON: Does anybody who  
14 authored Subsection (e) have experience with  
15 designed earth and dams?

16 MR. SODERBERG: No.

17 MR. ARMSTRONG: No.

18 MR. SODERBERG: I have experience  
19 monitoring water content. One of the reasons I  
20 brought this up is it is very straightforward to  
21 install and maintain these instruments. It is  
22 potentially very useful information. So -- and  
23 then that balances with how easy these days to  
24 obtain and install and maintain that

1 instrumentation. That's why I brought it up.

2 MR. ARMSTRONG: Have you seen these  
3 instruments installed at sites you've worked at  
4 before?

5 MR. SODERBERG: I can't recall earth  
6 and dam if I have seen that.

7 MS. OLSON: Do you know what the  
8 design basis is for requiring each earth and dam  
9 to have instruments for monitoring the water  
10 content or the pore pressure?

11 MR. SODERBERG: That was based on  
12 the guidance document from Tailings Dams from the  
13 US EPA.

14 MS. OLSON: What is that guidance  
15 document?

16 MR. SODERBERG: I referenced it in  
17 my pre-filed testimony.

18 MR. ARMSTRONG: We're looking for  
19 the original.

20 MR. SODERBERG: So this is a US EPA  
21 1994 Technical Report Design and Evaluation of  
22 Tailings Dams.

23 MS. OLSON: Is it attached to your  
24 testimony?

1 MR. ARMSTRONG: Yes.

2 MS. OLSON: Do you remember which  
3 number it was?

4 MR. ARMSTRONG: I don't remember  
5 which number it was.

6 MR. SODERBERG: No.

7 MS. OLSON: Can you look it up?

8 MR. ARMSTRONG: I can try to right  
9 now, yeah.

10 MS. OLSON: I think I might have  
11 found it. Is it attachment 10?

12 MR. ARMSTRONG: It should be, yes.

13 MS. OLSON: Can you give us the page  
14 number where the design basis is and explain it?

15 MR. ARMSTRONG: So we have the  
16 document. I will seek to locate that.

17 MS. OLSON: Would you guys mind  
18 answering that question in post-hearing comment so  
19 we can move on?

20 MR. ARMSTRONG: Sure.

21 MS. OLSON: I've got a couple more  
22 and I'm happy to take the responses off the  
23 record. I can just run through them if you'd  
24 like.

1 MR. ARMSTRONG: Okay.

2 MS. OLSON: The next one is could  
3 you explain how the water content of material  
4 within an existing earth and dam could be  
5 determined? And I'll keep going if you want. The  
6 next question is at which locations in a dam  
7 should water content be monitored? The next  
8 question is what is the design basis for requiring  
9 each earth and dam to have instruments -- sorry.  
10 Pardon. I retract that question.

11 The next question is could you  
12 explain how the pore water pressure and the  
13 material within an existing earth and dam would --  
14 sorry. I just asked that question. Let me  
15 refrain -- rephrase.

16 Could you explain how the pore  
17 water pressure as opposed to the water content in  
18 the material within an existing earth and dam  
19 would be determined? And then could you identify  
20 the locations in the dam where the pore water  
21 pressure as opposed to the water content should be  
22 measured?

23 MR. ZAHAROFF: Can I clarify? Are  
24 you asking those instead of the questions about

1 water content or --

2 MS. OLSON: In addition to. Yeah.  
3 I apologize if that was somewhat unclear. I'm  
4 happy to go through them again.

5 HEARING OFFICER FOX: Forgive my  
6 misunderstanding, Ms. Olson. When you said asked  
7 off the record, you wanted these questions to be  
8 read into the record to be addressed in  
9 post-hearing comment, am I misunderstanding you?

10 MS. OLSON: Yes. Thank you. That  
11 is correct.

12 HEARING OFFICER FOX: Very good.  
13 Thanks.

14 MS. OLSON: That's all I have for  
15 15. If anybody has any follow ups for 15?

16 HEARING OFFICER FOX: Mr. King, if  
17 you have any questions based on The Environmental  
18 Group's responses to the Board, please let us know  
19 which question that is and go ahead.

20 MR. KING: Just following up on 15.  
21 I'm not sure that the series of questions that I  
22 heard really got to the fundamental question of  
23 what is the point of gathering this information  
24 because I don't see that it connects up with any

1 other further decision-making. So I was just  
2 looking for what this -- what is the purpose of  
3 gathering this information?

4 MR. SODERBERG: Right. The primary  
5 purpose would be a way of tracking in realtime  
6 slope stability and potential for change in slope  
7 stability.

8 MR. KING: But then what -- is there  
9 some action that is supposed to be taken with  
10 regards to when this information is changed?

11 MR. SODERBERG: In my pre-filed  
12 testimony, it was in reference to an inspection as  
13 a potential for giving useful information to the  
14 inspector maybe to pinpoint areas of the earth and  
15 dam for further inspection.

16 MR. KING: But then there is no  
17 further follow up that is required relative to the  
18 regulations, relative to this information?

19 MR. ARMSTRONG: It's a requirement  
20 for acquiring information as opposed to --

21 MR. KING: Doing anything with the  
22 information?

23 MR. ARMSTRONG: It's a requirement  
24 to gather information which can be used for

1 inspections, to form the closure plan and to alert  
2 the regulators, the owner/operator, whether there  
3 is a chance of a failure in the impoundment.

4 MR. KING: Okay. Thank you.

5 HEARING OFFICER FOX: Nothing  
6 further, Mr. King?

7 MR. KING: No.

8 HEARING OFFICER FOX: Okay. Thanks  
9 very much. Ms. Franzetti, you're indicating you  
10 have a follow up?

11 MS. FRANZETTI: I would move to a  
12 different question.

13 HEARING OFFICER FOX: I believe we  
14 have wrapped up 15. So if you would identify the  
15 question you want to pursue.

16 MS. FRANZETTI: I was going to go to  
17 17.

18 HEARING OFFICER FOX: Very good.  
19 Why don't we have you go ahead, Ms. Franzetti.

20 MS. OLSON: I have a question on 16.

21 HEARING OFFICER FOX: Would you  
22 yield to the Agency?

23 MS. FRANZETTI: I yield.

24 HEARING OFFICER FOX: Thank you,

1 Ms. Franzetti. Ms. Olson, please go ahead.

2 MS. OLSON: In response to question  
3 16(a), you say the reason why the Agency should  
4 hold a public meeting and to allow residents of an  
5 affected community to hear the Agency's  
6 explanation of its decision.

7 So my question is if the Agency  
8 has not yet reached a decision, yet hold a public  
9 informational meeting per your proposal, what  
10 benefit would be gained over just accepting  
11 written comments.

12 MR. ARMSTRONG: So that doesn't  
13 accurately characterize the answer. The answer  
14 was it provides the residents of an affected  
15 community the opportunity to provide comments and  
16 to hear in person any explanation of its decisions  
17 relating to the impoundment. That doesn't mean an  
18 explanation necessarily of the final decision, but  
19 an explanation of what is going on, what the  
20 Agency believes is happening with the impoundment  
21 and an explanation of, you know, really what is --  
22 what is the impact of the Agency's regulation of  
23 the impoundment on the communities that would be  
24 affected by it.

1 MS. OLSON: So my question to you is  
2 if the Agency hasn't made a decision, do you  
3 believe that the public informational meetings  
4 will still be beneficial?

5 MR. ARMSTRONG: Yes, I believe it  
6 will still be beneficial because it will provide  
7 the information -- it will provide the public with  
8 information about what is at issue here.

9 MS. OLSON: So am I to understand  
10 that as proposed by The Environmental Groups it is  
11 not an informational meeting where the Agency  
12 comes to listen to what the public has to say,  
13 it's a meeting where we're obligated to explain a  
14 proposal that we didn't create and we may not even  
15 approve, is that right?

16 MR. ARMSTRONG: No.

17 MS. OLSON: Okay.

18 MR. ARMSTRONG: I believe it is an  
19 opportunity for the public to ask questions.

20 MS. BARKLEY: I think it is  
21 important for it to be a two-way communication  
22 opportunity between the residents living in that  
23 community and the Agency officials. I think you  
24 guys are fully aware at NPDES permit hearings and

1 your annual meeting many members of the public  
2 have absolutely no idea how the state system works  
3 and they don't understand what decisions are being  
4 made, how they're being made, how they can affect  
5 the process, what information that is local and  
6 important to them can be brought to you as  
7 decisionmakers in Springfield. This is an  
8 opportunity for them to say this is a river that I  
9 care about, this is what I do on that river, I use  
10 this drinking water to water my garden or this  
11 groundwater to water my garden or pets or horses  
12 or use for my own potable water.

13                   It is an opportunity for you to  
14 get information that is localized that might not  
15 be in your records that you might not have  
16 gathered. It is an opportunity to hear from you  
17 who are working on, you know, the public's behalf.  
18 What you're doing, what the process is, demystify  
19 it for them and really explain here is what is  
20 being proposed, here are the steps in the process  
21 so that they can understand and form -- they might  
22 have something to bring to the table about what  
23 happened 50 years ago at that site that might be  
24 relevant and they might also have some very

1 serious concerns that maybe aren't already being  
2 addressed by the state.

3 I think this is an opportunity  
4 afforded to them by the Clean Water Act, Illinois  
5 Environmental Protection Act. I think it's a  
6 really important part of the process.

7 MS. OLSON: Under the Clean Water  
8 Act and the NPDES permit, is it your understanding  
9 that the Agency has made a tentative decision and  
10 issued a draft permit before any public meeting is  
11 held?

12 MS. BARKLEY: I don't know that's  
13 always the case. I mean, if it's an NPDES permit,  
14 yes, the Agency has made the decision to issue  
15 this permit -- this draft permit. I know that  
16 there have been instances of having public  
17 meetings or hearings before a decision has been  
18 made, but for the NPDES permit, yes, I think  
19 that's the case.

20 MS. OLSON: And if I understand  
21 correctly that is not what you're proposing in  
22 this instance. The Agency would not have to have  
23 a tentative decision before going to any public  
24 informational meeting, is that right?

1 MS. BARKLEY: I think --

2 MR. ARMSTRONG: It's not required  
3 that the Agency have a tentative decision under  
4 the rules. It's not foreclosed either if the  
5 Agency would find that to be beneficial.

6 MS. BARKLEY: I do think it would be  
7 beneficial if Dynegy or Ameren or Midwest Gen were  
8 present for more technical questions about their  
9 proposed plan knowing that this is -- the meeting  
10 is about what is being proposed to the Agency,  
11 whether it's corrective action or a closure plan,  
12 but I don't think that -- you know, that is not  
13 something that we put into our proposal.

14 MS. OLSON: I was just clarifying  
15 because I thought maybe I had missed something  
16 based on the response, but I have another line of  
17 questioning on question 16, which I'll move to  
18 now.

19 The Environmental Groups propose  
20 an Agency review time of 120 days in proposed  
21 Section 841.500 and a proposed comment period time  
22 of 60 days. 35 Ill. Adm. Code Part 164 requires  
23 at least 30 days of public notice before a hearing  
24 can be held.

1                   So if the Agency waited 60 days  
2 for all the public comments to come in, decided to  
3 hold a public hearing, it would have to wait  
4 another 30 days under Part 164 before the hearing  
5 could be held.

6                   So my question is do you believe  
7 30 days following a public informational meeting  
8 is sufficient time for the Agency to reach a final  
9 decision?

10                  MR. ARMSTRONG: I disagree with the  
11 premise of your question because the Agency can  
12 put out a notice any time within the 60 days of a  
13 meeting. It can schedule the meeting for any time  
14 it likes.

15                  MS. OLSON: I understand that,  
16 Andrew, but it may not receive the comments until  
17 the 60th day. So it may not know that there was a  
18 request for a public meeting. It may not know  
19 there was significant public interest until the  
20 comment period is over.

21                  MR. ARMSTRONG: That's a possibility  
22 and in that case, yes, the meeting would have --  
23 you would need the 30 days notice.

24                  MS. OLSON: So my question is do you

1 believe 30 days following a public informational  
2 meeting is sufficient time for the Agency to reach  
3 a final decision?

4 MR. ARMSTRONG: Well, I mean, I  
5 expect that the Agency will already be using the  
6 time to make certain findings that would be  
7 necessary to support a decision. I would hope  
8 that the public hearing would help inform those  
9 decisions, but I don't think it's a predicate  
10 before the Agency can do the other work that is  
11 necessary to make a decision on the closure,  
12 corrective action or preventive response plan or  
13 alternative cause demonstration.

14 MS. OLSON: Do you believe there  
15 should be a post public meeting comment process  
16 that is typically associated with NPDES permits?

17 MR. ARMSTRONG: We have not required  
18 that in this rule.

19 MR. RAO: May I ask a follow-up  
20 question? In proposed Section 841.165(c), does  
21 the proposed language allow the Agency's decision  
22 to conduct public hearings only if it finds there  
23 is significant public interest? So the Agency  
24 gets to make the decision whether to have a

1 hearing or not, right?

2 MR. ARMSTRONG: Correct. The Agency  
3 has the discretion to determine whether there  
4 is -- whether it finds a significant degree of  
5 public interest or not.

6 MR. RAO: So if there is any member  
7 of the public to request for informational  
8 hearing, it may not result in a public hearing?

9 MR. ARMSTRONG: Correct.

10 MS. OLSON: Based on the language  
11 that you submitted attached to your responses to  
12 the Board's questions, do you agree that the  
13 Agency would have to complete a response to all  
14 questions raised during the comment period?

15 MR. ARMSTRONG: Yes. If the Board  
16 requires a public informational meeting or hearing  
17 or however it is termed and the procedures of 35  
18 Ill. Adm. Code Part 164 are applicable, then there  
19 would be a requirement of responses.

20 MS. OLSON: Has anyone on the panel  
21 participated in an NPDES permit hearing process  
22 through the Agency in the past?

23 MS. BARKLEY: Yes, I have.

24 MS. OLSON: And from your

1 experience, how long did it take from the date of  
2 the public hearing to the date the Agency  
3 published the responsive summary in general?

4 MS. BARKLEY: I think I've seen one  
5 as soon as 30 days, but it is usually much longer  
6 than that.

7 MS. OLSON: Can you tell me what you  
8 mean by much longer than that?

9 MS. BARKLEY: A few to several  
10 months. I think we're still waiting on some.

11 MS. OLSON: Have you experienced  
12 some to be longer than a year?

13 MS. BARKLEY: Yes, but I would add  
14 that in those instances I know that that is not  
15 necessarily due to the Agency not getting the  
16 responsive summary done, that there have been some  
17 requests for modifications by the applicant that  
18 have affected that time line, but I do understand  
19 and I think to your point it is -- it is work on  
20 the Agency's behalf.

21 MS. OLSON: It generally takes  
22 longer than 30 days?

23 MS. BARKLEY: Yes.

24 MS. OLSON: That's all I have for

1 16.

2 HEARING OFFICER FOX: Very good.  
3 Ms. Franzetti, you had indicated that you had  
4 follow up questions for 17. I think we're in  
5 order to return to you.

6 MS. FRANZETTI: Thank you. Although  
7 I have a question on 16, can you remind us why you  
8 selected the 120-day deadline for the Agency's  
9 decision?

10 MR. ARMSTRONG: So I believe the 120  
11 days was proposed by the Agency. It was  
12 originally 90 days and the Agency stated that  
13 there was -- a 60-day public comment period would  
14 be acceptable to The Environmental Groups to have  
15 a 120-day decision time and we accepted that and  
16 so we've carried that into our red line.

17 MS. FRANZETTI: I honestly could not  
18 remember. Moving to question 17. This has to do  
19 with the Board's question of why not allow -- why  
20 not allow TDS, total dissolved solids, monitoring  
21 to be reduced and in your response to that  
22 question you refer to statements by the US EPA in  
23 its proposed CCR rule indicating that the US EPA  
24 would support not reducing monitoring for TDS.

1           Isn't it true, though, that the  
2 statement you cite to in the Federal Register 75  
3 Fed. Reg. 35- -- page 35206 is where the US EPA is  
4 setting forth the list of parameters that it was  
5 proposing be the subject of as it called it the  
6 detection monitoring program, correct.

7           MR. ARMSTRONG: Correct. And let me  
8 clarify. Our intention in citing that was to  
9 support the premise that total dissolved solids  
10 are particularly indicative of coal ash  
11 contamination of groundwater. Not to suggest that  
12 we are mirroring the regulatory program that was  
13 at issue in that specific passage.

14           So US EPA did note that total  
15 dissolved solids and other constituents are  
16 present in CCR's and would rapidly move to the  
17 subsurface and thus provide an early detection as  
18 to whether contaminants are migrating from the  
19 disposal unit.

20           MS. FRANZETTI: In the eight  
21 parameters that the US EPA has proposed for the  
22 detection monitoring program, they actually don't  
23 include either manganese or arsenic as does your  
24 proposed mandatory reduced monitoring list,

1 correct?

2 MR. ARMSTRONG: I believe that is  
3 correct. Yes, that's correct.

4 MS. FRANZETTI: Okay. Is it also  
5 correct that the US EPA has not taken a position  
6 on reduced monitoring in its proposed CCR rule?

7 MR. ARMSTRONG: I haven't evaluated  
8 that.

9 MS. FRANZETTI: Okay. Total  
10 dissolved solids is an indicator parameter, isn't  
11 that right?

12 MR. ARMSTRONG: Yes.

13 MS. FRANZETTI: If specific  
14 compounds like boron and sulfate are being  
15 monitored and are not showing any detection or any  
16 increasing trend, then an increase in TDS is not  
17 in and of itself indicative of a release of CCW,  
18 isn't that true? Please feel free, Dr. Soderberg.

19 MR. SODERBERG: You know, by in  
20 large, yes, I would agree with that. That would  
21 be boron and sulfate would be typical constituents  
22 of the total dissolved solids. There may be other  
23 constituents that make up the total dissolved  
24 solids depending on the type of CCW and the

1 subsurface conditions.

2 MS. FRANZETTI: Thank you. That's  
3 all I have.

4 HEARING OFFICER FOX: Very good.  
5 Thank you, Ms. Franzetti. Do we have on the basis  
6 of questions number 18 to 24 any follow-up  
7 questions that any of the participants would like  
8 to raise? I see Ms. Olson's hand and only yours.

9 MS. OLSON: Question 24.

10 HEARING OFFICER FOX: Very good.  
11 Let's turn to that.

12 MS. OLSON: Does anyone on the panel  
13 know whether or not onsite landfills that are  
14 exempt from permitting under Illinois regulations  
15 for landfills have to provide financial assurance?

16 MR. ARMSTRONG: I'm not aware. We  
17 can address that in post-hearing comments.

18 MS. OLSON: Does anyone on the panel  
19 know whether the Agency as a general matter can  
20 require a bond or other security measure when  
21 issuing permits?

22 MR. ARMSTRONG: As a general matter,  
23 I'm not aware. We can address that in  
24 post-hearing comments.

1 MS. OLSON: In response to question  
2 24(c), I just kind of want to get a sense of what  
3 exactly one to three percent of the total cost of  
4 closure means.

5 So I think there is an example  
6 in your response somewhere that a unit could cost  
7 \$6 million to close, is that right? I think it  
8 may have been in response to the CWLP.

9 MR. ARMSTRONG: Yes.

10 MS. OLSON: So if you were opening a  
11 new unit and it was going to close in a manner  
12 similar to CWLP and that unit was open for 30  
13 years, do you know the actual dollar amount of  
14 financial assurance that would have to be  
15 provided?

16 MR. ARMSTRONG: I could probably  
17 calculate it, but I don't know off the top of my  
18 head. If you take two percent -- you would take  
19 two percent of the closure cost and then you'd  
20 have 30 years of that. So you'd have -- a very  
21 rough estimate you'd have 60 percent of the  
22 impoundment closure costs over 30 years.

23 MS. OLSON: So would an estimate of,  
24 say, \$3.6 million sound about right in the

1 ballpark?

2 MR. ARMSTRONG: Over 30 years for \$6  
3 million and the \$6 million was actually a citation  
4 to the cost where the CCW is going to be dredged  
5 out of the impoundment, I would think that if you  
6 have a responsibly sited, lined new impoundment --  
7 responsibly sited, adequately lined new  
8 impoundment, your closure plan would not involve  
9 closure by removal, but rather closure by capping.  
10 So it would be less.

11 MS. OLSON: Do you know under your  
12 proposal whether or not financial assurance would  
13 have to be maintained throughout the post-closure  
14 care period?

15 MR. ARMSTRONG: To the extent there  
16 was post-closure activities remaining to be  
17 performed, you would need to maintain financial  
18 assurance.

19 MS. OLSON: What does that mean?

20 MR. ARMSTRONG: Post-closure  
21 activities -- so our language is that the amount  
22 of financial assurance required under the subpart  
23 shall be equal to the cost estimate to complete  
24 the closure and post-closure activities under the

1 closure and post-closure plans approved by the  
2 Agency.

3                   So to the extent that there are  
4 costs associated with the post-closure plan that  
5 have not yet been expended, the proposal would  
6 require the owner or operator to maintain  
7 financial assurance in the amounts necessary to  
8 meet those remaining post-closure costs.

9                   MS. OLSON: So it would be fair to  
10 say that it would go down after you spend the \$6  
11 million to close it?

12                   MR. ARMSTRONG: Yes.

13                   MS. OLSON: Then whatever costs that  
14 would be required to maintain the post-closure  
15 care period that would be the new cost of  
16 financial insurance?

17                   MR. ARMSTRONG: Yes, the cost --  
18 well, the cost for closure would be the cost to  
19 assure closure and post-closure care. Once you've  
20 completed closure, then you don't have to ensure  
21 the cost of closure anymore, but only post-closure  
22 care and those would continue to decline as you've  
23 completed post-closure care.

24                   MS. OLSON: Under your proposal,

1 that financial assurance would extend another 30  
2 years after closure?

3 MR. ARMSTRONG: To the extent you  
4 were proposing a 30-year post-closure care period,  
5 yes.

6 MS. OLSON: That's it.

7 HEARING OFFICER FOX: Thank you,  
8 Ms. Olson. Mr. Sylvester, I see you have a  
9 question. If you would -- again, I know it's odd  
10 to ask you after recognizing you by name, if you  
11 would identify yourself for the record first,  
12 please.

13 MR. SYLVESTER: Sure. My name is  
14 Steven Sylvester. I'm with the Illinois Attorney  
15 General's Office. A follow-up question I had was  
16 regarding (c) (2). The Board --

17 HEARING OFFICER FOX: If I may  
18 interrupt, I can tell the court reporter is having  
19 difficulty hearing you. Would you mind taking a  
20 moment to move forward, please?

21 MS. SYLVESTER: Sure.

22 MS. FRANZETTI: Off the record.

23 (Whereupon, a discussion was had  
24 off the record.)

1 HEARING OFFICER FOX:

2 Mr. Sylvester's question pertains to 24(c)(2) on  
3 page 10, is that correct?

4 MS. SYLVESTER: Correct.

5 HEARING OFFICER FOX: Thank you.

6 MS. SYLVESTER: The question said  
7 please also address how those costs would impact  
8 the people of the State of Illinois and I was  
9 wondering if The Environmental Groups considered  
10 whether there was any benefit to the people of the  
11 State of Illinois from requiring financial  
12 assurance for these coal combustion waste surface  
13 impoundments?

14 MR. ARMSTRONG: Yes, to the extent  
15 that financial assurance is provided, there can be  
16 no concern that the cost of closure or  
17 post-closure care for any impoundments will be  
18 borne by the people of the State of Illinois.

19 MS. SYLVESTER: That's it.

20 HEARING OFFICER FOX: Mr. Sylvester,  
21 thanks very much. Are there any additional  
22 follow-up questions based on The Environmental  
23 Group's responses to Board questions number 11  
24 through 24 that we've been taking progress

1 through? Neither seeing nor hearing any, we had  
2 planned to turn to The Environmental Group's  
3 responses to the questions that the Board had  
4 posed to Ms. Barkley in its filing on April 30th  
5 and Mr. Rao has indicated that the Board itself  
6 does not have any follow ups in response to the  
7 written answers that you provided us, Ms. Barkley,  
8 but before we turn -- before we go ahead, I want  
9 to make sure that none of the other participants  
10 wish to follow up on those two written answers  
11 number 19 and 20. Ms. Olson, I see your hand.

12 MS. OLSON: Unfortunately, I just  
13 have one.

14 HEARING OFFICER FOX: Nothing  
15 unfortunate about it. Please go ahead.

16 MS. OLSON: In response to question  
17 one, you cite proposed Section 841.410. Did you  
18 mean Section 841.110?

19 MS. BARKLEY: I'm sorry. Question  
20 number one?

21 MS. OLSON: Yes.

22 MS. BARKLEY: From the Board --

23 MS. OLSON: Shoot. I'm sorry. I'm  
24 on the --

1 MR. ARMSTRONG: Question 11 from the  
2 Board?

3 MS. OLSON: I don't have a question.  
4 I'm sorry. I'm in the wrong section.

5 HEARING OFFICER FOX: That sounded  
6 familiar. I think that pertained to the --

7 MS. OLSON: Previous one.

8 HEARING OFFICER FOX: -- question  
9 11. Very good. We covered that. Ms. Barkley, I  
10 think you get a reprieve as it turns out. I don't  
11 see any hands or any other signal that anyone has  
12 any follow-up questions based on those two answers  
13 that you had provided to the Board and what that  
14 will allow us to do is turn finally to the written  
15 answers that the Agency had supplied to the Board  
16 in response to the written questions that the  
17 Board has filed and -- I'm sorry, Ms. Olson. I  
18 need to locate those. Mr. Rieser, you had a  
19 question?

20 MR. RIESER: Yes. And this has to  
21 do with the question on The Environmental Groups  
22 proposed additional -- submitted additional  
23 proposal in the rule itself. Would now be a good  
24 time to ask questions about that or should we

1 finish with the Agency -- questions of the Agency?

2 HEARING OFFICER FOX: I'm not sure I  
3 heard you over the traffic outside. Could you  
4 start again?

5 MR. RIESER: I'm sorry. I probably  
6 had my hand in front of my mouth. I've got some  
7 questions for The Environmental Groups with regard  
8 to the amended proposal they submitted on the 21st  
9 and I guess my question is would this be a good  
10 time to ask those questions or should we just turn  
11 to the Agency and get their answers?

12 HEARING OFFICER FOX: We have The  
13 Environmental Group's witnesses sworn in. We have  
14 the filing that you have referred to in the  
15 Board's record and before we turn to the Board's  
16 questions I think it would be in order to raise  
17 any questions on the basis of that proposed  
18 language, Mr. Rieser.

19 MR. RIESER: Thank you. In  
20 preparing this proposal, it appears that it was --  
21 that the preparation was informed by the Agency's  
22 proposal that was submitted on July 17th, is that  
23 correct?

24 MR. ARMSTRONG: Well, there is a lot

1 of different changes, a lot of different red lines  
2 in this proposal, but we have submitted two  
3 proposals within I guess a four-day period. One  
4 of them was on Friday and then one of them was on  
5 July 21st. The changes that we made on July 21st  
6 were informed by and in response to the proposal  
7 that the Agency had made in its answers to the  
8 Board's pre-filed questions on July 17th.

9 MR. RIESER: And I understand the  
10 speed with which this was done. If there was  
11 something in the Agency's proposal, additional  
12 proposal that was filed that wasn't included in  
13 The Environmental Group's proposal, from the 21st,  
14 does that mean that The Environmental Groups made  
15 a decision that they didn't agree with the  
16 Agency's proposal?

17 MR. ARMSTRONG: So in the Agency's  
18 proposal we have not evaluated as The  
19 Environmental Groups any of the language other  
20 than the language that was referenced in our  
21 e-mail of Friday the 18th and I believe that our  
22 statement in that e-mail was that based on the  
23 language that the Agency had proposed in response  
24 to board question -- I have it here -- Board

1 question number six.

2                   The Board's question about risk  
3 assessments and The Environmental Groups, you  
4 know, included in our proposal is changes to  
5 841.500(c), 841.310(e) and 841.410(a) that were  
6 referenced in that answer. You know, we have  
7 reviewed the other language in this proposal, but  
8 we haven't -- we have neither accepted it nor  
9 rejected it at this point.

10                   MR. RIESER: Thank you. So with  
11 respect to -- and this is going to involve the  
12 serious juggling of papers. So hopefully it won't  
13 be too cumbersome.

14                   With respect to the Agency's  
15 proposal at Section 841.105(a)(3), it addresses  
16 groundwater management zones whether a unit with a  
17 groundwater management zone is exempt or not  
18 exempt. This is not something that The  
19 Environmental Groups addressed and I was wondering  
20 if that was a result of a decision or just haven't  
21 gotten to it yet?

22                   MR. ARMSTRONG: We have not gotten  
23 to it yet.

24                   MR. RIESER: Thank you. Again,

1 looking at your proposal 841.105(c) the -- I  
2 believe it's the last sentence -- certainly the  
3 last sentence on the bottom of the page four says  
4 "Justification for an exemption under Subsection's  
5 (b) (2), (3) and/or (4) of this section also shall  
6 be included in any hydrogeologic site  
7 characterization for the exempted units power  
8 generating facility" and then goes onto identify a  
9 couple of other reports in which this has to be  
10 included.

11 Does this mean if there are  
12 other units at the facility that aren't exempt  
13 every time a report is submitted with respect to  
14 those nonexempt units the exempt unit has to be  
15 addressed?

16 MR. ARMSTRONG: Yes.

17 MR. RIESER: And what is the basis  
18 for that?

19 MR. ARMSTRONG: To continue to  
20 provide the basis for the exemption to the Agency  
21 so that there is a -- the Agency can continue to  
22 review whether it is reasonable to conclude that  
23 this unit is still exempt.

24 MR. RIESER: Is there concern that

1 the Agency might forget?

2 MR. ARMSTRONG: Well, there might  
3 be -- ten years down the road the Agency may look  
4 at the available evidence and question whether  
5 there is still a basis for the exemption to apply  
6 and ten years is merely an example.

7 MR. RIESER: I understand. Looking  
8 at 841.105(b)(2) this has to do with a unit that  
9 is exempt because it has initiated closure and  
10 meets certain other conditions. The last one of  
11 which is and whose coal combustion waste or  
12 leachate from coal combustion waste does not cause  
13 or contribute to the exceedance of the groundwater  
14 quality standards.

15 For the purpose of this  
16 exemption, is the determination that the waste  
17 does not cause or contribute to an exceedance  
18 something that has to be true at the effective  
19 date of the rule or at some time in the future?  
20 What I'm asking is because it begins with initiate  
21 closure. So if they've initiated closure prior to  
22 the rule, it may be the case that the unit has not  
23 yet complied -- the closure is not yet completed  
24 and the unit has not yet complied with the

1 groundwater quality standards.

2 MR. ARMSTRONG: Right. Well, in  
3 keeping in line with the Agency's original  
4 proposal, whether coal combustion waste or  
5 leachate from the unit causes or contributes to an  
6 exceedance, that is -- that is a condition that  
7 would have to be present at all times for the unit  
8 to be exempt.

9 MR. RIESER: So it would have to  
10 have initiated closure and also at the effective  
11 date of the rule be meeting the groundwater  
12 quality standards?

13 MR. ARMSTRONG: Correct.

14 MR. ANTONIOLLI: My name is Amy  
15 Antonioli on behalf of Ameren Missouri and Ameren  
16 Energy Medina Valley Cogen. My question was  
17 following on Mr. Rieser's question on  
18 841.105(b)(2) was if there is a GMZ in place, then  
19 there would be no exceedance of the groundwater  
20 quality standards?

21 MR. ARMSTRONG: For purposes of this  
22 Section (b)(2)?

23 MR. ANTONIOLLI: Yes.

24 MR. ARMSTRONG: Correct.

1 MR. ANTONIOLLI: Did you have  
2 certain units in mind for this exemption?

3 MR. ARMSTRONG: No. And this is  
4 really a combination of the Agency's original  
5 exemption along with what The Environmental Groups  
6 interpreted the Board to be suggesting to the  
7 Agency in one of their questions specifically --  
8 specifically, the Board's pre-filed question 1(d).

9 MR. ANTONIOLLI: Okay. Thank you.

10 MS. OLSON: I have a question on  
11 this section. So we can wrap it up or --

12 MR. RIESER: Go ahead.

13 MS. OLSON: As the term operated is  
14 used in this section, I'm assuming that you mean  
15 operated as defined not receiving any storm water  
16 even as precipitation, is that right?

17 MR. ARMSTRONG: That is the  
18 definition of operate within our rules, yes.

19 MS. OLSON: And is it safe to say  
20 that initiate closure means you don't have to have  
21 finished it by the time these rules are in effect?

22 MR. ARMSTRONG: Yes.

23 MS. OLSON: So my question is if  
24 you're closing by removal and it's been initiated

1 pursuant to a closure plan, but not completed how  
2 would the unit fall within this exemption after it  
3 rains?

4 MR. ARMSTRONG: Under our definition  
5 of operate, it would still be subject to the rules  
6 until it is either closed by capping or removal.

7 MS. OLSON: So is this exemption  
8 going to catch anybody because if you're closing  
9 by removal, but haven't finished it and it rains,  
10 wouldn't you automatically be kicked out of this  
11 exemption?

12 MR. ARMSTRONG: Yes, I guess that's  
13 the case under our proposal.

14 MS. OLSON: Was that your intent?

15 MR. ARMSTRONG: Well, again, our  
16 intent is -- I mean, if you look at the definition  
17 of operate under our rules, this -- if you look at  
18 the definition of operate under our rules, in any  
19 case any impoundment that is still open to the  
20 atmosphere is going to be included within the  
21 scope anyway.

22 So it may be the case that our  
23 definition of operate sweeps perhaps even broader  
24 than the Board's suggested revision or what The

1 Environmental Groups saw the Board had suggested  
2 in its proposed question 1(d).

3 MS. OLSON: So is that not your  
4 intent then to say that if you initiate closure,  
5 but it's rained and you've received -- your CCW  
6 surface impoundment has received storm water as  
7 direct precipitation because it rained, is it --  
8 is it or is it not your intent that they be exempt  
9 from these rules?

10 MR. ARMSTRONG: It is our intent  
11 that if an impoundment is being operated after the  
12 effective date of the rules within the meaning of  
13 our proposal, then it should be covered by the  
14 rules.

15 MS. OLSON: Even if it's initiated a  
16 closure plan as stated in 841.105(b)(2)?

17 MR. ARMSTRONG: Right.

18 MS. OLSON: Is it possible that  
19 instead of initiate closure, you meant complete  
20 closure in that section?

21 MR. ARMSTRONG: We use the language  
22 that has been suggested in the Board's question.  
23 If you look at how our rule is drafted and the  
24 definition of operate, the second of the three

1 requirements in this subsection probably  
2 overwhelms the first in so far as the second  
3 requirement here is that the unit is not operated  
4 after the effective date of these rules, but it  
5 is -- it is our intent that that second  
6 requirement is given effect.

7 MS. OLSON: Do you plan to make any  
8 future revisions to (b) (2)?

9 MR. ARMSTRONG: Not at this time,  
10 but we'll discuss it and take it under advisement.

11 MS. OLSON: That's all I have.

12 HEARING OFFICER FOX: Ms.  
13 Antoniolli, I see your hand.

14 MR. ANTONIOLLI: I do have one more.  
15 If you look ahead then to Section 841.105(c), the  
16 way if a unit qualifies for an exemption under  
17 (b) (2), it is still subject to the closure  
18 requirements of Subpart (d) and that would require  
19 a closure plan within a year of the effective date  
20 of the rule, is that also the intent if it has  
21 already initiated closure under an approved  
22 closure plan, does it need to then resubmit?

23 MR. ARMSTRONG: No. That is not our  
24 intent if it has initiated closure pursuant to the

1 closure plan that is going to meet the other  
2 requirements of Subpart (d).

3 HEARING OFFICER FOX: Anything  
4 further, Ms. Antoniolli?

5 MR. ANTONIOLLI: No, that's all.

6 HEARING OFFICER FOX: Very good.

7 Mr. Rieser, we're going to return to you. It  
8 sounds like you had some additional questions?

9 MR. RIESER: Unrelated points.

10 HEARING OFFICER FOX: Unrelated.

11 MR. RIESER: So I'm up to 841.305  
12 and specifically 841.305(c).

13 MS. OLSON: Mr. Rieser, is this the  
14 latest draft 7/21?

15 MR. RIESER: Correct.

16 HEARING OFFICER FOX: Just to be  
17 specific the one that was filed by the  
18 Environmental Groups July 21st, correct?

19 MR. RIESER: Correct.

20 HEARING OFFICER FOX: Very good.  
21 Thank you for letting me interrupt.

22 MR. RIESER: Not a problem.  
23 Subsection (c), and there was some discussion  
24 about this earlier, states that an owner or

1 operator who receives a written response of  
2 non-concurrence, in other words, the Agency not  
3 agreeing.

4 MR. ANTONIOLLI: Alternative cause  
5 demonstration has to do certain things. One of  
6 them is submit a corrective action plan and then  
7 the other is to close all units releases from  
8 which have caused an exceedance. So turning to  
9 the first question -- the first issue. Submit a  
10 corrective action plan. In other iterations or  
11 other places where there was an Agency denial and  
12 The Environmental Group's proposal required  
13 further action, there was an acknowledgment that  
14 the Agency's denial was something that could be  
15 appealed to the Board for review.

16 So am I correct in assuming that  
17 this is also something where somebody would --  
18 could submit a request to the Board to review and  
19 that the obligations of (c) wouldn't start until  
20 that review was complete?

21 MR. ARMSTRONG: First of all, I just  
22 want to note for the record that, you know, some  
23 of these changes have been made well before this  
24 most current draft and were, you know, available

1 for people's review at earlier hearings, but in  
2 answer to your question (c) (2) allows for an  
3 appeal of the Agency's decision of non-concurrence  
4 to the Board within 35 days of the date the  
5 Agency's non-concurrence was mailed to the owner  
6 or operator. So that was in the Agency's original  
7 proposal.

8 MR. RIESER: I'm sorry. That is in  
9 305?

10 MR. ARMSTRONG: I'm sorry. I'm on  
11 the wrong section. Yeah, (c) (2).

12 MR. RIESER: Thank you. All I had  
13 to do was turn the page. The other part of this  
14 is the requirement to close all units and my  
15 question is, why is it necessary to close when  
16 they could submit a corrective action plan and,  
17 perhaps, achieve some measure of corrective action  
18 which didn't require closure?

19 MR. ARMSTRONG: I believe that we've  
20 addressed this question at previous hearings, but  
21 our intent with this requirement was, you know,  
22 what we're talking about here is we're talking  
23 about impoundments that are -- the majority of  
24 them in the state are unlined and if we're talking

1 about a corrective action plan that is just going  
2 to allow the impoundment to continue to operate,  
3 receive coal combustion waste, continue to  
4 contaminate groundwater and corrective action is  
5 limited to, for example, natural attenuation, we  
6 don't believe that is an acceptable outcome here  
7 and that is why we have proposed a requirement  
8 that impoundments that are causing exceedances of  
9 the groundwater quality violations are required to  
10 close within a certain amount of time and, again,  
11 one basis for this is that the Agency has not  
12 proposed design standards for existing  
13 impoundments along the lines of what US EPA has  
14 proposed in its national rule on coal ash  
15 impoundments. Those design standards would  
16 address the problem of unlined impoundments to  
17 make sure they don't operate, but the rule as it  
18 stands the proposal does nothing to address that  
19 issue.

20 MR. RIESER: So because of that --  
21 well, let me ask you.

22 MR. ARMSTRONG: Just to further note  
23 another point. You know, under the provisions of  
24 the rule, one, there is an option for the

1 impoundment to stay open if it does meet the  
2 design standards we've proposed or, two, if  
3 corrective action is within five years successful  
4 in taking care of groundwater exceedances for four  
5 straight quarters.

6 MR. RIESER: But that part, that  
7 last bit that you mentioned, that is not -- that  
8 has no impact on the requirement to close under  
9 (c) (1)?

10 MR. ARMSTRONG: It does. It does  
11 actually. It says you need to close all units  
12 releases from which have caused an exceedance of  
13 the groundwater quality standard at the compliance  
14 point as provided in Subpart (d) of this part and  
15 in accordance with Section 841.405 of this part.  
16 841.405 includes the waivers for closure in the  
17 event that the impoundment meets the design  
18 standards or that there is compliance within five  
19 years.

20 MR. RIESER: Okay. Thank you.

21 HEARING OFFICER FOX: Anything  
22 further, Mr. Rieser?

23 MR. RIESER: No.

24 HEARING OFFICER FOX: Very good.

1 Any other questions on The Environmental Groups  
2 July 21st proposal before we turn to the Agency's  
3 written response to the Board? Neither seeing nor  
4 hearing any indication of that, the responses by  
5 the Agency to the Board's written questions were  
6 also filed on July 17th and I'll turn it over to  
7 Mr. Rao for follow-up questions and we can  
8 certainly entertain any other questions that other  
9 participants may have.

10 Ms. Olson, yes, thank you for  
11 the reminder. Ms. Olson, were there specific  
12 witnesses you intended to swear in to respond to  
13 these questions?

14 MS. OLSON: I think all of them  
15 depending on what the question is.

16 MR. RAO: I only have two questions.

17 HEARING OFFICER FOX: That would be  
18 Mr. Cobb, Mr. Buscher, Ms. Zimmer and Mr. Dunaway?

19 MS. OLSON: Yes.

20 HEARING OFFICER FOX: I took them  
21 out of order, but let's have the court reporter  
22 swear them in. Steven, please go ahead.

23 WHEREUPON:

24 LYNN DUNAWAY, AMY ZIMMER, RICHARD COBB and WILLIAM

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BUSCHER

called as witnesses herein, having been first duly sworn, deposeth and saith as follows:

HEARING OFFICER FOX: Mr. Rao has indicated he has a couple of questions. Mr. Rao, take a moment if you need to and we'll go ahead with questions.

MR. RAO: In response to question number five, you had suggested that the Board not be included in this regarding the DNR regulations on -- I think you proposed to add a Board note under Section 841.170 which deals with inspections. I'm just wondering if a similar Board note should also go under the section that deals with -- let me see. The final slope and stabilization?

MR. COBB: That will be fine with us.

MR. RAO: And a related question is, is the Agency aware whether all CCW impoundments with manmade urban berms are subject to the DNR regulations?

MR. BUSCHER: Bill Buscher. All of the impoundments have to comply with the dam

1 safety regulations. Now, depending on the age,  
2 you know, my knowledge of those regulations  
3 depending on the age of the impoundment, certain  
4 things kick in, but I ask the question are all  
5 these covered? Yes, they're covered under the  
6 regulation. Do the specifics of the regulation  
7 vary from impoundment to impoundment depending on  
8 age? My understanding is yes.

9 MR. RAO: Okay. Because when I look  
10 at those roles like you mentioned earlier they're  
11 different classes of dams based on tracks and also  
12 age and I was wondering if the Agency had looked  
13 at those rules to see whether they're consistent  
14 with the US EPA's proposed regulations concerning  
15 the inspection requirements.

16 MR. BUSCHER: I didn't look  
17 specifically at that.

18 MR. RAO: I had a question  
19 regarding --

20 MR. BUSCHER: Can I follow up with  
21 what I just said? The federal regulations have  
22 specificity in them with regard to new  
23 impoundments. With regard to existing  
24 impoundments, my understanding is they don't --

1 specificity is not there.

2 MR. RAO: Okay. Good to know.

3 MR. BUSCHER: Could I follow up on  
4 that?

5 MR. RAO: Yes.

6 MR. BUSCHER: Each state has -- I'll  
7 just use Illinois for an example. Illinois has  
8 DNR's Office of Water Resources, which are in  
9 charge of dam safety and they regulate these  
10 impoundments. I mean, there are regulations in  
11 the book for what is required. So I don't feel  
12 that an admission on the part of the federal  
13 program identifies a deficiency in the DNR's  
14 program. So I feel it is being addressed.

15 MR. RAO: Does the DNR regulations  
16 as far as you know does it also include some sort  
17 of a permitting program, for example?

18 MR. BUSCHER: My understanding of  
19 the DNR regulations is that if you come in to  
20 build a new one you have to have a permit. For  
21 old ones -- and this is a very broad statement.  
22 For the old ones, you're responsible for them and  
23 if in an inspection they determine something needs  
24 to be done, you need to do it.

1 MR. RAO: Okay.

2 HEARING OFFICER FOX: Mr. Armstrong,  
3 it looked like you had a question.

4 MR. ARMSTRONG: I had a couple of  
5 follow up questions about the IEPA and IDNR  
6 relationship. Do IEPA and IDNR regularly  
7 communicate about the stability of the  
8 impoundments?

9 MR. COBB: We have. Rick Cobb. We  
10 have the -- under statute, we have the Interagency  
11 Coordinating Committee on Groundwater and the  
12 Office of Water Resources has been part of that  
13 since 1988 and we meet quarterly and right from  
14 the beginning of the initiation of our ash  
15 strategy and even through this rulemaking, we've  
16 been communicating with them. So yes.

17 MR. ARMSTRONG: Is there a formal  
18 process if IDNR has a concern with a specific  
19 impoundment to communicate in a greater than  
20 quarterly basis for the Agency about that  
21 impoundment?

22 MR. COBB: Sure. We picked -- Arlan  
23 Juhl and I talk -- pick up the phone and just talk  
24 to each other on the phone or e-mail each other

1 quite frequently outside of that. Absolutely. If  
2 we have issues we need to discuss, we know each  
3 other and we communicate.

4 HEARING OFFICER FOX: Mr. Cobb,  
5 could you just for the record -- you used the name  
6 Arlan Juhl.

7 MR. BUSCHER: Arlan Juhl is the  
8 Director of the Office of Water Resources at the  
9 Department of Natural Resources.

10 HEARING OFFICER FOX: Thanks for  
11 that clarification. I'm sorry to interrupt,  
12 Mr. Armstrong.

13 MS. BARKLEY: I have a follow up.  
14 So it's my understanding that the DNR regulates  
15 dams for safety, specifically loss of human life  
16 and property, and that to them they're regulating  
17 those dams as impounding water not specifically  
18 looking at the contents of those dam's past water.  
19 So I wonder if there were a concern about  
20 stability that may create a water pollution or an  
21 environmental health problem, how they would  
22 communicate that to you?

23 MR. BUSCHER: Can you repeat the  
24 question?

1 MS. BARKLEY: Basically, I'm  
2 interested in -- I mean, they are specifically  
3 regulating these dams for safety concerns, not  
4 seepage or environmental protection or water  
5 pollution control which is under your -- that is  
6 your responsibility.

7 So I wonder if they have a way  
8 of looking at these dams or impoundments for  
9 concerns past just safety and, if so, how they  
10 would -- how would they measure that, how would  
11 they communicate those concerns to you so that you  
12 can do what you need to do to make sure you're  
13 protecting water quality, both groundwater and  
14 surface water?

15 MR. COBB: Let me just take a crack  
16 at that question. We also have inspectors out  
17 there evaluating sites and units for threats to  
18 the waters of the state whether that be  
19 groundwater or surface water. Their rule  
20 obviously is not those kind of visual observations  
21 of what might be happening during an inspection  
22 that can be catastrophic -- potential catastrophic  
23 release certainly is going to be a problem.

24 So it seems to me our inspection

1 process catches that kind of normal run of the  
2 mill type stuff whereas when we're talking about  
3 dam safety we're also talking a catastrophic  
4 release. So the whole thing could threaten waters  
5 of the state or cause and allow waters of the  
6 state to be contaminated.

7 So I don't think their thing is  
8 the more nuisance thing. I think our inspection  
9 is the more nuisance thing looking at the  
10 potential threats to contaminate the waters of the  
11 state. It's a little bit different than the way  
12 you described it.

13 MS. BARKLEY: Can I ask from what  
14 unit the Agency inspectors are coming from to go  
15 do these dam inspections? Is that it the  
16 groundwater section, hydrogeology unit, is it  
17 under Bureau of Water, Bureau of Land? You just  
18 referenced inspector from the Agency.

19 MR. COBB: That would be the  
20 Division of Water Pollution Control Field  
21 Operations Section because, you know, those types  
22 of visual observation don't necessarily mean much  
23 with respect to groundwater in the short-term. We  
24 look at monitoring well data and the subsurface

1 and modeling and that sort of thing. Runoff and  
2 all that is under the bailiwick of our water  
3 pollution control as part of the program.

4 MS. BARKLEY: And the inspectors  
5 coming from the field operations section, are  
6 those engineers, civil engineers?

7 MR. COBB: Yeah, I think a lot of  
8 them are. I think there might be some biologists  
9 out there as well, but there are a lot of  
10 engineers that are out there in those units.

11 MS. BARKLEY: But that's not  
12 necessarily a requirement to be a field -- an  
13 inspector for Illinois EPA to go to a coal ash  
14 impoundment and inspect it for stability concerns,  
15 they don't necessarily need to be an engineer?

16 MR. COBB: They're not there to  
17 evaluate things for stability concerns. They're  
18 out there to evaluate if there's an issue with  
19 compliance with the Environmental Protection Act  
20 and the Board regulations under which we have  
21 purview.

22 As I said, DNR gets involved  
23 with the catastrophic dam safety issues. Our  
24 inspections, you know, is there runoff. You know,

1 is it -- is it in compliance with the act? Is  
2 there a threat causing or allowing pollution into  
3 the waters of the state?

4 MS. BARKLEY: I have just one more  
5 question. For the coal ash impoundments that have  
6 been grandfathered in and are not permitted or  
7 inspected by DNR's Office of Water Resources, are  
8 those on your list for inspection? Specifically,  
9 I'll just give an example. The two older ash pits  
10 at Dynegy Vermilion are not permitted nor  
11 inspected by DNR so I wonder if that is caught by  
12 your Agency inspectors.

13 MR. BUSCHER: I'm not aware of the  
14 inspection schedule.

15 MR. COBB: Well, I know we've gone  
16 out and certainly inspected that together with DNR  
17 when we're talking about that specific site in  
18 general because of its high profile nature.

19 MS. BARKLEY: As a general rule, are  
20 you going out and inspecting sites that are not  
21 inspected by DNR?

22 MS. OLSON: I don't think they're  
23 doing inspection themselves and I think they  
24 answered the question with they don't know the

1 inspection schedule.

2 MS. BARKLEY: Okay. Thank you.

3 HEARING OFFICER FOX: Ms. Barkley,  
4 any further questions on that?

5 MS. BARKLEY: No.

6 HEARING OFFICER FOX: Mr. Rao had a  
7 follow-up question.

8 MR. RAO: I just had one more and  
9 this one doesn't go to your response, but I was  
10 reading some of the changes you proposed in your  
11 revised rules. I saw the language in 841.440  
12 post-closure report and certification. There is  
13 Subsection (c).

14 Here it states that a  
15 professional engineer or a professional geologist  
16 may supervise post-closure care activities as  
17 appropriate in the Professional Engineering  
18 Practice Act or the Professional Geologist  
19 Licensing Act. I was wondering why the Agency has  
20 made this an optional requirement by saying may  
21 supervise instead of requiring supervision by a PE  
22 or a PG?

23 MR. COBB: It's a good question. It  
24 is supposed to be one or the other. It is just a

1 drafting issue.

2 MR. RAO: Because under Subsection  
3 (e) when it comes to certification it cites that  
4 the post-closure certification must be made by the  
5 Agency and must contain a certification by a  
6 professional engineer and professional geologist  
7 has been left out. I just wanted to make that  
8 clear.

9 MR. COBB: It is supposed to be  
10 specific. We apologize about that. It was a  
11 drafting error.

12 MR. RAO: Thank you.

13 HEARING OFFICER FOX: Anything  
14 further, Mr. Rao?

15 MR. RAO: No.

16 HEARING OFFICER FOX: Was there a  
17 question any of the other participants wished to  
18 pose to the Agency on the basis of their written  
19 response to the Board's questions? I see  
20 Mr. Rieser's hand.

21 MR. RIESER: Well, sure. Question  
22 six deals with the issues of a risk-based approach  
23 and in response to Subsection (a) the Agency says  
24 that -- this is on the top of page six. The

1 Agency believes that the best process for  
2 evaluating and improving a closure plan is a  
3 flexible approach whereby the Agency can use its  
4 professional judgment in evaluating site specific  
5 information characteristics.

6 The Agency does not believe a  
7 highly prescriptive, risk-based approach is  
8 appropriate or necessary, et cetera. What is the  
9 highly prescriptive, risk-based approach which the  
10 Agency has highlighted here?

11 MR. DUNAWAY: Lynn Dunaway. What  
12 the Agency was talking about was a TACO type  
13 approach where you are eliminating pathways.

14 MR. RIESER: So it's the TACO  
15 approach that you think is highly prescriptive?

16 MR. DUNAWAY: Yes.

17 MR. RIESER: Why do you believe it  
18 is highly prescriptive?

19 MR. DUNAWAY: Because it would -- as  
20 it would apply to these we felt that it would --  
21 factors that we wanted to consider or we thought  
22 should be considered when looking at impoundments  
23 we felt that it would eliminate -- eliminate the  
24 possibility of impoundments being located in

1 certain areas without taking into consideration  
2 any engineering aspects that could mitigate those  
3 risks or problems.

4 MR. RIESER: I'm sorry. How would  
5 TACO do that?

6 MR. DUNAWAY: TACO -- Part 742 TACO  
7 would not because it doesn't apply to this at all,  
8 but we were speaking in terms of something that  
9 was very TACO like where it is either you've  
10 eliminated that risk or you haven't and we thought  
11 our goal was to be able to consider engineering  
12 fixes that could protect the resource.

13 MR. RIESER: But the rules also  
14 adopt components of TACO including the use of deed  
15 restrictions and groundwater restrictions,  
16 correct?

17 MR. DUNAWAY: Those are an option at  
18 the end of a corrective action, yes.

19 MR. RIESER: And those options can  
20 be used to define the required extent of  
21 corrective action, correct?

22 MR. DUNAWAY: The goal of corrective  
23 action under this rule is to achieve the  
24 groundwater quality standards. That is the

1 primary goal.

2 MR. RIESER: Later on in the answer  
3 which I believe is on Subsection (b) and on page  
4 13 I think this is all part of the same question  
5 which is question six, the question is more  
6 specifically directed to TACO and it says the  
7 Agency does not believe that a risk-based approach  
8 would be appropriate to identify and exclude  
9 migration pathways and related human and  
10 ecological receptors when determining the  
11 appropriate method of closure and my question is  
12 since TACO is used for closing any number of types  
13 of units, including hazardous waste facilities,  
14 why can't it be used to do those things for coal  
15 ash impoundments?

16 MR. DUNAWAY: Because when we  
17 drafted our rule we wanted to more closely  
18 parallel Part 620, which is -- protects the  
19 resource and requires that a legitimate attempt be  
20 made to protect the resource as opposed to being  
21 able to say no one is using that resource, we  
22 don't need to care about it.

23 MR. RIESER: But I'm correct that  
24 TACO has a direct connection with 620 both in

1 terms of identifying the standards of 620 to be  
2 evaluated and in terms of identifying remedies as  
3 being consistent with 620, correct?

4 MR. DUNAWAY: I'm going to defer to  
5 Rick.

6 MR. COBB: I think one of the  
7 biggest differences is TACO primarily deals with  
8 removing soil, source removal, and one of the  
9 things that we've seen done here, although we're  
10 also considering full-blown removal as well, is  
11 capping and very little does anything in TACO in  
12 terms of how much you can leave in the soil that  
13 is going to protect groundwater. That is where  
14 we're saying all that detail that is laid out  
15 there, that doesn't exist for these types of  
16 units.

17 There is no soil removal. So  
18 that is a big, big difference. These could have a  
19 cap over it and that could be your remedy whereas  
20 typically under TACO you're going to do -- you're  
21 going to go through. There is a detailed set of  
22 charts that are already worked out for different  
23 soil objectives based on different site specific  
24 conditions and assumptions. That is what we mean

1 by kind of a detailed set of things already laid  
2 out. That doesn't exist for this.

3 MR. RIESER: So is it the Agency's  
4 position that the modeling that they now require  
5 in their latest proposal isn't going to be  
6 adequate to model the fate and transport of the  
7 contaminants within the closed unit and to  
8 identify the future of the movement of those  
9 materials?

10 MR. COBB: The modeling is something  
11 that, you know, we've used with GMZ's before the  
12 word TACO was even developed. So, yeah, the  
13 modeling component of it in terms of the flow and  
14 the transport after you put the cap on and you're  
15 dewatering this stuff if you're just closing it  
16 and not fully removing it. There aren't any soil  
17 cleanup objectives to plug from the TACO equations  
18 and then go into the R-26 equations to, you know,  
19 show how you're going to come into compliance.  
20 You don't have that.

21 MR. RIESER: Well, of course, TACO  
22 has a whole tier three.

23 MR. COBB: Correct. Correct.

24 MR. RIESER: It has a whole tier

1 three which allows people to use alternative  
2 modeling if the Agency is convinced that the  
3 modeling is sufficiently predictive to understand  
4 what the future fate and transport of the  
5 contaminants are and I guess my question is if the  
6 Agency has decided that there is modeling which is  
7 sufficiently predictive, why can't that be used to  
8 arrive at a TACO-like remedy?

9 MR. COBB: Because we think that  
10 what we're proposing here will work just as good  
11 or even better than that without having to go  
12 through the whole set of -- no soil removal and  
13 not the upfront exclusion of exposure routes.

14 That's what we were trying to  
15 avoid here. Specifically, some of the  
16 contaminants under TACO and this was under my  
17 pre-filed testimony is much easier to remove via  
18 treatment than say something like boron or TDS  
19 which will take a reverse osmosis plan. I think  
20 we've heard testimony on the technical  
21 infeasibility of treating that.

22 Benzene, TCE, those kinds of  
23 things can be removed by simple granular  
24 activated carbon. These types of contaminants

1 that are dissolved are very difficult to remove  
2 and it is really not -- so we were trying to  
3 protect the resource from these contaminants that  
4 are very difficult to treat or remove once the  
5 groundwater is contaminated.

6 We didn't want to go to the  
7 limit the exposure route right upfront. We wanted  
8 to do the modeling, evaluate the options, do the  
9 capping, do the closure, whatever worked and then  
10 if those things don't work you get to an acidotic  
11 level, then there is an alternative standard that  
12 is available.

13 MR. RIESER: Thank you.

14 HEARING OFFICER FOX: Nothing  
15 further then, Mr. Rieser?

16 MR. RIESER: No. Nothing further on  
17 that issue.

18 HEARING OFFICER FOX: I see,  
19 Mr. Armstrong, did you have a follow up on the  
20 Agency's written answers?

21 MR. ARMSTRONG: I had a follow-up  
22 question on question nine on design criteria.  
23 9(b) and I was wondering if the Agency could just  
24 describe in a bit of detail what they would intend

1 for an outreach period for the design standard  
2 process?

3 MR. COBB: On page 15, there is a  
4 schedule proposed there. Can you further  
5 elaborate on your question? You mean beyond what  
6 we said there?

7 MR. ARMSTRONG: Right. What would  
8 you intend the outreach component to consist of?

9 MR. COBB: Well, we would do the  
10 same thing we've been doing for regulations that  
11 we proposed for groundwater since the beginning of  
12 the Groundwater Protection Act and that is we  
13 start with the Interagency Coordinating Committee  
14 and the Groundwater Advisory Council and we -- and  
15 the Agency and we would then propose a stakeholder  
16 outreach process to obtain input. I mean, we've  
17 done that since we started working on groundwater  
18 regulations in 1988, but, yeah, a face-to-face in  
19 person meeting. We did that on this rule. We've  
20 done that on the rules I've been involved in.

21 HEARING OFFICER FOX: Anything  
22 further, Mr. Armstrong?

23 MR. ARMSTRONG: No.

24 HEARING OFFICER FOX: Mr. Rieser, I

1 saw your hand.

2 MR. RIESER: I have questions on the  
3 Agency proposal. I don't know if we're there yet.

4 HEARING OFFICER FOX: Why don't you  
5 let me ask this question, Mr. Rieser.  
6 Mr. Armstrong had asked about effectively the  
7 Board's last question to which the Agency  
8 responded in writing. Is there anyone who has a  
9 follow-up question to any of the specific  
10 responses that have been submitted by the Agency?  
11 Neither seeing nor hearing any, Mr. Rieser, if you  
12 have follow-up questions on the Agency's proposed  
13 rule language.

14 MR. RIESER: In the interest of  
15 worker safety, primarily the court reporter, would  
16 this be a good time to take a break since we've  
17 been going for a couple hours?

18 HEARING OFFICER FOX: No.

19 MR. RIESER: Okay. Fair enough.  
20 841.105(a)(3) has language that appears to say  
21 that even if a unit has a groundwater management  
22 zone and it is in compliance with the groundwater  
23 management zone that that unit still has to --  
24 still included within this process and has to

1 submit corrective action and/or closure plans, is  
2 that correct?

3 MR. COBB: That is correct.

4 Essentially, the way the groundwater management  
5 zone is designed it is a lot like the drinking  
6 water standards where let's say you're out of  
7 compliance with an MCL and then you install  
8 treatment and you meet the MCL. With the GMZ  
9 process, you get the approved GMZ, your starting  
10 point is the existing concentration. The goal is  
11 for it to go down in a downward trend and then,  
12 you know, to reach some level. Until you either  
13 reach the appropriate standard which may be done  
14 or the appropriate alternative standard, you're  
15 not in compliance with Section 620.450 yet. Once  
16 you achieve compliance with 620.450 either the  
17 numerical standard or the alternative, then you've  
18 achieved compliance. Then you're done. So it's  
19 like you meet the MCL under the drinking water  
20 standard as an analogy.

21 MR. RIESER: Is it the Agency's  
22 position that the facility that has a groundwater  
23 management zone and meets all of its standards at  
24 the edge of that groundwater management zone that

1 that facility is not in compliance with the  
2 groundwater quality standards?

3 MR. COBB: That's a good structured  
4 question. The problem is the groundwater quality  
5 within that zone that still may be moving and  
6 not -- whereas mitigating the impairment has not  
7 been concluded such that you've achieved the  
8 standard or the alternative standard under  
9 620.450, it is an area within that that's still  
10 subject to a corrective action process and is not  
11 in compliance with 620.450 yet.

12 MR. RIESER: So is this a  
13 modification of the Agency's position regarding  
14 the integration of the circumstances under which  
15 groundwater management zones can stay in place?

16 MR. COBB: No.

17 MR. RIESER: Has it always been the  
18 Agency's position that additional corrective  
19 action needs to be performed in addition to the  
20 corrective action that the Agency approved as part  
21 of the approval of the groundwater management  
22 zone?

23 MR. COBB: No. I mean, the  
24 groundwater management zone is what the corrective

1 action is that was approved as part of the  
2 corrective action zone. There is no additional  
3 corrective action. It is just the example I was  
4 giving. The corrective action wasn't completed  
5 yet that was initially approved. There was no  
6 additional corrective action beyond what had  
7 already been approved. It just hadn't been  
8 completed yet or hadn't achieved its goals yet.

9 MS. OLSON: I have a follow up.

10 HEARING OFFICER FOX: Ms. Olson, why  
11 don't you go ahead.

12 MS. OLSON: Rick, under the Agency's  
13 proposed 841.105 when it initially proposed it, do  
14 you remember if the intent was to include or  
15 exclude those sites with GMZ's in the rule?

16 MR. COBB: Exclude.

17 MS. OLSON: I'm sorry. Exclude them  
18 from the applicability of the rule?

19 MR. COBB: No. Include them in the  
20 applicability. Exclude them from the exclusion.

21 MS. OLSON: Thank you. I'm sorry.  
22 That question was very poorly written.

23 MR. COBB: It's okay.

24 MS. OLSON: Do you see the most

1 recent changes to Section 841.105(a)(3) to be a  
2 new intention or version of the Agency's rule or  
3 is simply reflecting what the Agency always  
4 intended?

5 MR. COBB: It is simply reflecting  
6 what we've always intended and the way we have  
7 always operated.

8 MS. OLSON: Was there any testimony  
9 at the last hearing that made you decide that this  
10 language was necessary?

11 MR. COBB: There was testimony given  
12 at the last hearing even today that convinces me  
13 that this is necessary to make this clear because  
14 there is obviously still some confusion.

15 MS. OLSON: And if this language  
16 wasn't here and sites or units with GMZ's at the  
17 time the rule goes into effect were excluded from  
18 this rule, do you have any idea of how many sites  
19 that would include that would be excluded from  
20 this rule?

21 MR. COBB: I think we know the  
22 number of sites that have -- we provided that in  
23 previous lists. If I'm understanding your  
24 question, it is the sites that have GMZ's approved

1 that have not yet achieved Section 620.450. We  
2 have such a list. I can't remember the number off  
3 the top of my head, but I'm sure we can find that  
4 list.

5 MS. OLSON: Do you know whether or  
6 not sites that have a corrective action process  
7 established under 620.250 of the GMZ regulations,  
8 do you know whether or not under these proposed  
9 841 -- those owners and operators can resubmit the  
10 same corrective action plan under these rules?

11 MR. COBB: Yes.

12 MS. OLSON: That's all I have.

13 HEARING OFFICER FOX: Very good.  
14 Mr. Rieser, did you have any additional questions  
15 on the Agency proposed language?

16 MR. RIESER: Yes.

17 HEARING OFFICER FOX: Please go  
18 ahead.

19 MS. ANTONIOLLI: Sorry. Are we  
20 moving off this applicability section?

21 MR. RIESER: Yes, I meant to.  
22 Please go ahead.

23 MR. ANTONIOLLI: Sorry. Ameren  
24 submitted some proposed revisions earlier in the

1 week that would affect the applicability section  
2 and also the definition section and I just wanted  
3 to ask if the Agency's had a chance to review  
4 those yet?

5 MR. DUNAWAY: Lynn Dunaway. We've  
6 read it, but we have not had a chance to discuss  
7 it and come up with an opinion on it.

8 MR. ANTONIOLLI: Okay. We can talk  
9 with you after the hearing.

10 MR. DUNAWAY: Okay.

11 HEARING OFFICER FOX: Nothing  
12 further, Ms. Antoniolli?

13 MR. ANTONIOLLI: No.

14 HEARING OFFICER FOX: Mr. Rieser,  
15 we're in order to go back to you.

16 MR. RIESER: 841.125(b) this has to  
17 do with the uses of institutional control and what  
18 it requires is institutional control consistent  
19 with the Uniform Environmental Covenants Act for  
20 an alternative instrument authorized and it says  
21 or environmental use, I assume that's for  
22 environmental uses. That's not my whole question,  
23 but I'm pausing there.

24 MR. COBB: It does appear that it

1 should be for.

2 MR. RIESER: So instrument  
3 authorized for environmental uses under Illinois  
4 law and approved by the Agency, would this  
5 alternative instrument include an Environmental  
6 Land Use Control?

7 MR. DUNAWAY: Lynn Dunaway. As long  
8 as the ELUC or, E-L-U-C, complies with the  
9 841.125(b), it could be used.

10 MR. RIESER: So was this written  
11 with the Environmental Land Use Control in mind or  
12 was there something else that -- some other type  
13 of instrument that you had in mind?

14 MR. DUNAWAY: No, we weren't really  
15 considering ELUC's when we drafted it. There was  
16 a Board question regarding Hutsonville that this  
17 was responsive to.

18 MR. RIESER: Thank you.

19 MR. KING: If I can follow up and  
20 it's not likely to have a given location of these  
21 facilities, but if you had a municipality, for  
22 instance, that had adopted the ordinance that  
23 prohibited the installation of wells for  
24 groundwater use, wouldn't that be a type of

1 alternative instrument that could be used under  
2 this rule?

3 MR. DUNAWAY: Yes.

4 MR. KING: Thank you.

5 HEARING OFFICER FOX: Anything  
6 further, Mr. King?

7 MR. KING: No.

8 HEARING OFFICER FOX: Mr. Rieser, do  
9 you have some additional questions?

10 MR. RIESER: I do. Section 841.3 --

11 MR. DUNAWAY: I had a further  
12 explanation here. Okay. With regard to the ELUC,  
13 Section 840.116(a)(3) is where the language came  
14 from for 841.125(b).

15 MR. RIESER: Turning to the next  
16 question.

17 HEARING OFFICER FOX: Mr. Rieser, I  
18 see Mr. Sylvester's hand. Can we interrupt you so  
19 he can ask a question?

20 MS. SYLVESTER: I just had a  
21 follow-up question on Subsection (e) of 841.125.  
22 So I had a follow-up question on Section 841.125.  
23 Subsection (e) says the tiered approach to  
24 corrective action objectives 35 Ill. Adm. Code 742

1 shall not be used in lieu of or not -- or to  
2 satisfy the procedures and requirements of this  
3 part. And the question I have is under Part 742  
4 in the -- 742.105, the applicability section,  
5 there is specific language that prohibits the use  
6 of TACO for landfills. Is there any thought to  
7 amend 742 to be consistent with this subsection?

8 MR. DUNAWAY: The Agency is  
9 considering that.

10 MS. SYLVESTER: Thank you.

11 HEARING OFFICER FOX: Thank you,  
12 Mr. Sylvester. Mr. Rieser, I think you had let us  
13 interrupt you for just a moment. If you are  
14 ready, we can return to you.

15 MR. RIESER: Sure. Section  
16 841.210(e)(6) and this is the alternative impact  
17 assessment which describes certain things that  
18 have to be included as part of the corrective  
19 action plan and I think there is identical  
20 language in -- is it 410 that deals with the  
21 closure plan? And my question goes to what it is  
22 called, alternative impact assessment, and whether  
23 the intent of this language is really sort of a  
24 remedy selection assessment, in other words,

1 you're looking at different potential approaches  
2 and putting costs and environmental benefits on  
3 those different approaches and then describing why  
4 the approach that the owner or operator selected  
5 is the appropriate approach, is that basically  
6 what this is intended to achieve?

7 MR. COBB: It's somewhat modeled  
8 after the antidegradation assessment process and  
9 that is really the intent without --

10 MR. RIESER: What do you mean by  
11 that?

12 MR. COBB: What is meant by that is  
13 under 35 Ill. Adm. Code 302.105(f) if you go to  
14 that section, this looks almost exactly like that.  
15 It is very similar. That is what is meant or  
16 that's what I meant by that.

17 MR. RIESER: Okay. Nothing further.

18 HEARING OFFICER FOX: I see  
19 Mr. Armstrong's hand. We can see if he has a  
20 follow-up question.

21 MR. ARMSTRONG: I had one follow-up  
22 question on that subsection.

23 MS. BARKLEY: I just was wondering  
24 if dewatering of a coal ash surface impoundment

1 would fall under this alternative impact  
2 assessment?

3 MS. FRANZETTI: I'm sorry. While  
4 you're looking at that, what was the --

5 MS. BARKLEY: Dewatering.

6 MS. FRANZETTI: -- citation at the  
7 very end?

8 MS. BARKLEY: I'm sorry. On page  
9 30, under 841.310, it is (e)(6) the alternative  
10 impact assessment section. I'm just wondering if  
11 dewatering the liquid that would come from  
12 dewatering of coal ash impoundment would fall  
13 under this assessment?

14 MS. OLSON: I'm confused. You mean  
15 like as a standalone closure alternative or what  
16 are you referring to?

17 MS. BARKLEY: I'm wondering if that  
18 water would be considered for potential impact on  
19 surface water or groundwater would be identified  
20 and characterized specifically if dewatering is  
21 part of the proposed corrective action plan or  
22 closure plan, would that be covered under this  
23 alternative impact assessment?

24 MR. COBB: It depends on what is

1 proposed. Once again, if you close by removal  
2 then -- and if you were going to take it to a  
3 landfill, then you're going to have to dewater it  
4 just due to the instability of the material  
5 itself. To avoid a disaster, you're going to want  
6 to dewater it. So it depends on what is chosen as  
7 the alternative.

8 MS. BARKLEY: So if dewatering is  
9 part of the corrective action plan or the closure  
10 plan, would that be evaluated for potential  
11 impact?

12 MR. COBB: Yeah, I think under (b).  
13 (b) or (c) really. I mean, that's the way I was  
14 reading it.

15 MS. BARKLEY: Okay. Thank you.

16 HEARING OFFICER FOX: Mr. Rieser, I  
17 think we're in order to return to you if you had a  
18 question.

19 MR. RIESER: Yes. On Section  
20 841.440(a), which has to do with the duration of  
21 post-closure care, the Agency appears to have  
22 stricken from its description of how one complies  
23 with the groundwater quality standards, the  
24 ability to meet the standards in a groundwater

1 management zone and I was asking why the Agency  
2 did that?

3 MR. COBB: I think it gets back to  
4 that clarification and interpretation point (a)(1)  
5 under -- if you go to the 620.450(a), you either  
6 meet the applicable standard, which is number one,  
7 or, two, you -- you know, you go to the  
8 alternative and compliance beyond the management  
9 zone is with the applicable class, is also the  
10 point of one whereas two is at the end point.

11 MR. RIESER: So this is part and  
12 parcel of the exclusion of consideration of  
13 groundwater management zone at the initial point?

14 MR. COBB: To clear up what I think  
15 is confusion.

16 MR. RIESER: I understand.

17 HEARING OFFICER FOX: Mr. Rieser, I  
18 saw Mr. King's hand. Mr. King, did you have a  
19 question?

20 MR. KING: Yes. Mr. Cobb, so this  
21 doesn't represent a change in the way the  
22 groundwater management zone and classes is  
23 administered, but this is a clarification in how  
24 it would operate within the context of these

1 rules?

2 MR. COBB: Absolutely.

3 MR. KING: Thank you.

4 HEARING OFFICER FOX: Anything  
5 further, Mr. King?

6 MR. KING: No.

7 HEARING OFFICER FOX: Thank you very  
8 much. Mr. Rieser, did you have another question?

9 MR. RIESER: No, I didn't.

10 HEARING OFFICER FOX: I think I  
11 understood that. We had at the top of the day --  
12 let me check, first of all, to make sure there  
13 were no follow-up questions for the Agency's  
14 written responses or proposed amendments to the  
15 rule. I'm neither seeing nor hearing any, Ms.  
16 Olson. Apparently, that look was well-founded.

17 We had at the top of the day  
18 four chief things to exhaust in the course of this  
19 hearing. First, The Environmental Group's answers  
20 to the Agency's questions at which there were, I  
21 believe, 93. I believe, Ms. Olson, you indicated  
22 the Agency's follow ups were complete and I  
23 believe all the other participants had exhausted  
24 those follow ups as well.

1                   Secondly, we wanted to address  
2 The Environmental Group's answers to the Agency's  
3 questions directed specifically to Ms. Barkley and  
4 Dr. Soderberg. I believe you had indicated those  
5 had been exhausted and the other participants had  
6 also exhausted their questions based on that.

7                   Thirdly, we also wanted to  
8 address The Environmental Group's answers to the  
9 Board's questions that had been filed both on June  
10 11th and for Ms. Barkley on April 30th and we  
11 addressed those including all follow ups and,  
12 finally, we wanted to address the Agency's  
13 response to the Board's questions which you had  
14 filed on Thursday, the 17th. The Board has no  
15 further questions on the basis of that and I think  
16 it's clear that no one else had any additional  
17 follow ups.

18                   That brings us to the end for  
19 the purposes of these proposals to the testimony,  
20 the pre-filed questions and pre-filed answers.  
21 Mr. Armstrong, I saw your hand. Let me do this.  
22 I understand that you have some procedural issues  
23 to address. We can turn to those in just a  
24 moment. What I'd like to do first is address the

1 issue of an economic impact statement and then we  
2 can turn to you, Mr. Armstrong, and then go off  
3 the record to discuss the procedural issues  
4 chiefly relating to the deadline for filing  
5 post-hearing comments and responses thereto, but  
6 let me go through this boilerplate, first of all.

7                   Section 27(b) of the  
8 Environmental Protection Act provides that the  
9 Board must request that the Department of Commerce  
10 and Economic Opportunity conduct an Economic  
11 Impact Study of proposed rules before the Board  
12 adopts them. The Board must then make the  
13 Economic Impact Study or the department's  
14 explanation for not conducting one available to  
15 the public at least 20 days before a public  
16 hearing. In a letter dated November 18th, 2013,  
17 the Board's chairman Dr. Deanna Glosser did  
18 request that DCEO conduct an Economic Impact Study  
19 of this rulemaking proposal and specifically  
20 requested a response no later than January 31st of  
21 2014. To date, however, the Board has received no  
22 response from DCEO to this request. Is there  
23 anyone who would like to testify regarding either  
24 the Board's request or DCEO's response thereto?

1 I am not surprised neither to  
2 see nor to hear any interest in doing so. So we  
3 can turn to you, Mr. Armstrong. I see that you  
4 had some of the exhibits and/or attachments that  
5 you had submitted with your written responses that  
6 you wished to move into the record as hearing  
7 exhibits, am I correct on that point?

8 MR. ARMSTRONG: I do. I do. I have  
9 all the exhibits that were submitted attached to  
10 our pre-filed answers and I wonder if The  
11 Environmental Groups might enter them as a group  
12 exhibit?

13 HEARING OFFICER FOX: I think as  
14 much as I might hate to say this, Mr, Armstrong,  
15 for the purposes of citation and a Board opinion  
16 or order or other references to those that it does  
17 make more sense to give unique exhibit numbers to  
18 them, but let me ask you this. Is it the case  
19 that you had supplied electronic copies, CD or  
20 other similar medium, to other participants in the  
21 rule?

22 MR. ARMSTRONG: Yes, that's correct.

23 HEARING OFFICER FOX: Then let's  
24 start with the first of those that you wish to

1 move into the record as hearing exhibits and get  
2 underway with that process.

3 MR. ARMSTRONG: Okay. Thank you.

4 We have Board's Exhibit A and B to -- The  
5 Environmental Group's responses to the Board's  
6 questions. I would move to admit Exhibit A as --

7 HEARING OFFICER FOX: Number 58.

8 MR. ARMSTRONG: -- No. 58.

9 HEARING OFFICER FOX: Mr. Armstrong  
10 has moved to admit as Exhibit No. 58 a document  
11 entitled Regulatory Impact Analysis for EPA's  
12 Proposed RCRA Regulation of Coal Combustion  
13 Residues Generated By The Electric Utility  
14 Industry that was submitted with the written  
15 responses by The Environmental Groups as Board  
16 Exhibit No. A.

17 Is there any response or  
18 objection to the motion? Neither seeing nor  
19 hearing any, Mr. Armstrong, it will be so marked  
20 and admitted as Exhibit No. 58.

21 (Document marked as Hearing  
22 Exhibit No. 58 for  
23 identification.)

24 MR. ARMSTRONG: Exhibit B to The

1 Environmental Group's responses to the Board's  
2 pre-filed questions Appendix for Regulatory Impact  
3 Analysis for EPA's Proposed RCRA Regulation of  
4 Coal Combustion Residues Generated by the Electric  
5 Utility Industry. I would move to admit this as  
6 Exhibit 59.

7 HEARING OFFICER FOX: You have heard  
8 Mr. Armstrong's motion to admit as Exhibit No. 59  
9 the document the title of which I will not repeat  
10 in the interest of brevity that was filed with the  
11 written responses of The Environmental Groups as  
12 Board Exhibit B.

13 Is there any response or  
14 objection to the motion? Neither seeing nor  
15 hearing any, Mr. Armstrong, it will be admitted as  
16 Hearing Exhibit 59.

17 (Document marked as Hearing  
18 Exhibit No. 59 for  
19 identification.)

20 MR. ARMSTRONG: Exhibit B to The  
21 Environmental Group's responses to the Agency's  
22 pre-filed questions High Resolution Pore Water  
23 Sampling Near the Groundwater Surface Water  
24 Interface, I would submit this as Exhibit 60.

1 HEARING OFFICER FOX: Sixty.

2 Mr. Armstrong, of course, as you have heard has  
3 moved to admit as Exhibit No. 60 the document  
4 regarding High Resolution Pore Water Sampling  
5 filed on the 17th as Agency Exhibit B.

6 Is there any objection or  
7 response to the motion? Neither seeing nor  
8 hearing any, Mr. Armstrong, it is marked and  
9 admitted as Exhibit No. 60.

10 (Document marked as Hearing  
11 Exhibit No. 60 for  
12 identification.)

13 MR. ARMSTRONG: Agency Exhibit C  
14 Coal Combustion Residue Management in Illinois. I  
15 would move to admit this as Exhibit 61.

16 HEARING OFFICER FOX: Again, you've  
17 heard Mr. Armstrong's motion to admit this  
18 document entitled Coal Combustion Residue  
19 Management in Illinois filed on the 17th as Agency  
20 Exhibit C.

21 Any response or objection to the  
22 motion? Neither seeing nor hearing any, it will  
23 be admitted as Exhibit 61.

24

1 (Document marked as Hearing  
2 Exhibit No. 61 for  
3 identification.)

4 MR. ARMSTRONG: Exhibit D to The  
5 Environmental Group's responses to the Agency's  
6 pre-filed questions entitled Coal Power Plant Uses  
7 Ellicott Series 370 Dredge to Produce Four  
8 Beneficial Use Materials. I move to admit this as  
9 Exhibit 62.

10 HEARING OFFICER FOX: You have heard  
11 Mr. Armstrong's motion to admit as Exhibit 62 the  
12 document the title of which begins Coal Power  
13 Plant Uses Ellicott Series 370 Dredge. It was  
14 filed as Agency Exhibit D on the 17th.

15 Any response or objection to the  
16 motion? Neither seeing nor hearing any,  
17 Mr. Armstrong, it is admitted as Exhibit No. 62.

18 (Document marked as Hearing  
19 Exhibit No. 62 for  
20 identification.)

21 MR. ARMSTRONG: And The  
22 Environmental Group's Exhibit E to the responses  
23 to the Agency's questions entitled Ellicott  
24 Dredges 370 HP Dragon Cutterhead Dredge, we move

1 to admit that as Exhibit 63.

2 HEARING OFFICER FOX: Sixty-three is  
3 correct. You've heard Mr. Armstrong's motion to  
4 admit the document he just described filed on the  
5 17th as Agency Exhibit E as Exhibit 63.

6 Any objection or response?

7 Neither seeing nor hearing any, Mr. Armstrong, it  
8 is admitted as Exhibit 63.

9 (Document marked as Hearing  
10 Exhibit No. 63 for  
11 identification.)

12 MS. FRANZETTI: Mr. Fox, if I may,  
13 we all got copies of these as Mr. Armstrong  
14 indicated electronically and I would move that  
15 given we've all had an opportunity to see them  
16 that you don't have to keep repeating it all and  
17 asking if we have an objection. I will state for  
18 the record Midwest Gen has no objection. So you  
19 can just keep granting his motion and does anybody  
20 else object?

21 HEARING OFFICER FOX: Let's do this,  
22 Mr. Armstrong. I suspect I know precisely what  
23 you're about to do. Why don't you make a motion  
24 to admit all of the remaining documents in your

1 hand.

2 MR. ARMSTRONG: Yes.

3 HEARING OFFICER FOX: And we can see  
4 in totality if there is any objection to the  
5 admission of those and we can admit it appears to  
6 be about 12 or 15 documents with a single motion  
7 expecting as you've indicated, Ms. Franzetti, that  
8 there is no opposition to those.

9 MR. ARMSTRONG: I move to admit  
10 Exhibit's A through Q of The Environmental Group's  
11 responses to pre-filed questions to -- the  
12 Agency's pre-filed questions to Traci Barkley as  
13 the remaining exhibits in this proceeding.

14 HEARING OFFICER FOX: You've heard  
15 Mr. Armstrong's motion to admit I believe they are  
16 entitled Barkley Exhibit's A through Q beginning  
17 with Exhibit No. 64 for Exhibit No. A and running  
18 through what I suspect is approximately Exhibit  
19 No. 78 for Exhibit Q.

20 Is there any objection on a  
21 single motion to admitting those into the record  
22 as hearing exhibits? Neither seeing nor hearing  
23 any, they will be so marked and admitted  
24 consecutively, numerically, according to the

1 letter designations of those, Mr. Armstrong.

2 (Documents marked as Hearing  
3 Exhibit No.'s 64-78 for  
4 identification.)

5 HEARING OFFICER FOX: There will be  
6 a cumulative exhibit list prepared and submitted  
7 into the Board's docket and viewable on COOL so  
8 that it will be clear precisely what the exhibit  
9 numbers for each of the documents submitted by  
10 Ms. Barkley with her comments are.

11 Any further questions on these?  
12 You've suggested a way, Ms. Franzetti, to simplify  
13 that. I'm sure no one wanted to hear my voice --

14 MS. FRANZETTI: You're welcome.  
15 Thank you for the cumulative list that will  
16 follow.

17 HEARING OFFICER FOX: It grows more  
18 lengthy, but that will be the end of it.

19 Are there any further procedural  
20 issues before we go off the record to talk about  
21 deadlines for post-hearing comments? Neither  
22 seeing nor hearing any, Steve, if we can go off  
23 the record.

24

1 (Whereupon, a break was taken  
2 after which the following  
3 proceedings were had.)

4 HEARING OFFICER FOX: The  
5 participants having gone off the record briefly to  
6 discuss procedural issues we're prepared to  
7 adjourn in just a moment with the following  
8 clarification. Copies of the transcript of  
9 today's hearing are expected to be available no  
10 later than Tuesday, August 5th of 2014. As soon  
11 as the Board has received a copy of that  
12 transcript it will post it to the clerk's office  
13 online, or COOL, under this docket number 14-10.  
14 From COOL, it can be viewed, downloaded and  
15 printed.

16 The participants did agree to  
17 post-hearing deadlines, the first of which is that  
18 responses to questions or requests for information  
19 that arose at hearing today are due in writing to  
20 the Board's clerk on Tuesday, August 19th. The  
21 mailbox rule will not apply to that filing and  
22 those responses will be due in the clerk's office  
23 by 4:30 on that date.

24 In addition, the post-hearing

1 comments from the participants will be due on or  
2 before Monday, October 20th of 2014 and, again,  
3 the mailbox rule will not apply at the filing of  
4 those comments and they will be due in the Board's  
5 clerk's office at 4:30 on that day. In both  
6 cases, in the instance of both of those deadlines,  
7 electronic filing is permitted and if anybody has  
8 any questions about that, they may certainly  
9 direct it to the Board's clerk who will certainly  
10 assist them with those.

11 If anyone has any questions  
12 about procedural aspects of this rulemaking, the  
13 contact information both for the clerk and for the  
14 Hearing Officer is listed on the Board's web page.

15 Are there any other issues that  
16 need to be addressed at this time? I am certain  
17 that I speak for the Board members since there  
18 appear to be no further questions or comments in  
19 thanking particularly the witnesses. We've had an  
20 extensive record and we certainly had some robust  
21 discussion and we look forward to seeing your  
22 comments and, with that, we can adjourn. Thank  
23 you, all.

24

1 STATE OF ILLINOIS )  
2 ) SS.  
3 COUNTY OF COOK )  
4

5 I, Steven Brickey, Certified Shorthand  
6 Reporter, do hereby certify that I reported in  
7 shorthand the proceedings had at the trial  
8 aforesaid, and that the foregoing is a true,  
9 complete and correct transcript of the proceedings  
10 of said trial as appears from my stenographic  
11 notes so taken and transcribed under my personal  
12 direction.

13 Witness my official signature in and for  
14 Cook County, Illinois, on this \_\_\_\_\_ day of  
15 \_\_\_\_\_, A.D., 2014.

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\_\_\_\_\_  
STEVEN BRICKEY, CSR  
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CSR No. 084-004675



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