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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
COAL COMBUSTION WASTE (CCW)) R14-10
COAL COMBUSTION WASTE (CCW) AND SURFACE IMPOUNDMENT POWER GENERATING) (Rulemaking-Water)
POWER GENERATING) CLERK'S OFFICE
FACILITIES: PROPOSED NEW)
35 ILL. ADM. CODE 841	JUL - 1 2014

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 19th day of June, 2014, commencing at the hour of 9:00 a.m.

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HEARING OFFICER FOX: The hour of 9:00 having arrived, I want to reconvene this hearing. The second day of the third hearing in the docket entitled Coal Combustion Waste CCW and Surface Impoundments at Power Generating Facilities Proposed New 35 Ill. Adm. Code 841 docketed as rulemaking 14-10.

My name again for the record is

Tim Fox and I am the Hearing Officer and aside

from one quick announcement I'd like to go right

to the point where we left off in our order of

proceedings, which is questions by Ms. Franzetti

on the basis of The Environmental Group's proposed

amendments to the Agency's proposal.

The one announcement I do want to make and candidly repeat is that the Board will hold its regularly scheduled meeting in this room beginning at 11:00 a.m. so that at approximately 10:45 we will recess so that can take place here. Certainly you are free to remain in the room for what is of course a public meeting, but I will let you know then when we will plan to resume after the Board meeting is over.

With that, are there any

questions about our procedural steps at this point? Mr. Armstrong?

MR. ARMSTRONG: We had two documents from yesterday that we'd like to enter as exhibits.

HEARING OFFICER FOX: Very good. I think you had referred to those yesterday. Why don't we turn to that and address that briefly, Mr. Armstrong. Why don't you let us know what they are first.

MR. ARMSTRONG: Yes. The first document is a consent decree in Application Voices versus McCarthy. It is a case from the United States District Court for the District of Columbia. This is the consent decree that we referred to yesterday involving the US EPA's proposed rules on coal ash and under the decree The EPA Administrator shall, by December 19, 2014, sign for publication in the Federal Register a notice taking final action regarding EPA's proposed revision of RCRA Subtitle (d) regulations pertaining to coal combustion residuals.

HEARING OFFICER FOX: Let the record reflect that that has been distributed to the

Page 6 1 participants. Is there a motion you'd like to 2 make with regard to that document, Mr. Armstrong? 3 MR. ARMSTRONG: Yes, we would move 4 to admit it as Exhibit --5 HEARING OFFICER FOX: Fifty-three 6 would be the next consecutive one. 7 MR. ARMSTRONG: Thank you. 8 HEARING OFFICER FOX: You've heard 9 the motion to admit the consent decree that he has 10 just described as Exhibit No. 53 in this 11 proceeding. Is there any objection? Neither 12 seeing nor hearing any, Mr. Armstrong, it is 13 marked and admitted as Exhibit 53. 14 (Document marked as Hearing 15 Exhibit No. 53 for 16 identification.) 17 MR. ARMSTRONG: We also have the 18 Springfield City Water Light & Power, an 19 environmental compliance study that was entered 20 yesterday as an exhibit, a table of contents from 21 that study and we would move to admit that as 22 Exhibit No. 54. 23 HEARING OFFICER FOX: Mr. Armstrong, 24 just a moment for the distribution of those.

Mr. Armstrong, it looks like the distribution is complete. Do you have a motion you'd like to make with regard to that document?

MR. ARMSTRONG: Yes, we would move to admit it as Exhibit 54.

HEARING OFFICER FOX: You have heard the motion to admit as Exhibit 54 the document entitled Table of Contents. Is there any objection to the motion? Neither seeing nor hearing any, Mr. Armstrong, it is marked and will be admitted as Exhibit 54. Does that exhaust the documents that you had referred to?

(Document marked as Hearing Exhibit No. 54 for identification.)

MR. ARMSTRONG: Yes.

HEARING OFFICER FOX: Very good.

That leaves us, Ms. Franzetti, ready to turn to you. When we adjourned yesterday at 6:00 p.m. after a marathon yesterday, we appreciate your efforts in that regard, Mr. Rieser had indicated that he had resolved all of his questions that he had pre-filed and that left us ready to turn to you to begin posing your pre-filed questions.

Page 8 1 Why don't we swear in the 2 witnesses for the environmental groups and turn 3 back for just a second. 4 WHEREUPON: 5 ANDREW ARMSTRONG and TRACI BARKLEY 6 called as a witness herein, having been first duly 7 sworn, deposeth and saith as follows: 8 HEARING OFFICER FOX: Ms. Franzetti, 9 we're all set. 10 MS. FRANZETTI: Good morning, 11 Mr. Fox and Board Members. Good morning, 12 Mr. Armstrong and Ms. Barkley. 13 MR. ARMSTRONG: Good morning. 14 MS. OLSON: I'm going to skip 15 question one. I think it's already been answered. 16 Moving to question two regarding groundwater 17 quality standards Section 841.125 of the proposed 18 rules. 19 What is the intended purpose and 20 meaning of the proposed revision to Section 21 841.125 groundwater quality standards that

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established in Section 841.130 of this part, end quote?

MR. ARMSTRONG: The Environmental Groups would strike this language. It was intended to respond to the Agency's originally proposed language that would have delayed the compliance period for one year for existing impoundments, but now the compliance period begins with the adoption of the rule.

MS. FRANZETTI: You are withdrawing this proposed revision?

MR. ARMSTRONG: Correct.

MS. FRANZETTI: Moving to question three. On compliance period Section 841.130 in your June 6th, 2014, comments regarding the proposed requirement to submit a closure plan and post-closure care plan within one year of the rule's effective date, you explain that such a requirement is justified because of the existence of, quote, inadequately lined ponds, end quote, in Illinois.

Why is the requirement to submit closure and post-closure care plans within one year of the rule's effective date justified for

CCW surface impoundments that are adequately lined?

MR. ARMSTRONG: We have proposed that closure and post-closure care plans be required within one year for two central reasons. First, we're asking the Board to consider adopting financial assurance requirements for CCW surface impoundments and the closure plan would serve as a basis for those requirements. Second, the closure plan would provide certainty about the manner in which the impoundment will be closed and the CCW ultimately disposed and we believe this is important because it would allow for issues regarding the method of closure and ultimate disposal to be considered upfront.

MS. FRANZETTI: Question four. For CCW surface impoundments which have ash periodically removed and are not used as waste disposal sites, is your position the same regarding the proposed requirement to submit closure and post-closure plans within one year of the rule's effective date?

MR. ARMSTRONG: Yes, we request that closure plans be submitted first to establish

that, in fact, the intent is to close the impoundment by the removal of coal ash and, second, to serve as a basis for financial assurance.

MS. FRANZETTI: Five, given The Environmental Group's proposed revisions relating to the preference for closure by removal of CCW, is it also your intent that these closure and post-closure care plans must be based on the assumption that all CCW will be removed from an impoundment?

MR. ARMSTRONG: No, it is our intent that closure and post-closure care plans be submitted and proved by the Agency and if the Agency approves closure in place, then that is what the approved closure and post-closure care plan would provide.

MS. FRANZETTI: I believe you answered question six yesterday. Moving to question seven on alternative cause demonstrations Section 841.305. In The Environmental Group's June 6th comments on pages 16 to 17, it is stated that the Agency's proposed rule on alternative cause demonstrations conflicts with the

groundwater quality standards because the Part 620 Subpart (d) regulations in Section 620.410 and 620.40 provides that if a constituent is elevated due to natural causes, there is no exceedance.

How does The Environmental Groups proposed revisions to Section 841.305 address or resolve this alleged conflict between proposed Section 841.305 and the Part 620 Subpart (d) regulations?

MR. ARMSTRONG: So The Environmental Group's comments reflected an exchange between the Agency and Dr. Soderberg at the last hearing and we came away with the impression that the Agency interpreted the interaction between the proposed rules and the groundwater quality standards in Part 620 Subpart (d) in such a way if the concentration of a chemical constituent is believed to be elevated due to natural causes, then an owner or operator would not need to perform an alternative cause demonstration if there is an exceedance of the applicable numeric standards for that constituent from Part 620 Subpart D.

So, in our view, that would be

problematic because one of the alternative causes that an owner or operator is required to establish under 841.305 is natural causes. If you can effectively say at the front end, I don't need to perform an alternative cause demonstration to show natural causes because natural causes have increased the applicable standard at my site that seems to write natural causes out of the alternative cause section.

And we can suggest some language for consideration, specifically just a new second sentence in Section 841.300, quote, for purposes of this section concentrations of chemical constituents due to natural causes are not considered in determining the applicable groundwater standard.

MS. FRANZETTI: Would you say that one more time?

MR. ARMSTRONG: Sure. For purposes of this section referring to 841.300, concentrations of chemical constituents due to natural causes are not considered in determining the applicable groundwater standard.

MS. FRANZETTI: How does that

resolve this issue?

MR. ARMSTRONG: So in 841.300, this is the section on confirmation sampling and the first sentence provides "If the results of groundwater monitoring conducted pursuant to this part show an exceedance of the groundwater quality standards in 35 Ill. Adm. Code 620 at the compliance points, the owner or operator shall confirm the detection by resampling the monitoring well or wells." This idea of the exceedances then is carried through to 841.305 on an alternative cause demonstration.

So our point is if at 841.300 the standard that you're using to determine whether it is an exceedance takes into account natural causes, that creates a problem at the front end here. So if you take out the notion that natural causes can increase the groundwater quality standard, for example, in 620.410, for example, which refers to natural causes potentially allowing for a higher standard, then you remove the difficulty that we came away from -- came away with at the last hearing.

MS. FRANZETTI: Moving to question

1 eight. Surface impoundment closures. Section 2 841.400. The proposed revisions to Section 3 841.400(b) require closure by removal of all 4 impounded coal combustion waste, quote, unless the 5 Agency determines that removal is technically 6 feasible or would not result in greater protection 7 of human health and the environment, end quote. Subpart (a), what criteria is the Agency to use in 8 9 determining whether removal, quote, would not 10 result in greater protection of human health and 11 the environment?

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MR. ARMSTRONG: As I mentioned yesterday, 35 Ill. Adm. Code 811.325 relates to the selection of corrective action for municipal solid waste landfills and uses the term protective of human health and the environment. That regulation sets out a number of considerations that should be taken into account when determining whether a remedy is protective of human health and the environment and we would submit that similar criteria could be used by the Agency to determine whether a particular -- whether removal would result in greater protection of human health and the environment.

1 MS. FRANZETTI: (b), how will the 2 level of protection of human health and the 3 environment provided by closure in place versus 4 closure by removal be determined? 5 MR. ARMSTRONG: Well, I think that 6 again with reference to those criteria you would 7 look at what impacts you could expect from closure in place from, one, impacts on groundwater and, 8 9 two, potential threats to surface water and 10 compare those to the impacts on groundwater and 11 surface water that would be expected from closure 12 by removal. Did I say closure by removal twice? 13 MS. FRANZETTI: I'm not sure. 14 MR. ARMSTRONG: I would say you 15 would want to compare closure by removal and 16 closure in place in terms of their impacts on 17 surface water and groundwaters. 18 MS. FRANZETTI: And that is a 19 decision that you are comfortable leaving to the 20 judgment of the Agency? 21 MR. ARMSTRONG: That is correct. 22 With the exception of the second part of the rule

which you've talked about before which are the

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three presumptions.

MS. FRANZETTI: Turning to sub question C. If the subject CCW impoundment is adequately lined, under what types of circumstances would closure by removal result in, quote, greater protection of human health and the environment, end quote?

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MS. BARKLEY: I think we need to look back to 841.400 Section (b) specifically when the unit is located in a 100-year floodplain. think that's a clear example of when an adequately lined CCW impoundment is not enough when they exist in a floodplain to leave the coal ash -- the coal ash in place. That's when we're asking for closure by removal because when you have coal ash put in a floodplain you can have wear and tear on the retaining structure from the movement of the water, you can have flooding of the river itself over the surface into the adequately lined coal ash pit and you also can have rising of the flood waters back into the water table which can have reverse action on the liner of the coal ash pit and contribute to weaknesses in the liner of the otherwise adequately lined coal ash pit.

MS. FRANZETTI: And do you have any

Page 18 real life examples of that occurring with a closed 1 2 in place adequately lined ash pond? 3 MS. BARKLEY: With an already closed 4 in place? 5 MS. FRANZETTI: Yes. These 6 potential impacts you're talking about in your 7 answer, any real life examples of that occurring 8 with an ash pond -- that ash pond that has a 9 synthetic liner representative of current state-of-the-art liners and has been closed in 10 11 place and capped, vegetative layer placed on top 12 of it. 13 MS. BARKLEY: I am not aware in 14 Illinois any lined coal ash pits that have been 15 closed in place. 16 MS. FRANZETTI: Not limiting it to 17 Illinois. Anywhere just as you brought an 18 example. 19 MS. BARKLEY: I will have to look 20 into that. 21 MS. FRANZETTI: Okay. Moving to 22 (d). If a CCW impoundment is adequately lined, 23 why is a presumption in favor of closure by removal reasonable? 24 Same answer regarding

Page 19 1 floodplain? 2 MS. BARKLEY: Same answer. 3 MS. FRANZETTI: (e). When a CCW 4 impoundment is adequately lined, why is the 5 proposed presumption in 841.400(b)(2) that closure 6 by removal is more protective of human health and 7 the environment where the unit is located in a 8 100-year floodplain? Would your answer be the 9 same as the answer you just gave about the impacts 10 of being located in a floodplain? 11 MS. BARKLEY: Yes. And I think 12 largely when you have coal ash located in close 13 proximity to water you're increasing the risk of 14 breach, flood, discharge and leaking. 15 MS. FRANZETTI: Just simply because 16 it is located in close proximity to water? 17 MS. BARKLEY: To a river. Sorry. 18 MS. FRANZETTI: To a river? 19 MS. BARKLEY: To a river. 20 MS. FRANZETTI: And can you give us 21 some idea of what you understand the phrase as you 22 use it close proximity to mean in terms of 23 distance from the river?

I think we've refined

MS. BARKLEY:

our responses from May's hearing to qualify that when we're talking about floodplain, we're talking about the 100-year floodplain. Just in general and I think we'll get into this a little bit later with Lesley's findings is that when you have coal ash that is close proximity to -- it's in the water table or in a floodplain or is in direct contact with the water table you allow for those constituents to be mobilized and released into the environment. So removing coal ash from the floodplain or out of the water table allows for greater protection of human health and the environment.

MS. FRANZETTI: What I'm trying to understand is what you mean by close proximity. Is that within less than a quarter of a mile from a river, is it within less than an eighth of a mile from a river?

MS. BARKLEY: I think in this response we're saying close proximity. I'll qualify that by saying within the 100-year floodplain.

MS. FRANZETTI: I'm not sure -- now, I'm actually a little more confused. So are you

1 saying it has to be both within a 100-year 2 floodplain and in close proximity to a river? 3 MS. BARKLEY: I probably should not 4 have said close proximity. Largely what I meant 5 to say is all my qualifying statements and when 6 you have coal ash that is either in contact with 7 coal ash, able to be in contact with coal ash 8 either in a water table or a floodplain, that 9 100-year floodplain -- and I meant that to be in close proximity. That is where you start having 10 11 more opportunity to damage or impact human health 12 and the environment because you're mobilizing 13 those constituents. So I should not have said 14 probably close proximity. I'll pull that back and 15 refer more to the 100-year floodplain. 16 MS. BUGEL: In the answer, you just 17 said coal ash and contact with coal ash and I 18 don't think that's what you meant. 19 MS. BARKLEY: Coal ash and contact 20 with water. 21

MS. FRANZETTI: Subparagraph (f).

If the level of protection afforded by closure in place and closure by removal is substantially equivalent, why is it not appropriate to consider

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the reasonableness of the cost of each closure option?

MR. ARMSTRONG: Under our proposal,

I don't -- I view it as if the level of protection
afforded by closure in place and closure by
removal is substantially equivalent, then closure
by removal would not be required. The standard in
the rule is closure by removal has to be more
protective, not equivalent.

Ms. Olson I think indicated that she had a follow up. If we can turn to her for a moment.

MS. OLSON: You have one more question and then I'll just do a series on this whole line when you finish.

MS. FRANZETTI: Okay. Moving to Subparagraph (g). Under this proposed revision, is the Agency authorized to determine that closure by removal would present environmental concerns such as adverse effects caused by the removal of large amounts of CCW impact on the community from the removal operations and the ultimate offsite disposal of the CCW, which justifies closure in place?

MR. ARMSTRONG: Yes, we believe that the Agency is certainly permitted to take into account those considerations and assessments of technical feasibility.

MS. FRANZETTI: I have just one more additional question. Given that under the proposed federal CCR rule it is unknown today whether or not coal ash is going to be regulated under Subpart (c) RCRA as a hazardous waste or Subpart (d) as a nonhazardous waste --

MR. ARMSTRONG: Right.

MS. FRANZETTI: -- in making this
proposed rule language with regard to the
presumption in favor of removal, did you give
consideration to whether or not your proposed
language would change if the federal rule in its
final form deems coal ash to be a hazardous waste?

MR. ARMSTRONG: Whether the language
of this rule would change or you mean the language
of our proposal?

MS. FRANZETTI: Correct. In other words, we're basing it on the presumption that coal ash will be categorized as a nonhazardous waste and, if so, would your thinking change on

this proposed revision if, in fact, the federal rule characterizes coal ash as a RCRA hazardous waste?

MR. ARMSTRONG: With respect to parts (a), (b) and (c), the presumptions, the regulation of the CCW as a hazardous waste or waste under Subtitle (d) did not play a role in our development of those provisions. Our intent there was that coal ash, however it is regulated, if it is stored in those conditions presents a threat to human health and the environment. With respect to the greater protection of human health and the environment technical feasibility, I think those considerations are flexible enough to accommodate whatever regulatory scheme is ultimately proposed for CCW.

MS. FRANZETTI: Because --

MR. ARMSTRONG: Go ahead.

MS. FRANZETTI: And is that in part because -- or related to your answer to my question in Subparagraph (g) that the Agency can consider things like the adverse effects caused by removal of large amounts of CCW as well as offsite disposal of it?

MR. ARMSTRONG: Yes, I believe those can be considered by the Agency in the technical feasibility determination.

MS. FRANZETTI: Okay. Moving onto -- I'm sorry. Yes?

MS. OLSON: Just a few.

MS. FRANZETTI: Ms. Olson?

MS. OLSON: Thank you. I want to kind of go back to some of the things that you talked about in response to Ms. Franzetti's questions. You referenced 811.325. And am I correct to say that you're saying that the Agency should look to 811.325 to determine what is meant by greater protection of human health and the environment?

MR. ARMSTRONG: I believe the factors that are set out in 811.325 could be used by the Agency to determine what is meant by protective of human health and the environment. If the Agency would find it better to have factors explicitly set out in this rule as to what protective of human health and the environment means, I think that 811.325 would be a good place to start.

1 MS. OLSON: You keep saying 2 protective of human health and the environment. 3 You keep leaving off the word greater. Is that intentional or unintentional? 4 5 MR. ARMSTRONG: When I say -- when 6 I'm referencing 811.325, 811.325 does not have the 7 word greater in it. So that's why I'm not using 8 it with respect to that regulation. 9 MS. OLSON: So does 811.325 10 reference another standard that must be attained? 11 MR. ARMSTRONG: 811.325 -- so there is several standards that are referenced. 12 13 referring to an 811.325(b) --14 MS. OLSON: Yes. 15 MR. ARMSTRONG: -- or elsewhere? 16 So in 811.325(b) remedies selected under 17 this selection must meet the following 18 requirements. They must be protective of human 19 health and the environment, they must control the 20 sources of release so as to reduce or eliminate to 21 the maximum extent practicable further releases of 22 constituents detected under the assessment 23 monitoring into the environment that may pose a

threat to human health or the environment and they

must comply with standards for management of waste as specified in Section 911.326(d).

MS. OLSON: So is it fair to say that one of the standards that is required for corrective action at municipal solid waste landfills is the attainment of the groundwater quality standards?

MR. ARMSTRONG: That is one of the four standards I just read off.

MS. OLSON: And that this section that you're reading from does not require in selecting a remedy the Agency to evaluate what corrective action would result in greater protection to human health and the environment?

MR. ARMSTRONG: There is no mention of greater protection of human health and the environment, that's correct.

MS. OLSON: Do you know whether or not municipal solid waste landfills are closed by removal?

MR. ARMSTRONG: In the common course, they are not closed by removal. There could be cases where something would need to be removed from them from a municipal solid waste

landfill. I believe there was a case in Illinois involving the removal of a significant amount of benzene from a landfill, for example, but as a matter of practice they are closed by closure in place.

MS. OLSON: And why aren't municipal solid waste landfills closed by removal?

MR. ARMSTRONG: I don't think I can provide an answer to that today.

MS. OLSON: Okay. I'll just kind of throw a question out. Is it because it's a waste disposal operation and if you remove all the waste, the waste would no longer be disposed of at that site? If you don't know, that's fine.

MR. ARMSTRONG: That's something I'm not prepared to comment on right now.

MS. OLSON: Great. Can you identify where in Section 811.325 the Agency should look to determine whether or not something is -- would result in greater protection of human health and the environment?

MR. ARMSTRONG: I'm going to pull up that regulation. I don't have it in front of me. I mean, as I said before, the phrase greater

protection of human health and the environment does not appear in that regulation.

MS. OLSON: But correct me if I'm wrong. You said that the Agency should look to this section to determine what is meant by greater protection of human health and the environment, is that right?

MR. ARMSTRONG: What I said was that the Agency could look to that section for an analysis of what is considered protective of human health and the environment because that's the term that is used in that regulation.

MS. OLSON: How does that help the Agency in determining what is meant by greater protection of human health and the environment?

MR. ARMSTRONG: Well, I will reference one of the same provisions that I referenced yesterday. For example, the Agency did consider the long and short-term effectiveness and protectiveness of the potential remedies along with the degree of certainty that the remedy will prove successful based on consideration of the following factors including, for example, (f), any potential for exposure of humans and environmental

receptors to remaining wastes, considering the potential threat to human health and the environment associated with excavation, transportation, redisposal, or containment.

MS. OLSON: Okay.

MR. ARMSTRONG: So --

MS. OLSON: I'm going to stop you right there. My question is what section is that and I think you're reading from it? So if you can just provide the section and subsection, we can go forward.

MR. ARMSTRONG: Sure. That is as an example 811.325(c).

MS. OLSON: So do you believe the Agency should look at all of the factors that are in Subsection (c) of 811.325 in determining what is meant by protection of health -- human health and the environment?

MR. ARMSTRONG: So, again, we have not proposed that language in our rule. I think this would be an appropriate basis to define what greater protection of human health and the environment means.

MS. OLSON: I know that the language

1 doesn't match exactly. The Agency is trying to 2 get a handle on how to evaluate the phrase "the 3 greater protection of human health and the 4 environment" and you said you can look at 811.325. 5 My questions are a follow up to see which parts of 6 811.325 the Agency should be considering and 7 should not be considering. 8 MR. ARMSTRONG: As I said, I believe 9 the Agency could consider all of these factors. 10 MS. OLSON: So would that include 11 (c)(4)? 12 MR. ARMSTRONG: I think this 13 reflects the technical feasibility consideration 14 that we've also proposed. 15 MS. OLSON: Could you please read 16 Section 811.325(c)(4)?

MR. ARMSTRONG: The practicable capability of the owner or operator to implement the remedies, including a consideration of the technical and economic capability.

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MS. OLSON: So are you testifying that the practical capability of the owner and the economic capability of the owner in carrying out the remedy should be considered by the Agency in

determining what is meant by greater protection of human health and the environment?

MR. ARMSTRONG: So I think --

MS. OLSON: I --

 $$\operatorname{MR}.$$ ARMSTRONG: If I can just answer the question.

MS. OLSON: I think a yes or no answer would be perfect.

MR. ARMSTRONG: In considering greater protection of human health and the environment, it could be considered in that regard, yes, because you're going to be considering technical feasibility anyways under our rule and this is pretty much what we're talking about when we're talking about technical feasibility.

MS. OLSON: So economic capability would mean the regulated entity's ability to pay for the remedy, is that a fair characterization of what economic capability means?

MR. ARMSTRONG: Yes. And as I testified yesterday with respect to technical feasibility, if an owner or operator is not capable of actually implementing a requirement

because it would be far too expensive, then that is a consideration that can be taken into account under technical infeasibility or in this regulation greater protection of human health and the environment.

MS. OLSON: So if economic capability can be considered by the Agency, why isn't that language reflected in your proposal?

MR. ARMSTRONG: Well, I think

there's a difference between economic capability and economic reasonableness.

MS. OLSON: Can you explain the difference?

MR. ARMSTRONG: Economic capability in the way that we've talked about it yesterday with technical infeasibility is whether you're capable of performing a particular form of closure or particular corrective action. Economic reasonableness we see as more of a cost benefit analysis and we don't believe that cost benefit analysis should be applied if there is going to be a method of closure or corrective action that is more protective of human health and the environment that is going to better address a

threat to surface or groundwater.

MS. OLSON: Do you think that having guidance in the rule about what is meant by greater protection of human health and the environment and what is meant by technical infeasibility would be beneficial?

MR. ARMSTRONG: If the Agency would be interested in proposing some language, we'd certainly consider it. If the Agency would like us to propose language --

MS. OLSON: This is not our proposal so we will not be proposing language on what is meant by technical --

MR. ARMSTRONG: Very good.

MS. OLSON: -- infeasibility. I think your answer is, no, that you will not be proposing and if I'm incorrect in that statement, please correct me.

MR. ARMSTRONG: Well, we will consider it, but as we proposed it, we have not included any criteria on it. It is just from our proposal.

MS. OLSON: The other line of questioning I had that is a follow up to

Ms. Franzetti is there was some testimony about surface impoundments and floodplains and flood conditions and I think Ms. Barkley was responding to those questions.

So the question the Agency has is how does a flood condition in a floodplain affect the stability of a surface impoundment?

MS. BARKLEY: I am not a structural engineer, but I do understand, one, that river action does -- as an example at Dynegy Vermilion Plant, river action can -- the energy of the water moving past the impounding walls can eat away and erode at those retaining structures. When you have water rising up on the walls of the impounding walls, you have increased pressure from the outside against the walls that are holding the coal ash back in place.

It's especially important if you have fast moving water eating away at the toe which is supposed to be the larger, broader foundation of the impounding walls. I mean, this is exactly what we're seeing at Dynegy Vermilion and why we have concerns about stability at that site.

The other part is at -- as an example for the Ameren Edwards Plant when you have floodwaters that are rising and flowing over the levies into the coal ash ponds those are designed to be holding a certain amount of waste behind them, that additional volume of water is, one, increasing the head pressure on the coal ash that is in there and could contribute to an increased leaching of the coal waste through the bottom. also allows for mixing in a pond that otherwise should be settling the solids out and I believe that Ameren Edwards in their testimony at the public hearing last year -- actually, I think we have a copy of that letter that we submitted into the record they do reference that they need to -they were seeking permission from the Agency to pump flood waters from behind the levy in their ash pits out back into the river because of the stability and safety concerns by having that additional floodwater in their ash ponds -- in that ash pond.

MS. FRANZETTI: Can I follow up?

MS. OLSON: Sure.

MS. FRANZETTI: With regard to all

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those examples and even some from yesterday and other testimony you've given, I never hear you reference Midwest Generation ash ponds and yet certain of The Environmental Groups have brought a lawsuit pending before the Board specifically against Midwest Gen ash ponds.

Can you explain to me why you've singled out the Midwest Generation ash pond when you have all these significant concerns about other ash ponds and you haven't brought any similar case?

MS. BARKLEY: No, I can't answer
that right now.

MS. FRANZETTI: Okay.

HEARING OFFICER FOX: Anything

further, Ms. Franzetti?

MS. FRANZETTI: No.

MS. OLSON: I just have two

19 questions to follow up unless -- go ahead.

MR. RIESER: I have a question when

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MS. OLSON: Okay. So, Ms. Barkley,
is it possible that when you have a flood stage or

24 flood condition that the pressure on both sides of

the berm would be equalized? So, in other words, the amount of the liquid in the surface impoundment and then the water on the other side of the berm would be equal?

MS. BARKLEY: Yes, that's possible.

MS. OLSON: And is it possible that you could arm the berms or put in other structural controls to prevent erosion?

MS. BARKLEY: Yes, I'm aware that there are structural controls that can be put in place, but I think Dynegy Vermilion is a perfect example. I believe we submitted pictures into the record at the May hearings of structural controls that had been in place for exactly that purpose and have repeatedly failed to the point that the Army Corps of Engineers will no longer permit that as a practice at that site.

MS. OLSON: You spoke of water going over the levies into surface impoundments. Can you identify where you're speaking of?

MS. BARKLEY: Ameren Edwards and that is why it is in the letter that we submitted as an exhibit in the May hearing that they had -- this is a repeated issue for them when the

Page 39 Illinois River floods if there is water that rises 1 2 back into the Ameren Edwards ash pits. 3 MS. OLSON: It is going over the 4 top? 5 MS. BARKLEY: I'm not sure in their 6 letter if they identify exactly where that water 7 is coming into the ash pit. 8 MS. ANTONIOLLI: Can I just ask a 9 quick question? 10 MS. OLSON: Go ahead. 11 MS. ANTONIOLLI: I know you've 12 referred to several times the Ameren Edwards 13 station. Who is the current owner of Edwards 14 station? 15 MS. BARKLEY: Dynegy. 16 MS. ANTONIOLLI: Thank you. 17 MS. BARKLEY: My pleasure. 18 HEARING OFFICER FOX: Anything 19 further, Ms. Antoniolli? 20 MS. ANTONIOLLI: No. 21 HEARING OFFICER FOX: Mr. Rieser, I 22 haven't forgotten you, but I believe Ms. Olson had 23 another question or two. 24 MS. OLSON: That's it.

HEARING OFFICER FOX: She is all We can turn to you, Mr. Rieser.

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MR. RIESER: In response to Ms. Franzetti's question of 8(g) when she asks about the Agency, whether the Agency was authorized -- whether closure by removal would present environmental concerns and she listed several of them, your answer, Mr. Armstrong, was very careful to say that the Agency could consider them as part of a technical feasibility discussion and I was wondering if the Agency could also consider them -- those same types of factors as part of determining what approach would provide greater protection of human health -- greater protection of human health and the environment? MR. ARMSTRONG: Well, to the extent

that -- I'm just rereading the question 8(q).

MR. RIESER: Mm-hmm.

MR. ARMSTRONG: I would view this more as a technical feasibility inquiry. had in mind with the greater protection of human health and the environment was with respect to the action at the impoundment and the direct effect of closing the impoundment at the site as opposed to

offsite considerations.

MR. RIESER: You don't deny there will be offsite environmental consideration associated with the activity of moving millions of pounds of material from the site, this closing impoundment to another site, do you?

MR. ARMSTRONG: I don't deny that's a significant endeavor that should be considered.

MR. RIESER: You say significant endeavor. Do you deny there are environmental impacts associated with that?

MR. ARMSTRONG: No, I don't deny that there are environmental impacts associated with that.

MR. RIESER: Is it your position that the Agency shouldn't consider those environmental impacts when it decides what remedy it provides the greater protection?

MR. ARMSTRONG: Again, the way I was conceptualizing greater protection of human health and the environment is with respect to the action at the impoundment on site. I can consider that question. I have not thought of it in those terms before. I will view it more as a technical

feasibility issue.

MR. RIESER: So the answer to the question is you haven't thought about whether the Agency can consider those impacts in evaluating greater impact of -- what remedy presents the greater impact or the Agency should not consider those impacts?

MR. ARMSTRONG: No, I have not considered whether -- what -- which of the two categories -- when I considered which of the two categories that we identified, those impacts as fitting into. I had envisioned that as more a technical feasibility category. So I can take your question under consideration and discuss it.

MR. RIESER: Thank you.

HEARING OFFICER FOX: Anything

further, Mr. Rieser?

MR. RIESER: No.

HEARING OFFICER FOX: Ms. Olson, you

20 | have a question?

MS. OLSON: I have one. Maybe one follow up. There was a bunch of questions about surface impoundments and floodplains and when ash is removed assuming that the surface impoundment

closes by removal from a surface impoundment in a 1 2 floodplain, must the ash be disposed of in a 3 landfill that is not located in the floodplain? 4 MR. ARMSTRONG: Well, first, I don't 5 think it has to be disposed of in a landfill. 6 There are other disposal methods, beneficial use, 7 other places to put the ash, but your question is 8 if ash is excavated from an impoundment and then 9 deposited in a landfill, should the landfill not 10 be in a floodplain? 11 MS. OLSON: Yes. 12 MS. BARKLEY: Yes. 13 MS. OLSON: So, yes, the landfill should not be in a floodplain? 14 15 MS. BARKLEY: Yes. 16 MS. OLSON: What if the landfill 17 where the ash is going is existing and permitted 18 under 812 or 813? Is it still your opinion that 19 the ash should not go in that landfill? 20 MS. BARKLEY: Our proposal does not 21 specifically speak to where the removed coal ash 22 should be disposed of as a final disposal place. 23 It would be optimal, in our opinion, if it were

not placed in a landfill that were in a

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floodplain. That would be our recommendation.

MS. OLSON: That's all I have.

HEARING OFFICER FOX: Thanks,

Ms. Olson. Ms. Franzetti, if there are no other follow ups, I think we're ready, including yours of course, to turn to your question number nine.

MS. FRANZETTI: Yes. Please provide any precedent you are aware of for the proposed revision to Section 841.400(b).

MR. ARMSTRONG: So there is a California regulation on closure standards for units other than landfills, 27 CCR 21.400. Closure requirements for surface impoundments and that regulation in Section (b) (1) requires a mandatory clean closure attempt unless the discharger demonstrates and the RWQCB finds that it is infeasible to attempt clean-closure of the impoundment, then all residual wastes, including sludges, precipitates, settled solids, and liner materials contaminated by wastes, shall be completely removed from the impoundment and discharged to an approved unit and it goes on from there.

MS. FRANZETTI: Okay. Give me the

Page 45 1 cite one more time. 2 MR. ARMSTRONG: 27 CCR 21.400. 3 MS. FRANZETTI: And subparagraph was 4 (b) as in boy? 5 MR. ARMSTRONG: Correct. (b) (1). 6 MS. FRANZETTI: Any other precedent? 7 MR. ARMSTRONG: No. 8 MS. FRANZETTI: Moving -- I'm 9 skipping 10 and 11. I think those questions were 10 basically covered yesterday. Moving to closure 11 prioritization Section 841.405, question 12. For 12 purposes of question 12 given our questions and 13 answers towards the end of the day yesterday 14 regarding groundwater management zones, GMZ's, one 15 I want to clarify that for purpose of question 12 16 please assume there is no approved GMZ. 17 Does the proposed revision to 18 Section 841.405(a)(2)(b) require closure where an 19 exceedance of any groundwater standard at any 20 down-gradient monitor well has not been corrected 21 within a five-year period. 22 MR. ARMSTRONG: Yes. 23 MS. FRANZETTI: Is it correct that 24 this proposed revision does not allow the Agency

any discretion to consider the magnitude or severity of the exceedance in question?

MR. ARMSTRONG: Yes.

MS. FRANZETTI: Skipping 13. I think we covered that yesterday towards the end of the day. Question 14. How does the existence of institutional controls such as deed restrictions prohibiting the use of impacted groundwater affect the application of the proposed revision to Section 841.405(a)(2)(b)?

MR. ARMSTRONG: They are not applicable in our proposed revision.

MS. FRANZETTI: Why is that so?

MR. ARMSTRONG: The intent of our approach to corrective action was to address what The Environmental Groups saw as a weakness of the Agency's proposal specifically to lack of requirements to close unlined CCW impoundments that are causing groundwater contamination even when those impoundments have already stopped receiving CCW or leachate and the Agency has previously testified that with one potential exception identified by The Environmental Groups, Midwest Generation, all groundwater quality

exceedances from CCW impoundments are being caused by unlined impoundments. So the purpose of our approach to corrective action here is to try to phase out unlined impoundments that are causing groundwater contamination.

MS. FRANZETTI: Now, your reference there to Midwest Gen ponds --

MR. ARMSTRONG: Yes.

MS. FRANZETTI: -- you have no evidence, do you, that the ponds that have been lined with synthetic liners by Midwest Gen are currently causing exceedances of groundwater standards, isn't that right?

MR. ARMSTRONG: I can only give you my personal knowledge on this which is very little because I'm not working directly on that matter. So, personally, I am not aware of whether that is or is not the case.

MS. FRANZETTI: Moving on to 15.

Please provide any precedent you are aware of for the proposed revision to Section 841.400(b) that requires a release to be corrected within five years of detection or else the source of the release must be shut down or otherwise closed.

1 MR. ARMSTRONG: So as I was saying 2 before our concern here is that unlined 3 impoundments that are causing groundwater contamination --5 MS. FRANZETTI: I hate to interrupt 6 you, but in the interest of time I know what your concerns are. You've testified to them. 8 MR. ARMSTRONG: Right. 9 MS. FRANZETTI: This question is 10 provide any precedent. 11 MR. ARMSTRONG: Correct. And my --12 right after that I was going to say that US EPA's 13 proposed standards do allow for corrective action, 14 for example, but it is requiring that unlined 15 impoundments be phased out through design 16 standards. Another example is from the Board's 17 adoption of landfill regulations in 1990. 18 Existing landfills that could not meet minimum 19 safety requirements including a leachate 20 collection system were phased out. In the absence 21 of design standards, our approach here is that if 22 an impoundment is causing groundwater quality 23 exceedances, it is clearly unlined or 24 inadequately -- inadequately lined, those

impoundments should be phased out.

MS. FRANZETTI: I'm going to move to the financial assurance questions. This relates to Section's 841.600 through 841.610 of The Environmental Group's proposed revisions to the Agency's proposed rules.

Question 16. Have there been any incidents in Illinois where the owner or operator of a CCW impoundment has lacked the financial ability to close a CCW impoundment?

MR. ARMSTRONG: The Environmental Groups are not aware of any incidents, but it also appears that relatively few ash impoundments have closed at this point.

MS. FRANZETTI: Question 17. What state regulations, if any, did The Environmental Groups rely upon to prepare proposed Section's 841.600 through .610?

MR. ARMSTRONG: Generally, I would reference Part 811(g) and specifically noting -- and I can kind of do a group answer to your following questions if that is okay.

MS. FRANZETTI: Yes. If it will expedite things, absolutely.

MR. ARMSTRONG: 811.706, 811.716 on local government financial tests; 811.717 on local government guarantees; 811.719 on corporate financial test.

MS. FRANZETTI: With respect to my questions 18 through 20 which asks for the meaning of those phrases you just made reference to, local government financial tests, local government guarantee and corporate financial test, is the intended meaning of those phrases in your proposal the same as how they are used in the section of 811 that you just made reference to?

MR. ARMSTRONG: Yes, that would be helpful to include references to those sections.

MS. FRANZETTI: Twenty-one. Given the proposed revision by The Environmental Groups to require a presumption in favor of closure by removal under these proposed financial assurance regulations, must an owner or operator base its financial assurance amount upon closure by removal or may it assume closure in place?

MR. ARMSTRONG: As proposed in 841.605, an owner or operator should base financial assurance upon the activities in an

approved closure or post-closure plan. So that can either be closure by removal or closure in place depending what's been approved by the Agency.

MS. FRANZETTI: Thank you. I have no further questions.

HEARING OFFICER FOX: Ms. Franzetti, obviously -- go ahead, Mr. Rieser. It appears you have a question?

MR. RIESER: Yes, just a follow up on that last answer. I'm not as familiar with the 811 rules as I am with the federal financial assurance rules, but certainly under the federal financial assurance rules if there is a change in the remedy there has to be a change in the amount of financial assurance, right?

MR. ARMSTRONG: Correct.

MR. RIESER: So under these circumstances there is a -- I'm sorry. Under the rules you proposed, there is requirements to commit to closure by removal under certain various specific circumstances, correct?

MR. ARMSTRONG: Correct.

MR. RIESER: So if those

1 circumstances occur whoever is asserting --2 whoever is using the financial assurance would at 3 that time have to modify that financial assurance 4 in order to cover the additional costs, is that 5 correct? 6 MR. ARMSTRONG: I believe if you 7 modify your closure plan or post-closure care plan 8 and that changes the cost of the plan, then you 9 also would need to modify the amount of financial 10 assurance. 11 MR. RIESER: That might not be 12 something that is apparent at the initial stage 13 when you apply for financial insurance? 14 MR. ARMSTRONG: The modification 15 down the road may not be initially included at the 16 time you apply, correct. 17 MR. RIESER: All right. Thank you. 18 HEARING OFFICER FOX: Nothing 19 further, Mr. Rieser? 20 MR. RIESER: No. 21 HEARING OFFICER FOX: Ms. Franzetti 22 has obviously indicated that she has finished the 23 questions and follow up based on those that she

had pre-filed on the 11th. Did anyone wish to

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raise a follow-up question based on those?

Neither seeing nor hearing any, Ms. Olson, we are prepared to turn to the Agency at this point.

issue, first of all, with the Agency? You had indicated that you wished for the benefit of flexibility, that was very helpful, to hold all of the questions including those that had been pre-filed for the second hearing in May, but not address them until the end, until this point effectively.

In looking over the transcript, there were a number of those questions that you had passed over and a number of questions specifically for Ms. Barkley that we had not turned to.

Do you have a preference to begin with those or is it your preference to begin with the pre-filed questions specifically for this hearing?

MS. OLSON: The Agency's preference would be to begin with the questions filed for this hearing and to take those questions out of order. There are some things that the Agency

Page 54 1 would like to make sure get covered today and 2 unfortunately we put them at the end of our 3 questions than in the beginning. So we would like 4 to start with question 86 of what was pre-filed. 5 HEARING OFFICER FOX: I'm sorry. didn't hear the number. Eighty-six? 6 7 MS. OLSON: Eighty-six if that is 8 okay? 9 HEARING OFFICER FOX: I don't see or 10 hear any objection, so why don't we, with our 11 witnesses obviously sworn in and prepared to 12 answer questions, begin with number 86. 13 Ms. Franzetti, did you have a question? 14 MS. FRANZETTI: Off the record. 15 HEARING OFFICER FOX: Off the 16 record. 17 (Whereupon, a discussion was had 18 off the record.) 19 HEARING OFFICER FOX: Ms. Olson, 20 we're ready to turn to you with your question 21 number 86 pre-filed on the 11th of June which I 22 believe addresses design criteria. 23 MS. OLSON: That's correct. I'd 24 like to ask a precursor question before we get

into these and this is based on some of the responses we got yesterday. Are you guys prepared to answer questions regarding design criteria of your proposal?

MR. ARMSTRONG: To some extent. I mean, if we're going to be talking about follow-up questions about technical details about liners, I'm not prepared to speak to technical issues. I can talk about how our rule works, but I can't speak to detailed technical questions and if there are technical questions that I'm not able to answer, we are willing to present them to Dr. Soderberg for him to take a crack at.

MS. OLSON: Is Ms. Barkley able to answer any of the technical questions?

MS. BARKLEY: To some extent. There are -- some of these questions are more appropriately directed towards Dr. Soderberg.

MS. OLSON: Is Dr. Soderberg, to your knowledge, qualified to testify on dams and structural components of surface impoundments?

MS. BUGEL: Dr. Soderberg is qualified to testify on structural components of surface impoundments.

MS. OLSON: Is he licensed in the State of Illinois as a PE?

MS. BUGEL: I do not believe so.

MS. OLSON: Do you know if his

background is in structural engineering?

MS. BUGEL: I'm -- first of all, I'm not here as a witness. I don't know if this is creating any difficulty.

Second, Dr. Soderberg was here and we went through his background at length. So I think there are two different dynamics here that make this awkward.

MS. OLSON: I'm trying to key in Mr. Soderberg's qualification to respond to design criteria because I want to avoid a situation where you guys take these questions and he says "I'm not qualified to answer them. I'm not a structural engineer. I'm not a licensed engineer in the State of Illinois." So I'm just laying these things out in the beginning so we all know how we're proceeding.

HEARING OFFICER FOX: Let me try to address this, if I can, as a procedure recognizing, Ms. Olson, it may not completely

fulfill the concerns you've raised, Mr. Armstrong and Ms. Barkley have indicated that they are prepared to attempt to answer questions to the best of their expertise and ability although they have recognized that they may not be able to do so completely. They have -- I think it's fair to say committed to submit any questions that they are not prepared to answer to Dr. Soderberg whose qualifications were the subject both of written testimony and significant questioning and cross-examination during the hearing in May during which I believe all of us were present.

As a procedural matter, we could request that The Environmental Groups address any questions that they are not prepared to answer here today in writing in post-hearing comments.

We can also address a schedule for submitting responses to post-hearing comments so that you can address those if you wish in writing at the conclusion of the hearing.

MS. BUGEL: That sounds great.

MS. OLSON: Thank you. That's

agreeable to us.

HEARING OFFICER FOX: Did you wish

to go ahead, Ms. Olson?

MS. OLSON: Sure. Question 86.

Does proposed Section 841.450(a) apply to existing unlined units?

MR. ARMSTRONG: Yes.

MS. OLSON: If so, please describe the process by which a unit that currently contains CCW would be fit with a composite liner.

MR. ARMSTRONG: We're just conferring here. We're reviewing some of these questions and it appears Dr. Soderberg actually did answer some of these questions at the last hearing.

MS. OLSON: Can you please provide a citation for the record?

MR. ARMSTRONG: Page 211 of the May 15, 2014, transcript.

MS. BUGEL: Hearing Officer, just to allow me to jump in on this one. He may not have answered all three questions, but the opportunity was there to ask him these questions. He did testify as to design requirements in his pre-filed testimony. The parties were on notice that that was the subject area of his testimony and he was

made available to answer these questions and, in fact, answered some of them.

MS. OLSON: I would like to respond.

HEARING OFFICER FOX: Please go

5 | ahead, Ms. Olson.

MS. OLSON: I find this amazing because the Agency didn't even have enough time to read through the design criteria to formulate questions for Dr. Soderberg because the counterproposal was filed 12 hours or 16 hours before the hearing was scheduled. Dr. Soderberg's testimony was filed before the counterproposal was filed. So how are we supposed to know Dr. Soderberg's testimony is going to fit The Environmental Groups counterproposal to a T?

In fact, on questioning at the last hearing, it was evident that Dr. Soderberg's testimony didn't match the counterproposal and now we're in a position where we're not allowed to ask questions about design criteria that is going to bind the Agency on how these things are built and relined.

HEARING OFFICER FOX: Ms. Olson, I want to step in and address your concern that

you're not being allowed to ask questions. is precisely what the Agency is doing right now. The Environmental Groups have made clear that they believe generally at least to some extent that some of these questions have been answered. certainly may object with the citation for the record if they believe one has been asked and answered.

To the extent of the first question, they've provided the citation to the record of the particular day of hearing.

Certainly they are free to object in the future to any question on the basis that it has been asked and answered, but we're ready to proceed with your questions and certainly we'll expect The Environmental Groups to respond.

MS. OLSON: So looking at page 211.

Dr. Soderberg states some earth moving equipment would be necessary to remove the CCW. It is also possible that it could be pumped. The next question I have is where would the CCW go while the surface impoundment is being relined? I'll read question 86.2.

If CCW would have to be removed

in order to fit an existing unit with a liner, what would be done with the CCW during the construction of the liner.

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MR. ARMSTRONG: I'm not purporting to speak as an engineer or anything, but I can cite to you the example of the Springfield City Water Light & Power environmental plan that we provided yesterday in which impoundment was going to be dredged, relined with a deposit liner, the material was going to be put in an on site landfill, I believe. So that's one way you could do it. I'm not saying that that's an exhaustive description.

MS. OLSON: Under your example would the material have to have been dewatered to be placed in the landfill?

MR. ARMSTRONG: I'm just looking at Dr. Soderberg's testimony from last time. I can't give a definitive answer to that right now. That is something we can take back to Dr. Soderberg.

MS. OLSON: Question 86.3. How many existing units would be required to construct a new liner?

MR. ARMSTRONG: No units would be

required to construct a new liner. They would have the option of as under the US EPA's proposed rule either closing or retrofitting a new liner.

MS. OLSON: Question 86.4. How much CCW would have to be removed from existing units in order to construct new liners within five years of the effective date of this part?

MR. ARMSTRONG: It would really depend on which units were going to be relined and which ones were going to close and that would be determined by site owners.

MS. OLSON: So if all the units were to close, would the answer be zero?

MR. ARMSTRONG: Yes. Yes. Well, I should clarify. If in response to your question of how much CCW would have to be removed from existing units in order to construct new liners if none are constructing new liners, then zero CCW would be removed, that's correct.

MS. OLSON: I'm going to skip 86.5. What is the potential environmental impact for removing CCW from existing units during the construction of a liner?

MR. ARMSTRONG: So Dr. Soderberg did

answer this question from the last transcript.

MS. OLSON: Can you cite --

MR. ARMSTRONG: I'm trying to get the citation for you right now. I'm sorry. It might be better to move on to the questions. If we can come back to this one, I can find the citation for you in just a few minutes.

MS. OLSON: Question 86.7. Has ELPC conducted an analysis of the economic impacts of requiring that existing CCW surface impoundments that currently house CCW be lined? If so, could ELPC provide that analysis?

MR. ARMSTRONG: No, we have not conducted that analysis.

MS. OLSON: Question 87. Please explain the following language in the Environmental Groups' proposed Section 841.450(a)(2): "The FML component must be installed in direct and uniform contact with the compacted soil component."

HEARING OFFICER FOX: For the benefit of the court reporter, Ms. Olson, let me interrupt. FML refers to flexible membrane liner. Sorry for letting me cut in. Mr. Armstrong, that

1 | question was to you.

MR. ARMSTRONG: I believe that Dr. Soderberg addressed that as well in his testimony and I can get the citation for you.

MS. OLSON: Sure. When we asked this question last time, we didn't really -- we didn't have time to really understand the language that you guys proposed because we didn't have time to read it. Having taken it back, we're re-asking this question again because it is going to be setting up all the following questions. So if you can find the citation, that would be great.

MR. ARMSTRONG: So I think one way that we would start to address the questions that you have in the sequence after this is to present a design requirement for storage impoundments from another state that might be demonstrative of how some of these things could happen for a storage impound. So we have that here as an exhibit.

MS. OLSON: Sure.

MR. ARMSTRONG: So we have 25
Pennsylvania Code 294.10 storage impoundments
design requirements.

MS. OLSON: Did you find the

Page 65 1 citation to Dr. Soderberg's testimony in response 2 to question 87 yet? 3 MR. ARMSTRONG: This is the FML 4 component? 5 MS. OLSON: Yes. 6 MR. ARMSTRONG: So we would move to 7 admit 25 Pennsylvania Code 294.10 as an exhibit. 8 HEARING OFFICER FOX: Fifty-four would be the next number, Mr. Armstrong. 9 10 Mr. Armstrong has moved to admit that document 11 into the record as Exhibit 54. Is there any 12 objection to the motion? 13 MR. ZAHAROFF: I have 54 as the 14 previous exhibit. I might be wrong. 15 HEARING OFFICER FOX: No, I stand 16 The table of contents -- I appreciate corrected. 17 the correction. I saw a couple of puzzled faces in front of me and that makes sense. 18 19 Mr. Armstrong, my apologies. It will be Exhibit 20 55 if you move to admit it. I will construe that 21 as a motion to admit as Exhibit 55. Any objection 22 to that motion? Neither seeing nor hearing any,

it will be marked and admitted, Mr. Armstrong, as

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Exhibit 55.

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(Document marked as Hearing Exhibit No. 55 for identification.)

MR. ARMSTRONG: So we are searching for the citation to Dr. Soderberg's testimony. But just to explain what the standard is this is a Pennsylvania regulation that contains design standards for coal ash storage impoundments and according to the regulation the storage impoundment must include four layers. Starting from the bottom the first layer is a sub base, which is the prepared layer of soil or earth and material upon which the remainder of the liner system is constructed. The second is a leachate detection zone, which also collects leachate. third layer is a composite liner consisting of a synthetic liner over earth and material. fourth layer is a leachate collection zone, which includes a leachate collection system separated from the coal ash by a, quote, protective cover, end quote. So it seems like the way your questions are going is to inquire as to how a leachate collection system could be incorporated with a composite liner for a coal ash impoundment

and this would be our example of how that would be accomplished.

MS. OLSON: We need to take a minute to look at this.

MR. ARMSTRONG: Certainly.

HEARING OFFICER FOX: Ms. Olson, in the meantime, Mr. King has indicated that he has a question. Why don't we turn to him.

MR. KING: Andrew, the Pennsylvania, standard, is that applicable to both new and existing sites or existing impoundments?

MR. ARMSTRONG: You know, I am not clear as to which sites this applies to exactly as between new and existing. The purpose of including it is to show how a liner system like the type that US EPA is proposing and like the type The Environmental Groups have proposed have worked for a coal ash impoundment. So I'm not presenting it as, you know, this is what they do for X amount. It is just as an example of how design requirements can apply to a coal ash impoundment.

MR. KING: Okay.

HEARING OFFICER FOX: Anything

further, Mr. King?

MR. KING: If I could, while those folks are looking at it. One of the questions I guess that I really posed in my mind was we were talking yesterday about the Santee River site brought up and there was -- that was an example of a closure by removal and I believe -- I believe the information was that that process was going to take eight to ten years.

MR. ARMSTRONG: So we actually do have the consent decree for that site. So it might be helpful to produce that because that actually had the deadlines for the removal process.

MR. KING: Okay.

MR. ARMSTRONG: So --

MR. KING: I mean, I don't know that we need it. I was just trying to get a reflection of how long that process was taking.

MR. ARMSTRONG: So this actually has the dates laid out in there. So we might as well produce this. So this is a document captioned Settlement Agreement -- Settlement Agreement.

It's a settlement agreement entered between the

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1
     Winyah Rivers Foundation, several other
2
     environmental groups and the South Carolina Public
3
     Service Authority, or Santee Cooper, executed by
4
     the various parties and this is Exhibit 56.
5
                             I have not had a chance
                  MS. OLSON:
6
     to look at the document so we request a minute.
     have a question.
8
                  HEARING OFFICER FOX:
                                         Ms. Olson,
9
     referring to what I assume Mr. Armstrong has moved
10
     into the record as the next exhibit, is that
11
     correct?
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                  MR. ARMSTRONG: (Affirmative nod.)
13
                  HEARING OFFICER FOX: Please go
     ahead.
14
15
                  MS. OLSON: On page 14, on the
16
     bottom, it says generated by CamScanner. What is
17
     CamScanner?
                  MR. ARMSTRONG: I do not know.
18
                                                   Ι
19
     received this document from counsel for The
20
     Environmental Groups.
                  MS. OLSON: I believe there is a
21
22
     lack of foundation authenticity to this document.
23
     With those elements noted, I have no objection.
24
                  HEARING OFFICER FOX: Let the record
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reflect Mr. Rieser just received a copy of it. We don't want to move on before he's had a chance to look it over.

MS. OLSON: I can provide all the information I have about this document.

HEARING OFFICER FOX: Mr. Armstrong, let's take just a moment. Mr. Rieser, have you had a chance to look this over to form any question or objection?

MR. RIESER: I have. I don't have any objection.

other objection to admission other than those noted by Ms. Olson? Neither seeing nor hearing, Ms. Olson, your objections are on the record. I will grant the motion, however, and mark and admit it as Exhibit No. 56.

(Document marked as Hearing Exhibit No. 56 for identification.)

MR. ARMSTRONG: So in response to your question, Mr. King, on page two paragraph one undertakings taken by Santee Cooper, Santee Cooper agrees to implement the following action with

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respect to Grainger. They will deposit no more
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     coal ash or other coal combustion materials to
    Grainger. Subpart (b) no later than December
3
     31st, 2023, Santee Cooper shall excavate all the
4
5
     coal ash from ponds one and two at Grainger, one
6
     foot of underlying soil beneath the ash and
7
     additional underlying soil if required by DHEC and
8
     shall remove all the excavated ash and soil from
9
     the Grainger site to be sold, recycled or placed
10
     in a Class 3 or better landfill. Subsection (c)
11
     is that they will make good faith efforts to
12
     complete the excavation and removal of the coal
13
     ash and soil from the Grainger site by December
14
     31st, 2000. So what we're looking at here is to
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     finish this --
16
                             2020. You said 2000.
                  MR. KING:
                                                     Ι
17
     think you meant 2020.
18
                  MR. ARMSTRONG: I definitely meant
19
     2020.
20
                  MR. KING:
                             Okay.
                                    So it indicates a
21
     multiyear process, right?
22
                  MS. BARKLEY:
                                Right.
23
                  MS. OLSON: Correct.
24
                             It takes a significant
                  MR. KING:
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amount of time. Now, when you're talking about these design standards, that means if you're going to at an existing site remove that material you're talking about a multiyear process for removing that material and then it has to be placed somewhere and it has to be -- I would assume your thought process would be that you don't just place it on bare ground, but that you'd actually have to place it in an engineered facility that has a liner while you then go back and then install the permanent liner for the original facility.

MR. ARMSTRONG: Well, I think you can do a number of things to the coal ash. You don't necessarily have to reserve it to put it back in the impoundment. You can -- as has happened in this case, you can sell it, recycle it, take it to a landfill to dispose of, but I hear your question as being how are you going to get this done in five years necessarily, is that what you're asking?

MR. KING: I'm just thinking through the complexity of if you're removing it you have to place it in a lined facility, a temporary lined facility, that has to be an engineered facility

and then you have to move all the material there so that you can put the permanent liner back at the original facility and then move that material back there and then you'd have to decommission the temporary facility. I mean, that's the process being envisioned here it seems to me, am I correct in that's what you're thinking?

2.3

MR. ARMSTRONG: I don't think that you would need to do that in any particular case unless the owner or operator elected to. You could just close the impoundment all together. You could remove the CCW from that impoundment, dispose of it elsewhere, for example, an on site landfill, and then reline the existing impoundment to serve for future use or you could pursue the strategy that you described, but I don't think the strategy you described is necessary in any particular case.

MS. BARKLEY: I think there is also an opportunity at some of these sites where there are multiple cells where there might be capacity in one of the cells to remove the coal ash from the cell to be lined to another cell temporarily while you're lining that either to complete

Page 74 1 filling that half filled or unfilled cell or to 2 move it back into the new lined cell. 3 another possibility. 4 MR. KING: That, in your 5 perspective, would be an acceptable way to 6 proceed? 7 MR. ARMSTRONG: I think it depends. 8 MS. BARKLEY: It depends on the site 9 specific conditions. I mean, there are 10 opportunities to use multiple cells, dispose 11 offsite, reuse or just close and develop another 12 facility all together. 13 Thank you. MR. KING: 14 HEARING OFFICER FOX: Thank you, 15 Mr. King. 16 MS. OLSON: Are we back to me? 17 HEARING OFFICER FOX: We are indeed. 18 MS. OLSON: I would like to return 19 to question 87. Please explain what is meant by 20 the phrase the FML component must be installed in 21 direct and uniform contact with the compact soil 22 component. 23 MS. BUGEL: I'm going to jump in 24 We were reviewing the transcript from the

1 previous hearing. Dr. Soderberg provided this 2 exact language in his testimony on May 15th at 3 page 239. So there was an opportunity to ask him 4 how this would have worked or explain that 5 language, but he did provide this exact language. 6 In addition, we have been looking -- there had 7 been a question on the record about dewatering, a line of questions -- the Agency asked 8 9 Dr. Soderberg a line of questions about dewatering 10 in these circumstances on May 15th at page 212 in 11 the transcript and that is beginning at page 212. 12 MS. OLSON: This is a leading question for the rest -- it is a foundational 13 14 question for the rest of my questions. So if you 15 can please review the transcript and tell me what 16 is meant by the FML component must be installed in 17 direct and uniform contact with the compact soil 18 component? I would appreciate that. 19 MS. BUGEL: My point is that 20 Dr. Soderberg used this exact language so you 21 could have asked this exact question of him as a 22 follow up on that day. 23 The Agency did not have MS. OLSON: 24 enough time to fully evaluate the design criteria

that had been proposed. So we did not know to ask this line of questioning to Dr. Soderberg at the last hearing. The question I'm asking you is a foundational question that will be used in all of the proceeding questions. So while it may be in the transcript, an answer would be appreciated for ease of questioning.

MR. ARMSTRONG: And I don't want to claim to be an expert about how any sort of liners work, but for purposes of this question moving forward and offering to take back any points that we could clarify to Dr. Soderberg to see if he can offer any additional thoughts on this in our post-hearing comments, I would direct you to the Pennsylvania code that we provided Subsection 1.3 which describes the composite layer as a continuous layer of synthetic material over earth and material.

So I don't -- as a non-engineer I don't exactly myself know how continuous contact or whatever that is means, but what I'm stating is we have a composite liner here which is a continuous layer of synthetic material over earth and material.

1 MS. OLSON: Can you tell me whether 2 or not that means the two layers must be touching? 3 MR. ARMSTRONG: I don't know. 4 mean, in this standard it appears they are, but we 5 will take that back to Dr. Soderberg. 6 MS. OLSON: Do you feel comfortable 7 proceeding on this line of questioning that when 8 you wrote in your proposal direct and uniform 9 contact that you meant the liners must be 10 touching? 11 MR. ARMSTRONG: I am not about to 12 answer that question right now. 13 MS. OLSON: Do you feel anyone on 14 the panel is capable of explaining in detail how a 15 leachate collection system works? 16 MR. ARMSTRONG: We cannot explain in detail how a leachate collection system work, no. 17 18 MS. OLSON: Can you provide details 19 on the design of the drainage layer component of 20 the leachate collection system? 21 MR. ARMSTRONG: No, we cannot 22 provide details about the drainage layer. 23 MS. OLSON: Do you know whether or 24 not a leachate collection system should be

Page 78 1 designed and function differently depending on the 2 expected amounts of leachate to be collected? 3 MR. ARMSTRONG: I don't know. 4 MS. OLSON: Do you know the 5 anticipated amounts of CCW leachate collected from 6 a CCW surface impoundment? 7 MR. ARMSTRONG: I do not know. 8 MS. OLSON: Do you know the depth of 9 leachate typically found in a CCW surface 10 impoundment? 11 MR. ARMSTRONG: I do not know. 12 MS. OLSON: Does anyone on the panel 13 know? 14 MR. ARMSTRONG: No. 15 MS. BARKLEY: No. 16 MS. OLSON: I'm sorry. Did you guys 17 provide an answer to that question? 18 MS. BARKLEY: I said no. 19 MR. ARMSTRONG: We both said no. 20 MS. OLSON: Question 88.4. 21 HEARING OFFICER FOX: Ms. Olson, I 22 want to interrupt if I can. As I announced --23 this may not be the most perfect time to recess. 24 As I announced at the top of the day, we do need

to recess for the Board to hold its regularly scheduled meeting in this room that is scheduled to begin in approximately 15 minutes.

What we would like to do is break at this point and resume here at this point in our proceedings at 12:00 noon. I'm sorry. Let me correct that for the record, please. We'll resume at 12:15 in this room after the conclusion of the Board meeting. Thank you.

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

HEARING OFFICER FOX: The time of 12:15 having just passed we are back on the record. Having gone back on the record, I want to jump right now and address some procedural issues. I fully acknowledge that what I'm about to say will come as a surprise to you, but I want you to understand that it is not out of any desire purely to be surprising, but to come up with a procedural path that is productive and efficient to wrap up the pre-filed questions on this testimony and bring the hearings on this proposal and the proposed amendments to a productive and

expeditious close.

Based on our observations so far it seems to be a nearly 100 percent certainty that we don't have a realistic chance of wrapping up all of the Agency's pre-filed questions today. That is not a criticism of the Agency or the number of its questions. I think it's simply a recognition of the fact that there are a number of them that we have not addressed, dozens of them, in fact, and the pace we've established at this point makes it virtually certain that we cannot wrap them up today.

Since it seems to be perfectly clear that we need to schedule an additional day of hearing what the Board would like to strenuously suggest to the parties — the participants rather. I'm sorry. This is not an adversarial adjudicatory proceeding. The participants. That we frankly adjourn after there are any questions that you have to ask about procedural issues, schedule that hearing that seems certain to be necessary for Thursday, July 24th in this room beginning at 9:00 a.m. and in the meantime that we would ask The Environmental

Groups to prepare written responses to the questions by the Agency that we have not -- which I think we've frankly barely began to touch, the last five or six questions that were asked that we have. That The Environmental Groups place in the record by Thursday, July 17th written responses to those questions and, Ms. Olson, I bet I can anticipate your question.

We ask you to do the same for the questions that were directed to Ms. Barkley for the second hearing that we have not yet turned to and the questions that the Board had filed as well for this hearing which I believe there are about 15 and, forgive me, I don't know the exact number. I think that's an accurate estimate.

What we would like to do then is resume promptly at 9:00 a.m. on July 24th in this room and begin with the written responses that had been filed on July 17th and proceed through them with any follow ups that the participants wish to have.

Does -- does that raise any questions that the participants wish to bring forth?

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Page 82

MS. BUGEL: Hearing Officer, we were going to make a proposal as well. Our proposal was going to be we have a list of questions that -- from the Agency's questions that can be best answered by Dr. Soderberg. We were going to recommend pull those out. There are 16 of them. So out of the 93 questions, it is not voluminous. Mr. Armstrong is prepared to answer the remaining 70 plus questions. Might I suggest since we're all here today and since this is the fourth day that Ms. Barkley sat through and not answered questions yet of hearings, would there be any opposition to continuing this afternoon with either questions for Ms. Barkley or questions for Mr. Armstrong that he's prepared to answer and we have prepared the list that we think are appropriate for Dr. Soderberg instead of Mr. Armstrong?

HEARING OFFICER FOX: Ms. Bugel, we appreciate your willingness to do that. We think in the larger picture that having a full record of written responses would be far more efficient and would allow us to streamline the hearing procedure so we can confidently address them in one

additional day.

I do recognize implicitly there's a burden on Ms. Barkley to return.

Certainly she has been an active participant in each of the hearings she has attended. So it is not our wish unnecessarily to burden you,

Ms. Barkley. We do appreciate your expertise and your answers, but the Board's preference is to proceed with written responses to all of the questions on the grounds that would simply be more effective and effectively jumping ahead to the follow-up questions. So I appreciate the spirit of that offer, but our original intention isn't changed.

MS. BUGEL: Understood. Thank you.

HEARING OFFICER FOX: Ms. Olson, did
you have a question?

MS. OLSON: I'm just curious is the date set or is it possible to move the date? I'm okay with the answer that it is set. I just want to know if it is absolutely set.

HEARING OFFICER FOX: Let me put it this way. It is not irrevocably set in stone, but that would be a strong preference for the Board to

proceed on that date because it would allow us to move about as quickly as possible and still meet our requirements to provide public notice under the act.

MS. OLSON: We're fine with the 24th.

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HEARING OFFICER FOX: Very good.

Ms. Antoniolli or Ms. Franzetti, you've been silent. I don't want to overlook you if you've had any questions or concerns you wanted to raise on the record.

MS. ANTONIOLLI: I don't.

MS. FRANZETTI: I don't either.

HEARING OFFICER FOX: Very good.

Mr. Rieser, for your benefit, I think I saw you just come into the room.

MR. RIESER: Yes, I'm sorry. I understand there is a discussion about having a hearing?

HEARING OFFICER FOX: There is. And I have many editors who will correct me if I misstate in reviewing any of the key details. Since it is apparently inevitable that we will require an additional day of hearing, we would

propose to do that on Thursday, July 24th 1 2 beginning in this room at 9:00 a.m. That is a 3 Board meeting day. We will have to interrupt 4 ourselves for a short time as we did today for the 5 regularly scheduled meeting and we have asked and 6 I believe at least tentatively The Environmental 7 Groups have agreed to submit written answers to 8 the questions both filed by the Agency on the 11th 9 and those remaining for Ms. Barkley from the 10 second hearing and those that were filed by the Board on June 11th as well for this hearing. 11 12 mentioned that I reviewed that quickly so if you 13 have any comment or objection we can make that 14 part of the record in the conversation. 15 MR. RIESER: No comment or 16 objection. 17 HEARING OFFICER FOX: Very good. 18 MS. ANTONIOLLI: Did we agree on a 19 date when those written questions would be due? 20 HEARING OFFICER FOX: T had 21 proposed, and if I spoke quickly I apologize, July 22 17th which would allow almost exactly -- it would 23 allow four weeks, nearly a month, and allow a week 24 of review of the written answers before the

hearing so that follow-up questions can be considered and even drafted to expedite the discussion of those written answers more. I'm not seeing any more questions or, Ms. Franzetti, is that an indication --

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MS. FRANZETTI: It is. This may be premature, but I just want to throw out the concept and it can be taken up perhaps in July, not now, but what would be helpful before we have to file post-hearing comments which now obviously are going to be sometime after July 24th is for those who have proposals on the rules, so it's the Agency and The Environmental Groups, that they be prepared shortly after that July 24th hearing to file what is their final proposed revisions because I know right now it feels a bit like it's a moving target that -- that is a criticism, but just, you know, even today there was one where we're withdrawing that and that is at least clear, but also in testimony something that is not clear saying we'll consider that or we may do that.

I just don't want to spend time preparing comments on an issue only to find in the simultaneously filed comments by the parties whose

proposal I'm commenting on, they've changed it or they've withdrawn it. So I'd like us to get at least people's best and final proposed language and then have enough time after that to file post-hearing comments.

matter, I think you're correct that having a final red line version proposal is helpful, but I also recognize your implicit point that we haven't quite gotten to that point.

MS. FRANZETTI: It will give people time to think about it.

HEARING OFFICER FOX: You've given them as much as 60 days, but we can certainly revisit that and it's in the nature of a request that I suspect has been heard.

MS. OLSON: Just to kind of build on what Ms. Franzetti was saying that if in response to the questions that were pre-filed changes were to be made or proposed by The Environmental Groups, I think it would be very, very helpful if we had a draft that was consolidated so we weren't trying to piece together different parts of the proposal to try to get an understanding of what

exactly we're talking about. So I think it would be helpful for everybody if there is going to be changes or substantial changes that we see that language in time to evaluate it on the 24th of July.

MR. ARMSTRONG: We will provide an up-to-date, consolidated draft of everything we've discussed today with the July 17th answers.

MS. OLSON: Thank you.

HEARING OFFICER FOX: Mr. Armstrong, thank you for that flexibility. That would be very helpful. Any further questions? What I will do is, again, acknowledge that this has come as a surprise and I appreciate your flexibility and your questions in clarifying all of this.

Hearing Officer order that does confirm the time, date and location of the hearing that does address the deadline to pre-file the written answers, again, to the questions that were pre-filed by the Agency. The questions for you, Ms. Barkley, that remain from the second hearing here in Chicago and also the Board's questions and I think there were approximately 15 in number that were filed on June

11th for this hearing. Have I overlooked any of the issues -- I don't think I have, but I want to confirm that I have not overlooked any issue that has not yet been resolved?

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MR. RIESER: And I just want to confirm the purpose of the hearing is to finish up what we're doing, it is not for additional testimony?

HEARING OFFICER FOX: That's correct. Mr. Rieser, that is a very good point. My full intent is to wrap up the questions that are in the record based on the proposal that was filed by The Environmental Groups and not to introduce additional testimony on the part of any of the participants. Mr. Armstrong?

MR. RIESER: Thank you.

MR. ARMSTRONG: Just one last question about the questions that we'll be answering. There was another subset of questions from the last hearing, questions that were asked of Dr. Soderberg or directed to Dr. Soderberg and then reserved for this hearing.

HEARING OFFICER FOX: I -- I'm sorry, Mr. Armstrong.

MR. ARMSTRONG: We just wanted to confirm whether we'd be answering those as well, if the Agency would like us to?

HEARING OFFICER FOX: That's a question for you, Ms. Olson. My review of the transcript from May 15th shows that there were questions number 24 to 28, 31 and 33 to 38, but I think you determined that you wanted to skip past for the purposes of concluding that second hearing.

Have those been answered to your satisfaction or are you seeking written answers to those as well?

MS. OLSON: Unfortunately, I can't recall whether or not those questions -- I can't recall what those questions are.

HEARING OFFICER FOX: It's not helpful, I know, simply to recite numbers that were dealt with more than a month ago. So I don't have anything else to share with you.

MS. OLSON: Sure. I'm willing if you guys feel those have been answered, that's fine. But if there is a question that hasn't been answered, if you can address it, that would be

appreciated.

MR. ARMSTRONG: We'll review them.

MS. OLSON: Thank you.

HEARING OFFICER FOX: As I said, I will issue a Hearing Officer order that confirms the time, the date and the location that confirms the date to pre-file questions. The deadline of July 17th to do that and if there is nothing further -- Ms. Olson, did I see you indicated you had a question?

MS. OLSON: (Negative nod.)

HEARING OFFICER FOX: No. But

Mr. Rieser does.

MR. RIESER: I'm sorry. One of -- I think part of -- you know, it's been sort of a rolling process in terms of how information has come in and I think it would be useful to the extent that -- and I guess it's hard. I was going to say it would be useful to the extent that people who are answering questions are going to be providing exhibits to have those exhibits in advance or to let people know what they are so some of the discussion here has to do with getting things -- getting exhibits.

Now, it is also to the point if there is going to be more questions, there may be more exhibits and one couldn't do that, but if there is some way to have the exhibits pre-filed as well or at least a list or something so that we can complete our work that would be useful, too.

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hearings always roll in their own fashion as you have suggested, but what I hear you requesting is to the extent there are exhibits either in the nature of documents, maps or other items in support of written answers that your estimation is it would be appropriate to attach it perhaps or add it as an appendix to the written answers?

MR. RIESER: Correct.

HEARING OFFICER FOX: As a general

principle, I certainly agree with you.

MR. RIESER: Thank you.

HEARING OFFICER FOX: I don't see any further questions. Again, I certainly acknowledge that I have surprised you with this development. I appreciate your willingness to consider these issues and revisions to the calendar.

If there are no further questions on our procedure here, we can adjourn with the admonition to look for a Hearing Officer order and to see you then on July 24th. Nothing further apparently. Thanks to all of you.

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