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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)

)

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COAL COMBUSTION ASH PONDS) R2014-10

AND SURFACE IMPOUNDMENTS AT)

STATE OF ILLINOIS
Pollution Control Board

POWER GENERATING FACILITIES:) (Rulemaking-Water)

PROPOSED NEW 35 ILL.)

ADM. CODE 841.)

TRANSCRIPT FROM THE PROCEEDINGS taken before
The HEARING OFFICER TIMOTHY J. FOX by Kari
Wiedenhaupt, CSR, at 100 West Randolph Street,
Suite Room 9-020, on the 14th day of May 2014,
A.D., at 10:00 a.m.

1 A P P E A R A N C E S:

2 ILLINOIS POLLUTION CONTROL BOARD
3 100 West Randolph Street
4 Suite 11-500
Chicago, Illinois 60601
312-814-6983

5 BY: MR. TIMOTHY J. FOX,
6 Hearing Officer.

6 ILLINOIS POLLUTION CONTROL BOARD MEMBERS PRESENT:

7 Mr. Jerome O'Leary, Lead Board Member
8 Ms. Jennifer Burke, Board Member
9 Dr. Deanna Glosser, Board Chairman
Mr. Anand Rao, Technical Unit
Ms. Alisa Liu, Technical Unit

10 ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
11 1021 North Grand Avenue East
12 P.O. Box 19276
13 Springfield, Illinois 62794-9276
217-782-5544

12 BY: MS. JOANNE M. OLSON and
13 MR. JAMES JENNINGS,

14 Appeared on behalf of the Petitioner;
15 NIJMAN FRANZETTI, LLP
16 10 South LaSalle Street
Suite 3600
Chicago, Illinois 60603
312-251-5250

17 BY: MS. SUSAN FRANZETTI,
18 Appeared on behalf of Midwest Generation,
LLC.

19 SCHIFF HARDIN, LLP
20 233 South Wacker Drive, Suite 6600
Chicago, Illinois 60606
312-258-5550

21 BY: MS. AMY ANTONIOLLI,
22 Appeared on behalf of Medina Valley Cogen.
23
24

A P P E A R A N C E S: (Cont'd)

ENVIRONMENTAL LAW & POLICY CENTER
35 East Wacker Drive, Suite 1600
Chicago, Illinois 60601-2110
312-795-3747

BY: JESSICA A. DEXTER
FAITH BUGEL
JOSH ZAHAROFF
and ANDREW ARMSTRONG,
Appeared on behalf of Environmental Law &
Policy Center.

MUCH SHELIST
191 North Wacker Drive, Suite 1800
Chicago, Illinois 60606-1615
312-512-2717

BY: DAVID L. RIESER

1 HEARING OFFICER FOX: The hour of
2 10:00 has come and just passed if we could go on
3 the record. Good morning, and welcome to this
4 Illinois Pollution Control Board hearing. My name
5 is Tim Fox, and I am the hearing officer for this
6 proceeding which is entitled, Coal Combustion
7 Waste CCW and Surface Impoundments At Power
8 Generating Facilities: Proposed New 35 Illinois
9 Administrative Code 841.

10 The Board docket for this
11 proceeding Docket number is R14-14. I also want
12 to indicate that present today from the Board are
13 the following: At my immediate right is our Board
14 Member Jerry O'Leary, who is the lead board member
15 for this proceeding. At his right is our Board's
16 Chairman, Dr. Deanna Glosser and at her right is
17 our Board Member Jennifer Burke. To my immediate
18 left is our Board's technical unit, Mr. Anand Rao
19 at my immediate left and Ms. Alisa Liu to his
20 left.

21 Briefly reviewing the procedural
22 history of this case, the Environmental Protection
23 Agency filed this rulemaking proposal with the
24 Board on October 28th of 2013, and in an order

1 dated November 7th of 2013, the Board accepted the
2 proposal for hearing. We are today, of course,
3 holding the second hearing in this rulemaking and
4 will be addressing testimony pre-filed for it and
5 questions based upon it.

6 There will also be an
7 opportunity to offer testimony on the Board's
8 request that the Department of Commerce and
9 Economic Opportunity perform an economic impact
10 study of the proposal.

11 In an order dated March 3rd of
12 2014, the Hearing Officer stated that this second
13 hearing would take place as originally scheduled,
14 but amended filing deadlines for it. First the
15 order directed the Agency to respond in writing to
16 questions and requests for information that arose
17 during the first hearing no later than March 25th,
18 2014. On that date, the Agency timely submitted
19 its responses, which the Board appreciates, and
20 those are docketed as Public Comment No. 4.

21 As I noted, the Agency on the
22 same date filed motions requesting that the
23 Hearing Officer correct each of the transcripts of
24 the two days of the first hearing. That March 3rd

1 Hearing Officer order also directed participants
2 to pre-file testimony for the second hearing no
3 later than Wednesday, April 9th, and on that date
4 the Board first received testimony pre-filed by
5 Mr. Gary King on behalf of Ameren Missouri and
6 AmerenEnergy Medina Valley Cogen.

7 The Board also received
8 testimony pre-filed by Dr. Keir Soderberg and Ms.
9 Traci Barkley on behalf of the Environmental Law
10 and Policy Center, the Environmental Integrity
11 Project, the Sierra Club and Prairie Rivers
12 Network, which we will refer to collectively as
13 the Environmental Groups.

14 That Hearing Officer order also
15 directed participants to pre-file written
16 questions based on any of the pre-filed testimony
17 no later than April 30th and also allowed
18 participants to pre-file questions based on the
19 Agency's pre-filed comments by that same date. On
20 April 29th, the Board received the Environmental
21 Groups' questions for Mr. King. On April 30th,
22 the Board first received Midwest Generation's
23 pre-filed questions for Dr. Soderberg and next
24 received the Agency's pre-filed questions for both

1 Dr. Soderberg and Ms. Barkley, and in addition,
2 the Agency's pre-filed questions for Mr. King.

3 Also on April 30th the Hearing
4 Officer order included questions by the Board for
5 Mr. King, Ms. Barkley and for the Agency as well.
6 And as I noted, before hearing began on
7 March 13th, the Environmental Groups filed
8 proposed amendments to the Agency's proposal.

9 Although the Hearing Officer
10 order had originally anticipated that we would
11 begin today with that pre-filed testimony, we have
12 appearing here today approximately seven or eight
13 persons who would like to offer a public comment
14 to the Board on the Agency's proposal. Since we
15 don't expect any of them to offer lengthy comments
16 and they won't be sworn testimony, we will begin
17 with those. I will review the names on the list
18 in just a moment so that we can get started
19 expeditiously with those.

20 Once the comments have been
21 concluded, we will address the Agency's motions,
22 the two motions to correct two days of transcript
23 for first hearing and then we will turn to the
24 pre-filed testimony.

1 Section 104.424(f), as in Frank,
2 of the Board's procedural rules provides that this
3 pre-filed testimony is entered into the record as
4 if read, but one of the witnesses may begin with a
5 brief introduction or summary if he or she wishes
6 to do so. Based on the order then in which we
7 received the testimony and questions, we will
8 begin with the pre-filed testimony, the testimony
9 by Mr. King and proceed first through the
10 questions pre-filed by the Environmental Groups,
11 and then through the questions pre-filed by the
12 Agency before we turn to a small number of
13 questions that were filed by the Board.

14 Then we will turn at the
15 conclusion of those questions to the testimony of
16 Dr. Soderberg and Ms. Barkley and proceed first
17 through the questions pre-filed by Midwest
18 Generation, then through questions pre-filed by
19 the Agency, and then turn to the Board's
20 questions, a small number directed to Ms. Barkley.

21 Next we can turn then to the
22 Board's questions that were based upon the
23 Agency's March 25th post-hearing comments. After
24 those questions, we can see whether there is

1 anyone who did not pre-file testimony but would
2 like to testify here today.

3 Is there, just for the sake of
4 information, anyone who does wish to testify but
5 has not pre-filed testimony?

6 (No response.)

7 HEARING OFFICER FOX: Neither
8 seeing, nor --

9 UNIDENTIFIED FEMALE VOICE: Can you
10 explain pre-filed?

11 HEARING OFFICER FOX: Yes. It's
12 testimony that is submitted to the Board in
13 advance of hearing and is open to
14 cross-examination and follow-up questions here at
15 hearing, and that's distinct from a brief comment
16 that is not sworn and is -- will be offered at the
17 beginning of this hearing, ma'am.

18 If you wish to offer a comment
19 and have not signed in, you may reflect on the
20 sign-in sheet that you wish to do so.

21 As time allows after we have
22 completed the testimony and questions, we can also
23 quickly determine whether anyone wishes to
24 follow -- wishes to offer any public comment

1 before we adjourn. Any questions about the order
2 of proceeding? Ms. Olson?

3 MS. OLSON: Will there be time to
4 ask questions just on the counter-proposal to the
5 Environmental Groups?

6 Hearing Officer FOX: Yes. As I had
7 indicated, the proposal does pertain to the
8 pre-filed testimony and in some cases responds to
9 the pre-filed questions. It's my intention to
10 allow not only the pre-filed questions, also
11 follow-ups on those, and any questions as they
12 pertain to the proposal that was filed yesterday.

13 Does that complete your --
14 answer your question, Ms. Olson?

15 MS. OLSON: I guess my question is,
16 is Mr. Soderberg and Ms. Barkley going to be the
17 witnesses that will handle all the questions on
18 the counter-proposal?

19 Hearing Officer FOX: Mr. Armstrong,
20 I believe is going to address that.

21 MR. ARMSTRONG: And to clarify that
22 point, our witness' testimony informs some aspects
23 of the counter-proposal, but not necessarily all
24 aspects. So to the extent that the testimony

1 addresses portions of the counter-proposal, they
2 can address questions on those areas.

3 MS. OLSON: How will the
4 participants be able to question ELPC and
5 Environmental Groups on the other aspects of your
6 proposal on which you do not have testimony here
7 today?

8 MR. ARMSTRONG: What we have not
9 presented through pre-filed testimony we will
10 address through our post-hearing comments.

11 MS. OLSON: I would just like to
12 request that the Agency be given an opportunity to
13 respond to any post-hearing comments about the
14 proposal and comment that it seems to be a little
15 inappropriate to support your proposal not with
16 sworn testimony and with comments.

17 Hearing Officer FOX: Ms. Olson, I
18 understand precisely I think what you are
19 requesting. I would like to table that as it were
20 to the conclusion of hearing to the point at which
21 we are ready to adjourn. We can at that point
22 discuss procedural steps, including the filing of
23 post-hearing comments, and any interest that the
24 participants have in filing responses to those

1 including deadlines and schedules for that.

2 Mr. Rieser?

3 MR. RIESER: And would it be also
4 accurate based on comments prior to the record
5 that the Board may entertain a request for
6 additional hearing should the testimony of the
7 witnesses available from the Environmental Groups
8 prove to not reach all the elements of the
9 proposed rule, and I would certainly agree with
10 Ms. Olson. It's very unusual to have a proposal
11 filed the day before a hearing and not have people
12 available to testify and expect to have issues
13 regarding that proposal addressed solely by --
14 through post-hearing comments.

15 Hearing Officer FOX: And in
16 response, Mr. Rieser, I would simply say this. In
17 this as in any other rulemaking, the Board will
18 always entertain any motion that a participant
19 wishes to file, and we will give it due
20 consideration. Upon their determination, I will,
21 of course, be bound by the direction they give me
22 in deciding it.

23 MR. RIESER: Thank you.

24 MS. DEXTER: The issues that are not

1 covered by our witnesses today are basically
2 issues that will have legal arguments that we will
3 present in the post-hearing comments. So we
4 didn't think that that was a --

5 MR. RIESER: I'm sorry. I can't --

6 HEARING OFFICER FOX: Ms. Dexter,
7 could you repeat --

8 MS. DEXTER: The remaining issues
9 that aren't covered by our witnesses are likely to
10 be -- revolve around legal arguments that are more
11 in the nature of --

12 MS. OLSON: Are you willing to spell
13 out those issues for us?

14 MS. DEXTER: I believe they are
15 contained in the proposal.

16 MS. OLSON: The ones that you will
17 not be presenting testimony on, could you tell us
18 what they are?

19 Hearing Officer FOX: Rather than
20 get into this issue at this point, what I would
21 like to do is get underway as quickly as possible
22 with the testimony and questions. At the
23 conclusion of the hearing, Ms. Olson, I don't mean
24 to give short shrift to your question.

1 We can see more precisely where
2 the parties stand, more precisely what they would
3 like to request of the Hearing Officer or the
4 Board and address it a little more confidently and
5 completely at that point. Does that makes sense?

6 MS. OLSON: Yes.

7 HEARING OFFICER FOX: I am seeing
8 other folks indicating that they agree. So let's
9 proceed with the substance of the hearing.

10 Do we have anything else before
11 we begin with the public comments, first of all?

12 (No response.)

13 HEARING OFFICER FOX: Neither seeing
14 nor hearing any, I have a list coming my way. I
15 am going to take a moment -- and let me take a
16 moment. What I would like to do is read through
17 these names in the order in which they appeared
18 and signed up. There are a couple of reasons for
19 that. First of all, I want to make sure that you
20 are here. Secondly, so that you can see who
21 precedes you and you can be prepared to offer your
22 comment as quickly as possible after they have
23 concluded theirs.

24 Let me begin with Mr. Dennis

1 Nelson. Is he here today? Mr. Nelson I see that
2 you are. Thank you.

3 Ms. Carol Cooper.

4 MS. COOPER: Yes.

5 HEARING OFFICER FOX: I see your
6 hand.

7 Barbara Hill?

8 MS. HILL: Yes.

9 HEARING OFFICER FOX: Also here.
10 Rene Schreiner, am I pronouncing that correctly?

11 MS. SCHREINER: Yes. That's
12 correct.

13 HEARING OFFICER FOX: Thank you.
14 Jill Paulus. Am I pronouncing that correctly?

15 MS. PAULUS: Yes.

16 HEARING OFFICER FOX: Very good.
17 Patricia Walter. I see your hand. Lois Kain. Am
18 I pronouncing that correctly? Very good. Eileen
19 Borgia also present. Leslie Shad also here.
20 Marcia Powell?

21 MR. POWELL: Here. Marcia.

22 Hearing Officer FOX: Marcia. My
23 apologies. The next -- I have a couple of crossed
24 out names. The next one is Marcia Burnitz.

1 MS. BURNITZ: Mary Burnitz.

2 HEARING OFFICER FOX: Mary Burnitz.

3 So noted. Sorry for mangling that. Vincent
4 Coors? Very good. Matthew Steffan, and finally,
5 is it Ellen Rendulich? Very good.

6 You all are present. Let me
7 repeat. We would like you to limit your comments
8 to three minutes, and I would ask you to listen to
9 one another so that we can avoid repetition and
10 can hear your particular comments more clearly.
11 What I would ask you to do to deliver your
12 comments is to step forward, perhaps to this table
13 to my left, where you will be closer to the court
14 reporter. You will be more easily heard, and your
15 comments will be more clearly made part of the
16 record.

17 Any questions for those of you
18 who wish to comment?

19 (No response.)

20 HEARING OFFICER FOX: Mr. Nelson,
21 why don't we have you step forward so you are not
22 addressing the room from the back. Mr. Nelson,
23 when you are prepared to begin, please do so.

24 MR. NELSON: Good morning. My name

1 is Dennis R. Nelson, D-E-N-N-I-S, middle initial
2 R, N-E-L-S-O-N. My address is 3817 South
3 Winchester Avenue, Floor 2, Chicago, Illinois
4 60609-2011. I have a bachelor of science (BS
5 degree), in biology and environmental studies from
6 Dana College, Blair, Nebraska.

7 I am the vice president of the
8 Chicago based Nuclear Energy Information Service
9 (NEIS). Our website is www.neis.org. What does
10 being, quote, Illinois' nuclear power watchdog
11 group have to do with the Illinois Pollution
12 Control Board (IPCB) hearing on the Illinois
13 Environmental Protection Agency's (IEPA's)
14 proposed rules to regulate toxic coal combustion
15 waste at our coal-fired power plants?

16 Well, you see, coal contains the
17 radioactive elements uranium and thorium. When
18 coal is burned in a power station, this uranium
19 and thorium become concentrated in the already
20 toxic coal ash at up to ten times their original
21 levels. There is no safe dose of ionizing
22 radiation from these radioactive elements. From
23 the huge, toxic coal ash spill at the Tennessee
24 Valley Authority's (TVA's) Kingston coal-fired

1 power plant on December 22nd, 2008 measurements by
2 researchers at Duke University's Nicholas School
3 of the Environment, at a partially dammed
4 tributary of the Emory River confirmed the
5 contamination not only by toxic heavy metals like
6 arsenic, but also by dangerous levels of two
7 radionuclides of radium, radium 226 and radium
8 228.

9 NEIS advocates moving beyond
10 coal with its toxic combustion waste and moving
11 beyond nuclear with the different radioactive
12 wastes produced by the entire commercial nuclear
13 fuel cycle to a non-fossil fuel, non-nuclear
14 energy strategy called carbon-free, nuclear-free.
15 This inherently cleaner and safer, technically and
16 economically feasible energy pathway within 30 to
17 50 years includes energy use reassessment, greater
18 increased energy efficiency, combined heat and
19 power, appropriate renewable energy technologies,
20 smart electricity grids and advanced energy
21 storage.

22 In my "non-NEIS" online comments
23 that were submitted on Thursday, May 8th, 2014, I
24 already detailed how and why the final Illinois

1 Environmental Protection Agency rules regulating
2 toxic coal impoundment ponds must be strengthened.
3 The coal industry and the electrical utilities are
4 complaining that these tougher statewide rules
5 will be "too expensive." Actually, whether that
6 is true or not is beside the point.

7 Stronger, finalized rules to
8 keep toxic coal combustion waste out of our
9 state's waterways and groundwater are also
10 necessary "regulatory drivers" for the already
11 mentioned inherently cleaner and more economical
12 energy policy including efficiency, cogeneration
13 and renewables.

14 In conclusion, we should take
15 the conscious, determined steps to make the Land
16 of Lincoln a cleaner, safer and healthier place to
17 live. I strongly encourage the Illinois Pollution
18 Control Board with its rulemaking process to
19 protect our public health and ecological health.
20 Thank you very much.

21 Hearing Officer FOX: Mr. Nelson,
22 thank you for your comment, which is reflected in
23 our record.

24 We are ready for Ms. Cooper, if

1 she could step forward, please. Ms. Cooper, I
2 neglected to ask Mr. Nelson, but he obliged me
3 anyway. If you could just spell your name and
4 name anyone you may be representing, any
5 organization or group you may be with here today.

6 MS. COOPER: Carol Cooper,
7 C-O-O-P-E-R. If anything, I am representing --

8 UNIDENTIFIED FEMALE VOICE: Can't
9 hear.

10 MS. COOPER: Carol Cooper,
11 C-O-O-P-E-R. I am representing myself, and that's
12 as a daughter of John Cooper.

13 So good morning. Thank you for
14 this opportunity to testify. I -- again, my name
15 is Carol Cooper. Can everybody hear me?

16 (Audience responding no.)

17 MS. COOPER: Okay. I live in
18 Libertyville, which is in Lake County. My
19 professional -- my entire professional life has
20 been dedicated to healthcare. I am a life long
21 resident of Illinois except when I went north of
22 the border to attend the University of Wisconsin.

23 I have been an Abbott employee
24 for 18 years, and as an Abbott employee, I was a

1 hepatitis researcher, a clinical trial coordinator
2 and a regulatory affairs professional. My last
3 position was as Director of Regulatory Affairs at
4 Baxter Healthcare.

5 I am here today because of my
6 concern about water quality, and how coal ash
7 impacts our health. These proposed rules do not
8 prevent further pollution of our water. They do
9 not require adequate monitoring and leave
10 downstream waterways vulnerable to toxins. As a
11 by-product of coal combustion, this waste can
12 contain over 17 contaminants. I won't go into any
13 details. My contention will be the contaminant
14 lead. And they threaten the groundwater if the
15 containment system is not adequate and not
16 monitored.

17 None of these are chemicals that
18 should supplement our waters. As a citizen, these
19 rules do not provide sufficient time for public
20 comment and should be revised to give public at
21 least 60 days. My assumption is that later
22 speakers will discuss the attributes for surface
23 impoundment or coal combustion waste at power
24 generating facilities.

1 Proposed rules from the state's
2 EPA is weak and not in the public's best
3 interests. Coal ash problems must be dealt with
4 now, because it places us all at risk. My
5 particular concern is personal and is directed at
6 lead. Lead is just one of the many contaminants,
7 and it is a well-known fact that this metal is
8 poisonous. Lead stunts the growth of children.
9 It damages their brains, kidneys, hearing and
10 mental development.

11 Studies have linked early lead
12 exposure with lower IQs. Lead is also a risk
13 factor for Alzheimer's disease. It is suspected
14 that early lead poisoning may boost Alzheimer's
15 years later. In 2008, a monkey study was
16 published in that young monkeys were fed a lead
17 enriched infant formula. These monkeys along with
18 a control group were evaluated for 23 years. Upon
19 autopsy, the brains of monkeys that received the
20 lead enriched formula as infants had beta amyloid
21 plaques.

22 In December, a new study was
23 published in neurotoxicology. The same monkeys'
24 brains were examined once more and tau proteins

1 were found. Tau proteins are also linked to late
2 onset Alzheimer's disease. The author suggested
3 that early lead exposure epigenetically
4 reprogrammed the lead fed monkey's DNA.

5 I left Baxter recently to care
6 for my parents. Mom had broken her hip, and my
7 father who suffers moderate, if not severe
8 dementia. Most likely it's Alzheimer's.

9 My father was raised in the
10 Alleghenies of Pennsylvania. Shaft coal mining
11 was the town's predominant business. My father
12 began working for one of the mines at a surface
13 job when he was 12. I really don't have any
14 definition of what a surface job is, and my father
15 can't tell me any longer, but it was everything
16 but going down into the mines. He has four
17 sisters and is the only one of the siblings to
18 suffer from dementia. Note that Alzheimer's is
19 usually predominantly found in women. Alzheimer's
20 is the fourth leading cause of death in the U.S.
21 Research estimates that 5.1 million Americans may
22 have it.

23 My father's disease may or may
24 not be related to his lead exposure as a child.

1 There is still much to be learned, but as a child
2 of a parent with this disease, something as simple
3 as adequate containment of one of the 17 or more
4 by-product chemicals should be properly handled.
5 The proposed rules are lacking the proper
6 enforcement and should be amended.

7 I implore you to regulate coal
8 combustion waste at power plants now and to
9 strengthen the proposed rules so that our waters
10 remain safe, potable. The companies of coal ash
11 ponds should no longer pollute and be required to
12 clean up the mess created at their plants. Thank
13 you.

14 Hearing Officer FOX: Ms. Cooper,
15 thank you for your comment.

16 Ms. Hill, we are ready for you.
17 If you would step forward also, and let us know
18 who you may be representing or which group you may
19 be part of today.

20 MS. HILL: Yes. Hello. I am
21 Barbara Hill, B-A-R-B-A-R-A, H-I-L-L. I am a
22 34-year resident of Palatine and I am active with
23 the Sierra Club. I am not speaking officially for
24 them, but I -- you know, I am active as the

1 political chair for the Illinois chapter, and the
2 Northwest Cook County group.

3 I grew up outside Cleveland, and
4 remember the days when the Cuyahoga River caught
5 on fire fairly regularly due to industrial
6 pollution. My father was on our county health
7 board, and I watched him fight to get residents to
8 switch from septic systems to sewage treatment
9 systems as the county population increased.

10 Both these early experiences
11 taught me that effective regulations meet with
12 significant resistance when proposed, but they
13 improve the quality of life for everyone when
14 implemented. The combustion waste from coal
15 plants will significantly degrade our water
16 quality if it washes into streams or leeches into
17 groundwater.

18 I am very concerned that the
19 proposed rules require no assessments of impacts
20 on surface water. This omission puts our streams
21 and rivers at risk of toxic pollution. I am also
22 concerned that the rules enable the operator to
23 leave impoundments in-place indefinitely after a
24 coal plant closes. Unless coal ash is removed

1 from the site in a timely fashion and place and
2 disposed of, nearby residents face an ongoing
3 threat of contaminated drinking water.

4 The rules should also require
5 financial assurances from plant operators so that
6 Illinois taxpayers do not have to bear the costs
7 of solving environmental problems after the plant
8 has closed. Clean water is essential to all of
9 us; plants, animals and people. Please strengthen
10 your proposed rules so that all of us can thrive.
11 Thank you. For your attention.

12 Hearing Officer FOX: Ms. Hill,
13 thank you for your comment today, which is, of
14 course, in the record.

15 Ms. Schreiner, we are ready for
16 your comment, and once again, if you would spell
17 your name and let us know who you may be
18 representing here today.

19 MS. SCHREINER: My name is Rene
20 Schreiner. I am a resident of Schaumburg,
21 Illinois and a lifelong Illinoisan. I would --
22 R-E-N-E, S-C-H-R-E-I-N-E-R.

23 Thank you for the opportunity to
24 exercise my right today to participate in

1 decisions made regarding the safety of Illinois
2 water sources. As a resident of Schaumburg, you
3 may ask why I am here to testify today, but I am
4 here because I count myself amongst the
5 privileged.

6 I do not live near an unlined
7 wet ash pond. I get my drinking water from Lake
8 Michigan rather than a contaminated well. I am
9 here because I have the health and the monetary
10 resources to do so. Many that live near coal ash
11 ponds have neither their health, nor the monetary
12 resources to come and be here today. Since low
13 income Illinoisans live near a disproportionate
14 share of coal ash facilities.

15 I feel that it is my duty based
16 on my privilege to come and testify for those who
17 cannot due to illness or death in their families.
18 I am here to stand for those that are not able to
19 testify on their own behalf. They are my far
20 neighbors, those that live near an unlined wet ash
21 pond and drink from wells.

22 The EPA has found that living
23 next to a coal ash deposal site can increase the
24 risk of cancer or other diseases for these, my far

1 neighbors. In the absence of strict, federal
2 regulations, Illinois has the opportunity to do
3 the right thing and set the standard for
4 proclaiming proper and safe use of disposal
5 methods for coal ash.

6 I am a proud Illinoisan that
7 finds it completely unacceptable that other
8 Illinoisans living near wet ash ponds have as much
9 as a 1 in 50 chance of getting cancer from
10 drinking water contaminated by arsenic, one of the
11 most common and dangerous pollutants in coal ash.

12 The more I learn about the
13 terrible affects of coal ash, the prouder I am
14 that I chose the green option offered by
15 Schaumburg's aggregate electric contract for my
16 home's electric supply. I am happy to pay a few
17 cents more for my electricity, knowing that I am
18 not contributing to the devastating affects of
19 coal ash upon rural and poor Illinoisans,
20 especially children.

21 The majority of damaging affects
22 caused by coal ash come from leaching. This
23 process is invisible and gradual, often occurring
24 over a number of years, and it will go undetected

1 if testing of groundwater at coal ash disposal
2 sites is not mandated. I would like to see the
3 Board do that.

4 Prolonged exposure to the toxic
5 metals found in coal ash is responsible for, among
6 other things, several types of cancers,
7 respiratory distress, impaired bone growth in
8 children and nervous system impacts. I am asking
9 you if we want any of these for our fellow
10 residents of Illinois? I urge you to take every
11 measure available to you to prevent this from
12 happening to anyone anywhere in our great state.

13 I urge the IEPA to strengthen
14 the rules proposed today and to prevent coal
15 combustion waste from continuing to damage the
16 waters used by citizens of this state. Require
17 companies with coal ash ponds to show that they
18 have the financial means to clean them up so
19 communities are not poisoned and then left with
20 the responsibility and cost for that cleanup.
21 Thank you for the opportunity to testify.

22 Hearing Officer FOX: Ms. Schreiner,
23 thank you for your comment today. Ms. Paulus, we
24 are ready for you if you would step forward,

1 please. And the same request for you, if you
2 would spell your name and let us know who you may
3 represent, ma'am.

4 MS. PAULUS: Is that good? Can you
5 hear me?

6 (Audience responding no.)

7 MS. PAULUS: My name is Jill Paulus.
8 It's, J-I-L-L, P-A-U-L-U-S. I am actually here --
9 I am part of FrackFree. I am also a Wild Ones
10 member. I am an environmentalist, and that is how
11 come I have come to environmental activism, and I
12 am concerned about the coal ash.

13 For one thing, when the Chicago
14 Tribune finally says climate change is upon us, we
15 are active into it, and again today the Tribune
16 has a headline, flooding. We have to be concerned
17 about water. In Havana -- and this is just one
18 example of a problem with coal ash. They have --
19 it says here, number of coal ash pits, they have
20 three. They have two out of six cells unlined.
21 Thirty-seven percent of the coal ash pits are
22 unlined. So, therefore, they are leaching into
23 our water. There is no way around it.

24 We have had flooding of the Des

1 Plaines River, and now there is no one paying for
2 that. The insurance did cover that flooding, but
3 now they are putting it back on the citizens. It
4 is an intertwined economic and environmental
5 disaster we face unless we change.

6 So what I am saying to you is,
7 yes, you have to have tighter regulations. This
8 has been gone over with the previous
9 person/persons. We have radioactivity in the coal
10 ash, according to the speaker, Dennis. I don't
11 remember his last name. If we are in risk of
12 flooding, we have -- and this was my example. In
13 Havana, Illinois there is a high hazard dam, that
14 if that dam breaks, all this coal ash can flood
15 throughout the state. We have to have contained
16 structures.

17 We can no longer have pits,
18 which are open to the environment. Much of
19 southern and central Illinois is a flood plain
20 area. We face the same problem with the coal ash
21 with fracking pits in other states.

22 So my main message is that even
23 with containment, we will face dangers. This is a
24 new game. We have to get out of the past of

1 fossil fuels. They are dangerous. There really
2 is no way to clean them up, and the only way to
3 change it, though, is to make very stringent
4 regulations, and they have to cost the industry.
5 That is the way they will change.

6 Duke Energy in North Carolina
7 had a very famous spill. What I read -- it was
8 \$15 million or so. And they said, well, that's a
9 drop in the bucket. We are in the billions of
10 dollars in our operation, huge profits, but at
11 this point in time, I think they're looking to
12 push that back on the ratepayers, and that's kind
13 of common.

14 So my basic comment is, look at
15 one example. Look at Havana. Look at what's
16 happening there. Multiply that to see the
17 devastation. Consider climate change, flooding.
18 It's a new ballgame, and you know the cost really
19 is on the people. There is birth defects,
20 neurological damage, reproductive issues.
21 Physicians For Social Responsibility has said that
22 in their article, The Toxic Threat For Our Health
23 and Environment, that those are the results.

24 The EPA itself has said that one

1 in 50 people who drink coal ash water, which could
2 be the result of all this coal ash in our
3 environment, will get cancer. So it's documented
4 that it's hazardous to health. Thank you.

5 HEARING OFFICER FOX: Ms. Paulus,
6 thank you for your comment.

7 Ms. Walter, we are ready for
8 you, if you would step forward, please. And once
9 again, if you could let us know your name, please,
10 and anyone you may represent.

11 MS. WALTER: Is this mic working
12 first?

13 HEARING OFFICER FOX: I don't
14 believe that's an amplified mic, but we will need
15 you to speak clearly for the full room.

16 MS. WALTER: I will try to speak so
17 most people can hear me. Again, my name is
18 Patricia Walter. That's, P-A-T-R-I-C-I-A, last
19 name is Walter, W-A-L-T-E-R. I am a concerned
20 citizen. I do not represent any particular group,
21 but I want to say I live right now in Glenview,
22 Illinois, but for 40 years I lived and worked in
23 downtown, Chicago, and I mean downtown.

24 I was part of coming here to

1 work every day for those 40 years. I want to
2 thank you very much for holding this hearing. Any
3 public comments I think are always wonderful,
4 which is why I am able to be here. I first want
5 to also say I am very grateful that the Illinois
6 Pollution Control Board -- excuse me -- is able to
7 listen to us directly. That is a wonderful -- you
8 are a vital part of this process, as you know.

9 I was looking at your mission
10 statement, which I had to deal with a lot in my
11 job, and as it states, you are -- were enacted in
12 1970 for the purpose of establishing a statewide
13 program to restore, protect, and enhance the
14 quality of the environment. That I know is your
15 mission, and I know you folks believe in that.

16 I want to say that the reason
17 that I am here as a concerned citizens is that I
18 am a three-time breast cancer survivor. Not
19 unlike Mrs. Daley, who I followed a lot of times
20 in the news -- I was very concerned whenever she
21 had her treatments, and obviously, I certainly had
22 mine. They were not easy, and they were
23 difficult, but on the good news, yes, I am here,
24 and nationwide there are 2.8 million of us.

1 Anything that I can comment on
2 to emphasize the importance of our environment is
3 something that I am interested in. I have always
4 been very healthy as far as my own personal
5 habits. I don't smoke. I don't drink. I don't
6 jump out of airplanes. I don't do anything that
7 could risk my health. My parents taught me that.

8 But on the other side, I am
9 going to have side effects. That's what happens
10 with breast cancer treatments. So I have to be
11 especially careful. I am very happy to hear about
12 the specifics that other folks have commented on
13 today for the problem of coal ash. I am just
14 learning more about this, but I have to say I am
15 also very happy that Mr. O'Leary is the lead
16 person, I understand, at least for today, and I
17 found that part of an organization that you were
18 involved with before, the United Association, is
19 involved with LEED construction.

20 Again, the purpose of that is to
21 help our environment. So, again, just to state
22 another obvious example, we have to be careful of
23 what we do with our air and water. I can do what
24 I can, because as another lady said, I am able to

1 have my water filter and do what I can. But not
2 everybody is going to walk around with a water
3 filter all the time. You just can't do it.

4 And I look at the example in
5 West Virginia where they dumped something and they
6 still don't know what it was that they dumped in
7 the water. Well, that was obvious and above
8 ground. I mean, if it's leaching into the ground,
9 how are you going to know what's there, and how
10 would you know to be able to take care of it.

11 So BP has been taking care of
12 the Gulf now for a number of years. I think BP
13 can and will do the responsible thing in taking
14 care of the petcoke here. So those are my
15 comments. Thank you very much.

16 Hearing Officer FOX: Ms. Walter,
17 thank you for your comments.

18 Ms. Kain, we are ready for you
19 if you would step forward, please. Once again, if
20 you would spell your name and let us know who you
21 may represent today.

22 MS. KAIN: Good morning. My name is
23 Lois Kain, L-O-I-S, K-A-I-N.

24 HEARING OFFICER FOX: Ms. Kain, if

1 we could ask you to project a little more loudly,
2 please.

3 MS. KAIN: I live in Urbana about
4 30 miles west of three coal ash pits, perched in
5 the flood plain along Illinois' only national
6 scenic river, the middle fork of the Vermillion
7 River. The company, Dynergy, mothballed its
8 Vermillion River Station, power station in Oakwood
9 in 2011, but the coal ash pit still sits there,
10 still decaying, still contaminating the river.

11 Two of the three pits are
12 unlined, and two of the three pits are leaking
13 dangerous coal ash toxins into the much beloved
14 river. The ever changing river affects the stone
15 embankments, which are failing, and every rain,
16 storm and flood brings the possibility of a
17 disaster that could be more horrifying than the
18 recent Dan River disaster in North Carolina.

19 I took a coal fuels tour in 2011
20 arranged by Prairie Rivers Network and the
21 Heartland Coalfield Alliance. I had never seen
22 coal ash pits that closed before. Millions upon
23 millions of tons of horribly toxic coal combustion
24 waste is stored in acres-wide above ground

1 impoundments leaking into local waterways.

2 I was shocked to learn that some
3 of these gigantic ponds not all were lined simply
4 with black landscaping plastic only millimeters
5 thick and open to the sky. Illinois has over 90
6 coal ash pits, and every one has polluted the
7 groundwater around it.

8 We need the Illinois Pollution
9 Control Board to step up and enact and enforce the
10 most stringent coal ash regulations. Impoundments
11 causing contamination have got to be closed by a
12 firm date, and complete removal of all waste to
13 permanent, secured, dry locations is imperative,
14 no leeway given.

15 Much stronger rules protecting
16 surface water contamination are needed. Citizens
17 have the right to be involved in protecting their
18 communities when it comes to the handling of coal
19 ash combustion waste, and big coal should shoulder
20 the full cost of cleaning up the messes it has
21 left behind after decades of lack in oversight and
22 gargantuan profits.

23 The Illinois Public -- Pollution
24 Control Board needs to strengthen these proposed

1 rules to regulate coal combustion waste. We
2 cannot live without clean water. This is a moral
3 issue. This is a justice issue. The citizens of
4 Illinois and our ecosystem deserve your fullest
5 protection.

6 And I also would like to
7 mention a -- Prairie Rivers' online petition to
8 clean up the ash pits along the middle fork. So
9 far I had 560 signatures, and the petition is
10 about opposing Dynegy's plan to just leave these
11 ash pits just like they are along the river, and
12 that -- it urges that these things have to be
13 moved to a high and dry lined landfill and that we
14 are hoping that the local, state and regional
15 decision-makers will act on behalf of the river
16 and the citizens and make Dynegy clean these
17 things up like they should. And thank you very
18 much.

19 HEARING OFFICER FOX: Ms. Kain,
20 thank you for your comment. Ms. Borgia we are
21 ready for you. Once again, give us the spelling
22 of your name.

23 MS. BORGIA: Is it okay if I stand?

24 HEARING OFFICER FOX: That's just

1 fine, ma'am.

2 MS. BORGIA: Thank you. My name is
3 Eileen Borgia; E-I-L-E-E-N, B-O-R-G-I-A. I live
4 in Urbana, Illinois. And I thank you for the
5 opportunity to address the Environmental
6 Protection Agency, and the Pollution Control
7 Board.

8 And I am speaking to you as a
9 citizen concerned about air and water pollution,
10 but also as a professional educator who teaches
11 adults to work with young children and about the
12 things that impact their environment and their
13 learning abilities.

14 My -- I have been doing this
15 work for 46 years. I earned my Ph.D. in early
16 childhood education from the University of
17 Illinois, and I have done that in many capacities.
18 Thanks to decades of experience in my field, I
19 know that prevention of harm is as important as
20 promotion of mental, physical and emotional health
21 and education.

22 The deleterious effects of
23 inadequate disposal of waste from coal production
24 and the long time lapses in rules from

1 identification to resolution are of great concern
2 to me, and they intersect the needs and rights of
3 young children as well.

4 Several people have already
5 mentioned the -- some of the harmful wastes that
6 are affecting children, and I will not read all of
7 mine because of that, but prenatally mercury
8 affects fetuses, and it affects nervous system
9 damage and developmental delays. If you are
10 thinking about the school system and the children
11 that you know, there is a big cost for children
12 who have any kind of impairments.

13 Chromium can cause all sorts of
14 anemia, asthma and wheezing. Asthma is another
15 huge issue in schools today. Excess selenium
16 causes, again, neurological damage, impaired
17 vision, paralysis. Arsenic can lead to nervous
18 damage. Boron can damage testes, intestines and
19 other organs.

20 Lead can result in brain
21 swelling, as you know, nervous damage, and it is
22 accepted that no safe level of lead exposure is
23 good, especially for children. The modern effects
24 on children from contamination by coal waste

1 poison extract huge unintended consequences on
2 families, medical systems and the public, special
3 education services for the first 21 years of a
4 child's life.

5 Many children live with those
6 effects and the quality of their childhood and
7 their projected adult productivity is seriously
8 disrupted. The economic drag on state resources
9 will affect all taxpayers.

10 Prevention of ill effects is the
11 responsibility of coal producers, and when
12 corporations shrink their obligation to children
13 and families, environmental agencies can and must
14 enforce strong rules, including financial
15 penalties. It's less costly for coal companies to
16 leave no carcinogens behind than to leave
17 surviving children behind with impaired brains and
18 bodies. And as a bereaved parent, I can assure
19 you that no amount of money can soothe the loss of
20 a child from any cause.

21 To protect Illinois children, I
22 urge the Pollution Control Board and the
23 Environmental Protection Agency -- I suggest three
24 things; one, require the removal of coal ash from

1 failing pits to high and dry landfills, and many
2 of us have already suggested that. Allow for
3 assessment and prevention of damage to rivers and
4 lakes, and readjust the existing acceptable levels
5 of admission. What's an acceptable level of lead
6 poisoning?

7 Require power companies to
8 provide financial assurances, whether it's a
9 proposed coal plant, an operating coal plant or an
10 expired coal plant, that they are going to pay the
11 bill for the disaster clean-up that might occur.

12 Illinois Environmental
13 Protection Agency and Pollution Control Board have
14 been interested to do no harm to the people, and
15 have the power to enforce strong rules regarding
16 coal waste and contamination. It is your moral
17 and legal obligation. Please do it. Thank you.

18 Hearing Officer FOX: Ms. Borgia,
19 thank you. Mrs. Shad, we are ready for --

20 MS. BORGIA: I have another letter
21 from the Vermillion County Soil and Water
22 Conservation District, if you please. Is it all
23 right if I --

24 HEARING OFFICER FOX: Would you like

1 me to submit that to our clerk as a written
2 comment in this case, ma'am?

3 MS. BORGIA: Not this copy, but we
4 have a -- yes, we have a copy for you.

5 Hearing Officer FOX: Very good.
6 And our clerk's office is upstairs on the 11th
7 floor if you would wish to file that with him as
8 well or comment yourself.

9 MS. BORGIA: Thank you. And you
10 would rather I not speak that?

11 HEARING OFFICER FOX: If you have
12 got a written copy --

13 MS. BORGIA: I do.

14 HEARING OFFICER FOX: -- and we can
15 submit it into the record that way, that would be
16 expeditious. We have got a number of people
17 behind you waiting to offer a comment, ma'am.

18 MS. BORGIA: Ms. Shad, if you would
19 step forward, please.

20 MS. SHAD: Thank you. Thank you for
21 letting us speak. I appreciate that. And I am
22 going to just stand too, because maybe I can be
23 heard more easily.

24 Leslie Shad. It's, L-E-S-L-I-E,

1 S-H-A-D. I am from Evanston, and I am on the
2 board of Citizens For a Greener Evanston, and also
3 National Wildlife Federation, but most importantly
4 I am a mom with three teenagers.

5 So, yes, I live in Evanston. I
6 am here primarily on behalf of National Wildlife
7 Federation where I am a board member. NWF has
8 four million members, partners and supporters.
9 140 thousand of those are in Illinois. NWF's
10 mission is to protect -- inspire Americans to
11 protect Wildlife for our kids' future and the
12 treatment of coal ash matters to me as a mother
13 and someone who cares for the health of our
14 community.

15 I just want to -- I am here just
16 to note for you -- the record, that earlier this
17 month National Wildlife Federation's 49 state
18 affiliates unanimously passed a resolution calling
19 for action on coal waste. The resolution called
20 attention to the fact that many coal ash dams were
21 built five or more decades ago, long before modern
22 technologies and standards existed, before the
23 Clean Water Act.

24 Some utilities that benefited

1 from the pits are defunct or in bankruptcy leaving
2 no one to maintain and be financially responsible
3 for the impoundments and the harm that flows from
4 them. That the wet disposal of coal ash and
5 unlined impoundments near waterways and wildlife
6 habitat is recognized by the utilities, regulators
7 and others as archaic, imprudent and a real danger
8 to public health and outdoor economies, as well as
9 wildlife.

10 The impoundments have failed
11 with devastating effects on communities and
12 wildlife as everyone knows and it's been well, you
13 know, in the news. The National Wildlife
14 Federation's resolution calls on federal and state
15 agencies to expedite promulgation, implementation
16 and enforcement of effective state of the art
17 standards to regulate coal waste.

18 The National Wildlife Federation
19 strongly encourages the utilities responsible for
20 coal waste wet impoundments to voluntarily act to
21 expedite moving these toxic residuals to lined,
22 dry landfill facilities using the best available
23 technologies, leak resistant liner systems and
24 locating deposits far from the surface and

1 groundwater and sensitive wildlife habitats. NWF
2 recognizes and commends utilities that are already
3 implementing these improved practices. So this is
4 not news.

5 On behalf of the National
6 Wildlife Federation, I encourage you to pass coal
7 waste rules for the comprehensive closure and
8 clean-up of coal ash pits in Illinois. It needs
9 to include protection of surface and groundwater,
10 financial assurance from the industry and allowing
11 the public input throughout the closure process.
12 This is just critical for kids in our communities,
13 and I have the resolution, which I would like to
14 submit as well, if I could.

15 Hearing Officer FOX: Yes. I can
16 accept that as a written comment, if you would
17 wish, and it will be filed as a document in our
18 public record.

19 MS. SHAD: That sounds perfect.

20 Hearing Officer FOX: Very good,
21 thank you.

22 MS. SHAD: Thank you so much for
23 your help and time and your attention to these
24 issues.

1 HEARING OFFICER FOX: Ms. Shad,
2 thank you for your spoken comment and the document
3 you provided me will be entered into the record as
4 a written public comment in this case, and Ms.
5 Powell that causes us to be ready for you.
6 Ms. Powell?

7 MS. POWELL: This is from Eileen
8 Borgia's thing. I was told to hand it to you.

9 HEARING OFFICER FOX: Very good.
10 And I will just have the record quickly reflect
11 that the document Ms. Borgia referred to has been
12 provided to me for filing as a written public
13 comment in this docket, Ms. Borgia. Is that
14 correct?

15 MS. BORGIA: I am hearing that you
16 indicate that it is correct. Ms. Powell, please
17 go ahead with your comment when you are ready.

18 MS. POWELL: So my name is Marica
19 Powell; M-A-R-C-I-A, P-O-W-E-L-L. I am here
20 because I am concerned about the water quality and
21 the future of the waterways in my community and
22 throughout Illinois.

23 I recently inherited 20 acres of
24 farmland near Ogden, which is about 15 miles east

1 of Urbana. I am turning it into a sustainable
2 farm. The south border is an irrigation ditch.
3 The Salt Fork River is only about 6 miles away by
4 the town of Homer where a coal mine is planning to
5 operate. Thus, there is the threat of possible
6 future problems from coal ash pollution from that
7 mine, which I hope doesn't happen. Anyway,
8 Oakwood is only a few miles east of me.

9 Although the Dynegy power plant
10 is now inactive, there are three coal ash pits on
11 the site with two of the three cells unlined.
12 Groundwater adjacent to and underlying the coal
13 ash pond is the bank of the middle fork of the
14 Vermillion River, which is Illinois' only national
15 scenic river. The river is destabilizing the ash
16 pond walls allowing more leaching and a potential
17 breach.

18 As someone whose goal to is
19 produce organic food, any pollution in my area is
20 a problem for me. There is more and more data
21 becoming known regarding the relation between
22 polluted water, polluted soil and the growing
23 number of health problems of the populous.

24 Just in the last couple of weeks

1 I have heard from a couple of mothers whose
2 children have sever allergy problems. Coal
3 combustion waste is a serious public health threat
4 jeopardizing my community. I am here to ask that
5 stronger protections be put in place. My foremost
6 concern is health issues, but I also very much
7 want our Illinois waters to be safe for
8 recreational use. More swimming, less video
9 games.

10 I urge the Illinois Pollution
11 Control Board to strengthen these proposed rules
12 and to prevent coal combustion waste from
13 continuing to damage the water used by citizens of
14 the state. Companies with coal ash ponds should
15 be required to show they have the financial means
16 to clean them up so communities are not left with
17 the responsibility and the price tag.

18 And then a quick -- I am also
19 with the Prairie Rivers Group. This is a
20 statement of support from the Vermillion County
21 Conservation District. They support the
22 resolution that will protect the Middle Fork River
23 from possible coal ash pollution from the
24 deteriorating coal ash pond from the Dynegy

1 property.

2 The Vermillion County
3 Conservation District borders the east side of the
4 Middle Fork River, our state's only national
5 scenic river. The quality of the river is so
6 important for the native aquatic species, but now
7 also is home to the endangered muscles that were
8 recently located from Pennsylvania. We urge the
9 Dynegy corporation to take responsibility and the
10 necessary steps to assure that the Middle Fork
11 National Scenic River remains as pristine as it is
12 today. Thank you very much.

13 HEARING OFFICER FOX: Ms. Powell,
14 thank you for your comment, and we are ready for
15 Ms. Burnitz, the next commenter.

16 And again, the same request. If
17 you would spell your name, and let us know who you
18 may represent.

19 MS. BURNITZ: I am going to stand as
20 well.

21 HEARING OFFICER FOX: That's just
22 fine.

23 MS. BURNITZ: My name is Mary
24 Burnitz; M-A-R-Y, B-U-R-N-I-T-Z. Good morning and

1 thank you. Again, I am Mary Burnitz. I live on
2 High Road in Lockport, a resident of Will County.
3 I live within the shadow of Will County generating
4 station, Old Midwest Generation. As a resident of
5 Will County and a director of care for the
6 Citizens Against Ruining the Environment, a
7 grassroots group in Will County, in the fall of
8 2012, CARE with other groups filed a legal
9 complaint against Midwest Generation for
10 violations of Illinois state's solid waste and
11 groundwater laws at four power generating
12 facilities in Will County; Joliet 29, Powerton,
13 Waukegan and Romeoville.

14 Midwest Generation's own
15 monitoring reports show that their coal ash dumps
16 are leaking toxins such as arsenic, selenium,
17 boron and others into groundwater at levels that
18 exceed federal and state drinking water standards.
19 I ask you, the Illinois Pollution Control Board,
20 to follow the rules that the Illinois
21 Environmental Protection Agency have set in place.
22 The rules seek to establish criteria -- "criteria,
23 requirements and standards for site
24 characterization, groundwater monitoring,

1 preventive response, corrective action and closure
2 of surface impoundment units containing coal
3 combustion waste or leachate from coal combustion
4 waste at power generating facilities."

5 My husband is a hunter and a
6 fisherman. He questions me a lot of times, Is the
7 fish safe to eat from our rivers and our lakes and
8 that goes back to coal ash. I urge you to do the
9 right thing. Thank you.

10 HEARING OFFICER FOX: Ms. Burnitz,
11 thank you for your comment. We are ready, Mr.
12 Coors, for your comment, if you would step
13 forward, please. Again, if you would spell your
14 name for our court reporter and let us know who
15 you may represent today please.

16 MR. COORS: My name is Vincent
17 Coors. I am from Danville, Illinois. I have got
18 a master's from the University of Illinois, a
19 farmer and industrial environmental
20 representative, and I represent myself and the
21 people of Vermillion County. I appreciate the
22 opportunity to appear before the Board.

23 If you have missed this fact, we
24 have a wild and scenic river in Vermillion County.

1 It runs right next to several ponds budding right
2 up to the river that are in the process of dumping
3 material into the river as we speak. The
4 Vermillion County Board met last night, and
5 unilaterally approved a resolution, 23 to nothing,
6 to ask this Board to strengthen the rules and
7 require the removal of the ash at the expense of
8 the ash producer.

9 We feel like the pond structures
10 are already proven to have failed and are
11 presently facilitating contamination of the Middle
12 Fork. The proposed Dynegy cap will not, cannot
13 drain the structure and is not protective of the
14 environment, were it installed, and would be
15 applying one more ineffective Band-Aid on a gaping
16 wound in our locality. Each locality with flash
17 pits does not have to have their own disaster like
18 the Dan River in Virginia, to demonstrate that our
19 present rules for flash containment are not
20 working.

21 The Pollution Control Board
22 needs to -- a strategy to move the flash material
23 out of the flood plain of the Middle Fork River
24 and other rivers where they are contained and

1 preferably to economically consume the material,
2 not simply move them, perhaps by fostering joint
3 city-county industry cooperative consortiums that
4 converts this flash into a concrete product used
5 to pave miles of area of biking paths or other
6 such structures.

7 We specifically are particularly
8 concerned that the Pollution Control Board rules
9 adopted require prompt reaction to and resolution
10 of problems found to have occurred. Proposals
11 that allow up to six years to correct deficiencies
12 are totally unacceptable to us in Vermillion
13 County. Illinois needs to remove these flash
14 materials to avoid gaining yet another dubious
15 national distinction, and bringing nationwide
16 attention to, once again, our capacity as being
17 unique, as only Illinois can be, the only state
18 having a wild and scenic river running through a
19 superfund site. I thank the Board for the
20 opportunity to speak.

21 HEARING OFFICER FOX: Mr. Coors,
22 thank you for your comment. Mr. Steffen we are
23 ready to have you step forward and comment,
24 please. And again, if you could spell your name

1 and let us know who you may represent, please. My
2 name is Matthew Steffan; M-A-T-T-H-E-W, last name
3 is S-T-E-F-F-E-N.

4 HEARING OFFICER FOX: Mr. Steffen,
5 we might benefit from some volume from you,
6 please.

7 MR. STEFFEN: Yes, sir. I am here
8 today representing the Illinois Environmental
9 Counsel. The counsel represents roughly 60
10 groups, including environmental, health, religious
11 and community organizations. There are 24 power
12 plants in Illinois that store coal ash in onsite
13 wet pits. At each of these locations coal ash
14 containments have -- contaminants have been found
15 in the groundwater. These contaminants include
16 arsenic, mercury, selenium, lead and other toxic
17 and radioactive elements that we have heard about
18 today. They have been shown to cause birth
19 defects, neurological damage, reproductive issues
20 and cancer.

21 No matter how strong these rules
22 are elsewhere, if they leave our surface waters,
23 groundwater and drinking water at risk, IEPA will
24 have failed to protect the people and environment

1 of Illinois. I urge the Illinois EPA to
2 strengthen its rules on surface impoundments that
3 contain coal combustion waste. Thank you for your
4 time.

5 HEARING OFFICER FOX: Okay.
6 Mr. Steffan, thank you for your comment.
7 Ms. Rendulich, we are ready for you, if you would
8 come to the head of the room, please.

9 Once again, if you would spell
10 your name for your court reporter, and let us know
11 who you may be representing today, please.

12 MS. RENDULICH: I am Ellen
13 Rendulich. I am a resident of Will County and
14 also director of Citizens Against Ruining the
15 Environment.

16 HEARING OFFICER FOX: You may need
17 to speak a bit louder, ma'am.

18 THE COURT REPORTER: And how do I
19 spell your last name?

20 MS. RENDULICH: R-E-N-D-U-L-I-C-H.
21 The Citizens Against Ruining the Environment is a
22 grassroots group in Will County. In 1995, we
23 learned about the air pollution from the coal
24 plant or power plants. Later we learned about the

1 mercury pollution in our lakes and groundwater.

2 In 2010, we learned about the coal ash pollution.

3 We -- Will County houses have
4 two Joliet facilities and the Romeoville, Will --
5 known as Will County facility, and 80 to
6 90 percent of the people in Will County are on
7 private or community well waters. I also like
8 Mary and some of the others of our group live
9 within a mile or a couple of miles of the coal ash
10 pond. Joliet is an unlined coal ash pond. It has
11 been leaching out. We are disgusted. We are
12 disgusted that we even have to come here.

13 I mean, I don't know why. If
14 the EPA says there is a problem, then there is a
15 problem. Half the time the EPA disagrees that
16 there is a problem, and that's a bigger problem.
17 We don't know what to do, and we don't know why
18 the residents should have to even come here.

19 It's your responsibility to
20 protect us, the waters, ground waters are
21 leaching. These coal ash ponds need to be shut
22 down. We need stronger regulations. I have
23 brought a resolution that was passed in Vermillion
24 just last night, and I am asking that you guys

1 look at this resolution, try to make stronger
2 pollution controls, more stringent controls, and
3 try to figure out how to help protect us and our
4 drinking water. We are afraid to drink our water.
5 We are afraid to take showers and baths. Here's a
6 resolution.

7 Hearing Officer FOX: Ms. Rendulich,
8 I did receive a copy of a resolution from
9 Ms. Borgia. This may be a duplicate, but I will
10 submit it to our clerk for filing as a written
11 public comment in this rulemaking docket.

12 MS. RENDULICH: Thank you.

13 HEARING OFFICER FOX: Did you wish
14 to continue your comment or have you wrapped that
15 up.

16 MS. RENDULICH: That's it.

17 HEARING OFFICER FOX: That's it,
18 very good. That is the last name that had signed
19 in indicating that they wished to offer a comment
20 here this morning.

21 Is there anyone who has not
22 commented but wishes to do so?

23 MR. RICHART: I do.

24 HEARING OFFICER FOX: Sir if you

1 would step forward, please. And again, if you
2 would tell us your name clearly and spell your
3 last name and let us know who you may represent.
4 We have asked folks to limits their comments to
5 about three minutes, and if you would do the same,
6 please.

7 MR. RICHART: Good morning. My name
8 is Lan Richart. That's spelled; L-A-N,
9 R-I-C-H-A-R-T. And first of all, I want to thank
10 you for the opportunity to be present this morning
11 and testify, give you our comments.

12 I am a codirector of the
13 Eco-Justice Collaborative. It's a Chicago-based
14 nonprofit. I am dedicated to raising public
15 awareness about the impacts of public policies and
16 actions that affect our planet and all of life
17 that's on it, and also to bring about changes that
18 create a world that is more environmentally
19 sustainable and just.

20 As part of our work, we promote
21 a better understanding of the real costs of
22 everyday choices. Both the direct costs
23 internalized in the price of producing goods and
24 services, but also the indirect, the eternalized

1 cost borne by the general public in the form of
2 taxes, financial subsidies, environmental
3 degradation and clean-up, or health deterioration
4 and medical care costs.

5 These costs are just as real as
6 those we pay over the counter, at the pump, or in
7 our electricity bills. Coal combustion waste, a
8 byproduct of electricity production, contains a
9 variety of toxic metals and chemical constituents
10 that pose a serious public health threat and
11 environmental concern.

12 Yet, within our state it's safe
13 disposal is largely left unregulated. Facilities
14 within our state generate 4.4 million tons of coal
15 ash every year, and imports coal ash from six
16 states. Illinois has over 90 coal ash disposal
17 sites, only 38 of those are lined.

18 Illinois also has the second
19 highest number of contaminated coal ash disposal
20 sites in the U.S. In 2012, the Illinois EPA
21 reported that groundwater contamination from coal
22 ash pollution was present at every site that was
23 investigated. That's 22 sites, and more
24 specifically, if it -- Dynegy Power Plant in

1 Oakwood, Illinois ash ponds were built in the
2 flood plain of the Middle Fork of the Vermillion
3 River, allowing coal ash pollutants to enter
4 Illinois' only National Scenic River.

5 In Will County, pollution from
6 coal ash stored in an abandoned quarry has leaked
7 into adjacent groundwater, threatening the
8 drinking water of local residents. In Havana,
9 Illinois, the Havana Power Station generates 200
10 to 400 tons of coal ash each year. Coal ash is
11 stored behind a high hazard dam adjacent to the
12 Illinois River. If this dam were to fail,
13 millions of gallons of toxic waste would be
14 discharged downstream and threatening homes and
15 schools located within two miles of the plant.

16 These and many other sites like
17 them represent long-term legacy cost to the people
18 of Illinois, and a potential threat to the health
19 and safety of those persons living near these
20 facilities. We believe that the cost of clean-up
21 and safe disposal of coal ash should be borne by
22 the industries who created the by-products in the
23 first place, and the strong regulations should be
24 put in place to protect the valuable surface and

1 groundwaters of Illinois from contamination both
2 now and in the future.

3 We, therefore, urge the Illinois
4 EPA and Illinois Pollution Control Board to
5 strengthen the proposed rules governing the
6 storage and disposal of coal combustion waste.
7 Specifically, we call on you to require that the
8 potential for surface and groundwater
9 contamination be assessed at all existing and
10 proposed disposal sites, require the removal
11 relocation and stabilized containment of all waste
12 for the current facilities shown to be leaking,
13 require stringent design standards that can assure
14 that future disposal sites will not leak or be
15 susceptible to failure under reasonably expected
16 conditions, establish and enforce strict timelines
17 for the containment and closure of coal ash
18 facilities, revise the proposed rules to give the
19 public a minimum of 60 days to comment on facility
20 plans and provide for a public hearing where there
21 are strong concerns expressed by the public and
22 include a financial assurance requirement to be
23 placed on companies responsible for the coal ash
24 ponds to guarantee that in the event of failure

1 any clean-up or remediation costs are not borne by
2 the taxpayer.

3 Lax rules and regulations have
4 left our state in the unenviable position of being
5 one of the most adversely affected by coal waste
6 disposal, and with many of its residents at risk
7 of health problems related to air and water
8 contamination. We believe it's time to take
9 action to correct this problem and to assure that
10 the people of Illinois are not left paying the
11 price of a diminished health and safety. Thank
12 you for the opportunity to provide these comments.

13 Hearing Officer FOX: Mr. Richart,
14 thank you for your comments, which are, of course,
15 part of our record here today.

16 Is there any other person who
17 did not sign in who has not offered a comment who
18 wishes to do so now? I see one more hand, if I
19 could have you quickly come up, and again, state
20 your name, spell it, and let us know who you may
21 represent. Again, please limit your comments to
22 about three minutes.

23 MS. SMITH: I will be much shorter.
24 Don't worry. I did want to also mention there are

1 folks coming in ten or so minutes, but I don't
2 want to delay any longer. I just thought I would
3 let you know.

4 HEARING OFFICER FOX: Let's go ahead
5 with your comments.

6 MS. SMITH: Good morning. Thank you
7 for the opportunity to give a public comment
8 today. My name is Colleen, C-O-L-L-E-E-N,
9 S-M-I-T-H, and I am the clean water organizer for
10 the Illinois chapter of the Sierra Club.

11 Beyond representing our
12 membership throughout the state and our
13 organization's water priorities, I am here before
14 you as a resident and a concerned citizen. I grew
15 up in Peoria along the Illinois River where the
16 river represents a source of recreation, income
17 and drinking water. Yet near Peoria the river is
18 threatened by the Edwards Power Plant coal ash
19 pit. These coal ash pits have already been shown
20 to be the cause of groundwater contamination and
21 continue to pose a very serious risk to the river
22 and to public health. While the need for this
23 proposed rulemaking is critical, they are not
24 nearly adequate.

1 The people of Illinois and our
2 waterways deserve strong protection from the
3 toxins of coal ash. If a coal ash pit is found to
4 be causing groundwater contamination, then the
5 complete removal must be first and foremost
6 considered. Legacy pits are far too common, and
7 as such, these rules need to protect communities
8 beyond the time the facility up and leaves.

9 Not only do these rules fail to
10 provide sufficient post-closure monitoring, but
11 they provide no financial assurance from which the
12 burden of these costs will not be inflicted on the
13 communities they are harming. I urge the Illinois
14 Pollution Control Board today to consider the
15 testimonies of the citizens and experts and to
16 strengthen the rules before you. Thank you.

17 Hearing Officer FOX: Ms. Smith,
18 thank you for your comment, and let me offer one
19 more chance. Is there anyone else who wishes to
20 offer a comment such as that Ms. Smith just
21 offered?

22 (No response.)

23 HEARING OFFICER FOX: Neither seeing
24 nor hearing any who wish to do so, as I mentioned,

1 we can turn at the end of our proceedings to see
2 whether there are additional people who wish to
3 offer a comment. I think we are ready to turn to
4 the substantive part of our proceedings today.

5 As I did mention at the top of
6 the day, we have pending an Agency motion to
7 correct the transcripts, the two transcripts of
8 the two days of the first day of hearing. That
9 was filed by the Agency on March 25th by
10 Ms. Olson, and the Board has to date not received
11 a written response.

12 Is there anyone who wishes --
13 any of the participants who wish to respond to
14 that motion to correct the transcript on the
15 record here today?

16 (No response.)

17 HEARING OFFICER FOX: Neither seeing
18 nor hearing any, I have reviewed the two motions,
19 the corrections submitted by the Agency, and in
20 the absence of any objection, the motions are
21 granted.

22 Ms. Olson, I will direct the
23 clerk to reflect the granting of those two motions
24 to correct in our docket so that it's clear that

1 those have become part of the transcript and the
2 record in this case.

3 MS. OLSON: Thank you.

4 HEARING OFFICER FOX: Absolutely so.
5 That brings us to Ms. Antoniolli to
6 Mr. King's pre-filed testimony and discussing the
7 order of proceedings. It was readily agreed that
8 having pre-filed the first set of testimony, that
9 we would begin with him.

10 Are we ready to begin with the
11 questions that have been filed for him?

12 MS. ANTONIOLLI: We are.

13 HEARING OFFICER FOX: Very good.
14 Why don't I have the court reporter swear Mr. King
15 in just a moment. We can have you introduce him
16 for the record.

17 I stress that pre-filed
18 testimony is entered into the record as if it has
19 been read. Mr. King, if you would like to begin
20 with a brief summary or any kind of statement, we
21 can turn to that and then continue with questions
22 that have been filed for you.

23 MS. ANTONIOLLI: Before we do that,
24 can I circulate copies of written responses that

1 we have prepared for today just so everyone has a
2 chance to look at them? Then once everyone has
3 had a chance to look at them for a minute, maybe,
4 we can move to enter those into the record as
5 hearing exhibits?

6 Hearing Officer FOX: Very good.
7 Ms. Antoniolli. It makes sense to take a moment.
8 If you would be kind enough to distribute those,
9 we can give everyone, frankly including the Board
10 members and the Hearing Officer a chance to look
11 things over.

12 MS. ANTONIOLLI: If it would also be
13 helpful, I have copies of the pre-filed testimony
14 to enter as an exhibit as well to keep them
15 together. These are the -- it's the pre-filed
16 testimony we filed with the Board on April 9th.

17 HEARING OFFICER FOX: Very good. Do
18 you have -- copies of both of those? Distributing
19 each of them makes sense. Thank you.

20 (Whereupon, copies were
21 distributed.)

22 MS. ANTONIOLLI: So with that I
23 would move to enter both the -- well, the
24 pre-filed testimony of Mr. Gary King that we filed

1 on April 9th with the Pollution Control Board as
2 Hearing Exhibit 1.

3 Hearing Officer FOX: It would be
4 Exhibit No. 19 continuing from the --

5 MS. ANTONIOLLI: Oh, 19. Okay. And
6 then the responses to pre-filed questions for
7 Mr. King as Exhibit 20.

8 Hearing Officer FOX: Let me take
9 those one at a time, Ms. Antoniolli.

10 The participants have heard
11 Ms. Antoniolli to admit Mr. King's pre-filed
12 testimony, originally submitted to the Board on
13 April 9th of 2014 as Hearing Exhibit No. 19. Is
14 there any objection to that motion?

15 (No response.)

16 HEARING OFFICER FOX: Neither seeing
17 nor hearing any, Ms. Antoniolli, it will be
18 entered into the record as Exhibit No. 19.

19 (Whereupon, Hearing Exhibit
20 No. 19 was marked for
21 identification and admitted
22 into evidence.)

23 HEARING OFFICER FOX: And the
24 participants have also heard Ms. Antoniolli's

1 motion to admit into the record a document
2 entitled "Responses of Gary King On Behalf of
3 Ameren Missouri and AmerenEnergy Medina Valley
4 Cogen," responses specifically to the questions
5 that were pre-filed for this hearing.

6 Do any of the participants have
7 any objection to the motion?

8 (No response.)

9 HEARING OFFICER FOX: Neither seeing
10 nor hearing any, Ms. Antonioli, it will be
11 entered into the record as Exhibit No. 20.

12 MS. ANTONIOLLI: Thank you.

13 (Whereupon, Hearing Exhibit
14 No. 20 was marked for
15 identification and admitted
16 into evidence.)

17 HEARING OFFICER FOX: And if there
18 is nothing further, why don't we have the court
19 reporter swear Mr. King in, and as I suggested, we
20 could begin with any statement you wish to offer.

21 (Whereupon, Mr. King was duly
22 sworn.)

23 MS. ANTONIOLLI: So the way that we
24 have laid out the responses is that we have

1 addressed the responses to the pre-filed questions
2 of the Environmental Groups first, and then we
3 have responded to questions that were filed by
4 Illinois EPA, and lastly, we have responses to the
5 Board's questions. Should we go ahead and go
6 through each of them, or do you want to leave it
7 as entered into the record and proceed with
8 questions?

9 HEARING OFFICER FOX: Okay.

10 Ms. Antonioli, my sense is that since these were
11 submitted to -- particularly to the Environmental
12 Groups who would go first, that we may need to
13 proceed carefully question by question since they
14 have not had a chance to review the answers that
15 you've submitted to see whether they have any
16 follow-up questions or clarifications they would
17 like to add. I realize that may seem a little
18 bulky or disjointed, but I think that would be the
19 fairest opportunity for them to assess whether
20 they are -- whether they do have any follow-up
21 questions.

22 So why don't we have Mr. King
23 begin with any statement he might wish to offer.
24 They can review the responses in the meantime, and

1 then we can proceed at least through those first
2 four questions that were directed to Mr. King by
3 the Environmental Groups before we turn to the
4 Agency.

5 MR. KING: My name is Gary King, and
6 it's spelled, G-A-R-Y, K-I-N-G. I am currently
7 employed by the environmental consulting firm
8 Arcadis. That's spelled, A-R-C-A-D-I-S. I have
9 been employed with that firm for about two years.
10 Prior to that I was employed by the Illinois
11 Environmental Protection Agency.

12 Over the course of many years, I
13 was involved with leading the development of
14 environmental regulations that dealt with the
15 cleanup and remediation of sites in Illinois.
16 Those regulations form the backbone of how sites
17 are remediated in this state, and literally,
18 thousands of sites have been cleaned up using
19 those rules.

20 Today I am here on behalf of
21 Ameren, and my testimony was really in two parts.
22 One was just to provide an update on the closure
23 of what was known as Hutsonville Pond D. That was
24 an ash pond that went through a site-specific rule

1 change before the Board. The Board adopted a
2 rule, and I have provided a brief update on the
3 status of activities since then for the Board's
4 information.

5 The second part of my testimony
6 was providing comments and requesting some
7 clarifications relative to the Illinois EPA's
8 rulemaking and their most recent response that was
9 filed with the Board in March of this year. One
10 of the areas of questions that I received was
11 related to proposing specific language, and we
12 have made some suggested language changes to the
13 proposed rules, but really have not identified
14 where those would go, and we certainly would want
15 to have -- knowing full well that how you place
16 changes within rules can have a dramatic impact on
17 the meaning of those rules, we would like to have
18 the opportunity to consult with Illinois EPA as to
19 how those suggested changes would best work. So
20 that concludes my statements.

21 HEARING OFFICER FOX: Mr. King, if I
22 could have your patience for just a second. I may
23 have put the cart before the horse. Did we have
24 the court reporter swear him in?

1 THE COURT REPORTER: Yes, sir.

2 HEARING OFFICER FOX: Very good. I
3 wanted to make sure of that. Let's turn to the
4 questions by the Environmental Groups, which we
5 are now in order to proceed to, Ms. Antoniolli, if
6 there is nothing preliminary in nature to go
7 through.

8 MS. ANTONIOLLI: No. We can go
9 ahead with the questions.

10 HEARING OFFICER FOX: Very good.
11 Why don't we have the Environmental Groups --
12 their questions number four, if I am not
13 mistaken -- begin perhaps with a summary of their
14 first question. If it's a satisfactory answer
15 that doesn't generate any follow-ups, we can move
16 on once we have determined whether there are any
17 other follow-up questions by the other
18 participants.

19 Mr. Armstrong, why don't we turn
20 it over to you for the first of your four
21 questions.

22 MR. ARMSTRONG: Thank you, but I
23 will actually turn it over to my colleague Josh
24 Zaharoff who will be asking the questions.

1 MR. ZAHAROFF: Josh Zaharoff,
2 J-O-S-H, Z-A-H-A-R-O-F-F.

3 So our first pre-filed question
4 was on page two of your pre-filed testimony. You
5 reference an addendum to the NPDES permit renewal
6 application for the Hutsonville facility that
7 Ameren is currently compiling.

8 UNIDENTIFIED FEMALE VOICE: Can't
9 hear.

10 MR. ZAHAROFF: I should say we
11 haven't had time to really review. So I am just
12 going to go ahead and ask these.

13 Our first pre-filed question, On
14 page two of your pre-filed testimony you reference
15 an addendum to the NPDES permit renewal
16 application for the Hutsonville facility that
17 Ameren is currently compiling. What is the
18 purpose of this addendum?

19 MR. KING: And I will just proceed
20 with the reading of the written response. The
21 purpose of the addendum to Ameren's NPDES
22 application for the Hutsonville Station is to
23 reflect current conditions at the Hutsonville
24 Station. The addendum seeks authorization to

1 discharge (1) precipitation entering the existing
2 impoundments before they are closed, or (2) water
3 removed from the groundwater trench, or (3) a
4 combination of both.

5 Wastewater discharges from
6 Hutsonville are currently authorized by NPDES
7 Permit IL 0004120 and State Operating Permit
8 2010-E0 -- excuse me -- EO-0192. NPDES Permit IL
9 0004120 expired on April 30th, 2004. However, the
10 permit remains in effect as Ameren filed a timely
11 and complete renewal application on October 28th,
12 2003. State Operating Permit 2010-E0-0192 expires
13 on June 30th, 2015.

14 On July 25th, 2011, Ameren
15 submitted an addendum to the pending NPDES renewal
16 application, in accordance with Section 840.132 of
17 the site-specific rules adopted by the Board to
18 allow in-place closure of the Pond D ash basin.

19 30 -- Ameren requested
20 authorization for the operation of the groundwater
21 collection trench, or GCT, along the station's
22 southbound -- south property boundary and
23 discharge via the existing Outfall 002.

24 On March 5th, 2012, Ameren

1 submitted a second addendum since by then Ameren
2 had suspended operations (i.e. power generation)
3 at Hutsonville. Thus, the pending NPDES renewal
4 addendum no longer accurately represented the then
5 current and/or potential future Outfall 002 water
6 quality in conjunction with the projected use of
7 the GCT.

8 MR. ZAHAROFF: And do you know the
9 date that the closure plan was submitted for
10 Hutsonville Pond D?

11 MR. KING: I don't know the exact
12 date as I sit here, but it was submitted in
13 accordance and compliance with the Board rule.

14 MR. ZAHAROFF: Okay. And is the
15 groundwater trench presently discharging?

16 MR. KING: No. It's not operational
17 yet, because the NPDES permit has not been issued.
18 It's been constructed, but it's not operational.

19 MR. ZAHAROFF: Do you know if the
20 closure plan involves discharges from the
21 groundwater collection trench to a surface water?

22 MR. KING: Yes, that's true.

23 MR. ZAHAROFF: What surface water is
24 that?

1 MR. KING: I'm not sure which branch
2 of the -- what river it is.

3 MR. ZAHAROFF: And has Ameren ever
4 done an anti-degradation assessment for new
5 discharges from the ground water collection trench
6 to a surface water?

7 MR. KING: Relative to that, this
8 new addendum, no.

9 MR. ZAHAROFF: And do you know if an
10 anti-degradation assessment was included in the
11 draft NPDES permit that was recently put on public
12 notice?

13 MR. KING: No, it was not.

14 MR. ZAHAROFF: Okay. And will an
15 anti-degradation assessment be included in the
16 addendum that Ameren is currently compiling?

17 MR. KING: No, because I don't
18 believe -- it was not required relative to the
19 Board regulation.

20 MR. ZAHAROFF: Okay. All right.

21 MR. RAO: May I ask a follow-up?

22 Mr. King, do you think
23 anti-degradation analysis would be required under
24 the NPDES rules if there is new discharge into the

1 receiving stream?

2 MR. KING: Before I answer, can --
3 can I answer that a little bit later? I would
4 like to take a little consultation with one of our
5 other people before I answer that.

6 MS. OLSON: Can you repeat the
7 question? I didn't catch it.

8 MR. RAO: I was asking Mr. King
9 whether if there is an application for a
10 modification of an NPDES permit to address
11 additional loading to the receiving stream, would
12 there be an anti-degradation analysis?

13 MS. OLSON: Under subtitle C?

14 MR. RAO: Yes.

15 MR. ZAHAROFF: Question two of our
16 pre-filed questions. On page three of your
17 pre-filed testimony you propose a new subsection,
18 841.105(b)(6) allowing an exemption to the rule
19 for impoundments that are subject to a closure
20 plan and groundwater management zone approved by
21 the Agency prior to the effective date of this
22 part.

23 To your knowledge, which
24 impoundments in the state of Illinois would this

1 exemption apply to, were the rule to go into
2 effect today?

3 MR. KING: Under this revision it
4 would apply to Venice Ash Ponds 2 and 3, and then
5 depending on the timing -- your rule presupposes
6 that it would go into effect today, but if, in
7 fact, it went into effect in a more anticipated
8 time scale than today, depending on the timing of
9 the rules, it might also apply to the balance of
10 ponds at Hutsonville Ponds A, B, C and the bottom
11 ash pond because Ameren is presently developing a
12 closure plan for all four impoundments.

13 MR. ZAHAROFF: And so under your
14 proposal a facility that has an approved closure
15 plan doesn't need to do anything that's required
16 by this rule?

17 MR. KING: It would -- no. The rule
18 would be inapplicable. They would be -- it would
19 be governed by the closure plan approved by the
20 Agency.

21 MR. ZAHAROFF: And on our -- moving
22 on to our pre-filed question three --

23 HEARING OFFICER FOX: Mr. Zaharoff,
24 let me see if there are any other follow-up

1 questions on the basis of Mr. King's response to
2 number two.

3 (No response.)

4 HEARING OFFICER FOX: Neither seeing
5 nor hearing any, thank you for the interruption
6 and please go ahead.

7 MR. ZAHAROFF: What post-closure
8 care and post-closure monitoring requirements are
9 currently applicable to the Venice Plant Ash Ponds
10 2 and 3?

11 MR. KING: Venice Ash Ponds 2 and 3
12 are currently subject to the groundwater plan
13 approved in conjunction with the closure plan.
14 Currently Ameren is required to monitor 12 wells
15 on a quarterly basis. Five field parameters are
16 measured along with 24 laboratory parameters.

17 The post-closure requirements
18 include quarterly final cover inspections and
19 maintenance including: Filling of rills, gullies
20 and crevices six inches in depth or deeper;
21 recontouring areas susceptible to erosion;
22 repairing eroded and scoured drainage channels in
23 the final cover and replacing damaged flexible
24 membrane as needed; filling and recontouring of

1 low areas and depressions caused by settling to
2 prevent ponding of water; reseeding areas with
3 more than 100 square feet of failed or eroded
4 vegetation; repairing any tears, rips, punctures
5 or other damage to the flexible membrane; and
6 removal of any woody species (i.e., trees and
7 shrubs over 18 inches tall) that establish in the
8 final cover.

9 An evaluation of statistically
10 significant trends must be conducted on an annual
11 basis and included in the annual report of
12 monitoring and maintenance activities. The most
13 recent annual report for Venice Ash Ponds 2 and 3
14 was submitted to the Agency on March 27th, 2014.

15 MR. ZAHAROFF: And at the Venice Ash
16 Ponds was coal combustion waste used for the final
17 grade and slope?

18 MR. KING: It was part of the -- it
19 had to be -- there had to be regrading done, and
20 so it was moved around, and so it was done in
21 accordance with the closure plan. So there was
22 some movement of the coal ash.

23 MR. ZAHAROFF: And areas that are
24 eroding could contain coal combustion waste at

1 that site?

2 MR. KING: No. There is coal ash
3 underneath the cap. So, I mean, the cap is being
4 maintained so there is not an exposure.

5 MR. ZAHAROFF: Is there coal ash on
6 the berms?

7 MR. KING: There is coal ash --
8 there is coal ash that is covered by berms and a
9 top. So I'm not sure how to answer other than to
10 say there is coal ash that is not -- that has an
11 elevation to it that has been covered.

12 HEARING OFFICER FOX: Ms. Olson, did
13 I see your hand indicating that you had a
14 follow-up?

15 MS. OLSON: I just have a few
16 questions for Mr. King to kind of follow-up.

17 Mr. King, we are speaking about
18 the cap at the Venice pond; is that right?

19 MR. KING: 2 and 3, yes.

20 MS. OLSON: 2 and 3. And this cap,
21 does it have a low permeability layer?

22 MR. KING: Yes, it does.

23 MS. OLSON: And what's on top of
24 that low permeability layer?

1 MR. KING: There is a -- it's a soil
2 material that is vegetative.

3 MS. OLSON: And how much soil is
4 above that low permeability layer?

5 MR. KING: I believe it's 24 inches,
6 a little more than 24 inches.

7 MS. OLSON: Thank you.

8 HEARING OFFICER FOX: Member Burke,
9 I believe, has a follow-up question.

10 Board MEMBER BURKE: In connection
11 with the closure plan for these Venice Ash Ponds 2
12 and 3, has the company provided any financial
13 assurance with respect to those requirements?

14 MR. KING: No.

15 Board MEMBER BURKE: Thank you.

16 HEARING OFFICER FOX: Mr. Zaharoff,
17 I think we are back to you on your question number
18 three to Mr. King.

19 MR. ZAHAROFF: I think we are ready
20 to go to question four.

21 HEARING OFFICER FOX: Any other
22 follow-up questions on number three?

23 (No response.)

24 HEARING OFFICER FOX: Neither seeing

1 nor hearing any, Mr. Zaharoff, please go ahead.

2 MR. ZAHAROFF: On page four of your
3 pre-filed testimony you propose a modification to
4 proposed Section 841.200(c)(12)-(14), which
5 currently provides that a hydrogeologic site
6 characterization should include information
7 regarding the geological layers underlying an
8 impoundment to a minimum depth of 100 feet below
9 land surface. You propose to modify that
10 requirement to provide that such information shall
11 be provided "based on a review of existing site or
12 regional information." Whom do you propose would
13 perform that review?

14 MR. KING: Because we propose such
15 review be included in the hydrogeologic site
16 characterization, the review must contain the seal
17 and signature of either a professional engineer or
18 geologist pursuant to proposed Section
19 841.140(b)(1).

20 MR. ZAHAROFF: And does the Agency
21 have the ability to review that determination?

22 MR. KING: Once it's submitted, yes.

23 MR. ZAHAROFF: If the Agency
24 disagreed, what would happen?

1 MR. KING: They would disapprove the
2 plan.

3 MR. ZAHAROFF: Under proposed
4 Section 841.130(b), the hydrogeologic site
5 characterization must be conducted within one
6 year, correct?

7 MS. OLSON: Whose proposal are we
8 speaking of? Are we speaking of your
9 counter-proposal or the Agency's proposed rule?

10 MR. ZAHAROFF: I'm sorry. The
11 Agency's proposed rule.

12 MS. ANTONIOLLI: And would that be
13 the way that it was amended in attachment two to
14 the Agency's post-hearing comments?

15 MR. ZAHAROFF: Yeah. This is --
16 yes, the attachment of March 25th. If you could
17 look at Section 841.130(b), Mr. King. When would
18 the hydrogeologic site characterization be
19 conducted under the proposed rule?

20 MR. KING: You mean the phrase
21 "within one year of the effective date of this
22 part," is that what you --

23 MR. ZAHAROFF: Right.

24 MR. KING: That's what it says.

1 MR. ZAHAROFF: And what I want to
2 know is, how would the -- your process affect that
3 deadline?

4 MR. KING: Well, it would be
5 submitted to the Agency within one year.

6 MR. ZAHAROFF: And then if the
7 Agency disagreed with the determination that
8 you -- in your proposal, then it would have to go
9 back and be redone, I assume, after one year?

10 MR. KING: Well, I mean, if the
11 Agency disapproves a plan, then the applicant
12 would have a choice of responding to the points of
13 deficiency raised by the Agency or proceeding with
14 an appeal to the Pollution Control Board.

15 MS. ANTONIOLLI: And was the
16 suggestion meant to affect any time frames for
17 submitting the hydrogeologic site investigation?

18 MR. KING: No, it was not.

19 MS. ANTONIOLLI: Was it just a
20 comment based on what information needs to be
21 submitted or relied on in submitting a
22 hydrogeologic site investigation?

23 MR. KING: That's correct.

24 HEARING OFFICER FOX: Anymore

1 questions, Ms. Antoniolli?

2 MS. ANTONIOLLI: No.

3 HEARING OFFICER FOX: You are good.

4 Ms. Olson, your question was answered, or do you
5 have another follow-up?

6 MS. OLSON: I am okay. Thank you.

7 HEARING OFFICER FOX: Very good.

8 Mr. Zaharoff.

9 MR. ZAHAROFF: Nothing further.

10 HEARING OFFICER FOX: Nothing
11 further. That wraps up the four questions posed
12 by the Environmental Groups on the basis of
13 Mr. King's pre-filed testimony; is that correct?

14 MR. ZAHAROFF: Correct.

15 HEARING OFFICER FOX: Very good.

16 Ms. Olson I believe we are ready for the Agency to
17 address its questions to Mr. King. Would it be
18 helpful to move up to the table that's here so
19 that you are a little closer to him and a little
20 more audible to the court reporter?

21 MS. OLSON: I just have a question
22 about our scheduling for the day. It is
23 approximately 11:50, and I am just curious if we
24 are going to take a break, or if we are going to

1 take a lunch in the afternoon or if that's no,
2 because at this point if we are going to continue
3 working through until 1 o'clock, maybe a short
4 break would help the Agency to review the
5 responses quickly.

6 HEARING OFFICER FOX: Ms. Olson
7 let's -- and for all of the participants, it's
8 quarter to -- it is approximately ten to noon, and
9 we have been going for approximately two hours.
10 Ms. Franzetti, did you wish to be heard?

11 MS. FRANZETTI: Well, I was going to
12 wait to hear what you were saying, but where I am
13 going is, it is really hard to hear today, and
14 those -- and I can imagine for you back there,
15 because I am in the second row, and I am
16 straining. We need to -- if you are going to take
17 a break, that's --

18 HEARING OFFICER FOX: One additional
19 reason to take a break.

20 MS. FRANZETTI: You have got to move
21 these tables so people are speaking -- I have
22 never seen them, quite frankly, aligned this way.
23 You have got to get it so the audience can hear
24 people. This is not working.

1 HEARING OFFICER FOX: Let's take a
2 break for 15 minutes, resume at five after, and we
3 can take steps such as those to try and make it a
4 little more audible for everyone.

5 UNIDENTIFIED FEMALE VOICE: When
6 will lunch break be?

7 HEARING OFFICER FOX: We have
8 approximately 15 questions of the Agency's. We
9 will break for lunch when they are done. I would
10 estimate approximately an hour after we resume.

11 UNIDENTIFIED FEMALE VOICE: Will we
12 have another opportunity for public comment after
13 the lunch break?

14 HEARING OFFICER FOX: We provided
15 approximately 90 minutes already. What we will do
16 is wait until the conclusion of the testimony to
17 do so.

18 UNIDENTIFIED FEMALE VOICE: At the
19 end of the day?

20 HEARING OFFICER FOX: Yes. We will
21 see you at five after.

22 (Whereupon, a short break was
23 taken.)

24 HEARING OFFICER FOX: We can go back

1 on the record. Thank you for your promptness in
2 returning from the break. When we began our
3 break -- pardon me. The Environmental Groups have
4 gone through their four questions for Mr. King.
5 Let me quickly assure that they have, in fact,
6 wrapped up their questions? Mr. Zaharoff?

7 MR. ZAHAROFF: Yes.

8 HEARING OFFICER FOX: Very good.
9 The Agency has taken the position to run through
10 the approximately 15 questions, I believe, they
11 had, Ms. Olson, and if Mr. King is ready and you
12 are ready, why don't we begin with the first of
13 them?

14 MS. OLSON: Thank you. My
15 co-counsel, Mr. Jennings, will be handling the
16 questions for Mr. King.

17 HEARING OFFICER FOX: Very good.

18 MR. JENNINGS: I am James Jennings,
19 assistant counsel with Illinois EPA, and Mr. King,
20 we actually only have two, hopefully three
21 follow-up questions for you. They both relate to
22 question 12. So I will defer to Mr. Fox and see
23 if there are any additional follow-ups before we
24 get to that point?

1 HEARING OFFICER FOX: Mr. Jennings,
2 I'm sorry. Did you indicate which specific
3 questions you did have follow-ups on?

4 MR. JENNINGS: 12.

5 HEARING OFFICER FOX: Number 12. I
6 don't believe so. Mr. Jennings, why don't you go
7 ahead with the follow-up questions you have,
8 please.

9 MR. JENNINGS: Mr. King, if you
10 could read your response.

11 The question was, Is the
12 statistically significant increase in chemical
13 concentration compared to a background chemical
14 constituent concentration to determine compliance?

15 MR. KING: I believe that a
16 statistically significant increase in a parameter
17 compared to background should be used to determine
18 compliance only if it is increasing (i.e. the
19 statistically significant concentration is
20 trending upward based on the methods in proposed
21 Section 841.225) and it demonstrates that a
22 release attributable to the unit threatens a high
23 priority resource groundwater such that either
24 treatment or additional treatment is necessary to

1 continue an existing use or to protect a potential
2 use that is or to protect a potential use or that
3 it precludes an existing or potential use as
4 provided in Section 841.235(c)(2)(C)(i) or (ii).

5 The Agency should confirm whether this
6 interpretation is correct.

7 MR. JENNINGS: And based on your
8 interpretation, this background could be used
9 under some circumstances to determine compliance,
10 correct?

11 MR. KING: Yes, that's true.

12 MR. JENNINGS: And then conversely,
13 there would be circumstances under which
14 background would not be used to determine
15 compliance?

16 MR. KING: Yes, that's correct.

17 MR. JENNINGS: We have nothing
18 further.

19 HEARING OFFICER FOX: Nothing
20 further, Mr. Jennings? Are there any follow-up
21 questions by any of the other participants on the
22 basis of those answers provided by Mr. King to the
23 Agency?

1 (No response.)

2 HEARING OFFICER FOX: Neither seeing
3 nor hearing any, let me turn to Mr. Rao to see if
4 he has any follow-up questions based on Mr. King's
5 written answers to the Board's question.

6 MR. RAO: We don't have any
7 follow-up except in response to our question 18,
8 you had indicated that you had worked with the
9 Agency to see if you could propose any language
10 changes. Would that be in your final comments
11 or --

12 MR. KING: Yes. Yes, that's
13 correct. I mean, that would be up to them whether
14 they -- I mean, obviously we would make a request
15 to consult with the Agency on how to formulate
16 that and --

17 MR. RAO: And if the Agency does
18 not, you know, provide any input, I am assuming
19 you would still provide us some language that you
20 think may work for this?

21 MR. KING: That's correct.

22 HEARING OFFICER FOX: Anything
23 further, Mr. Rao?

24 MR. RAO: No.

1 HEARING OFFICER FOX: Very good.

2 That appears to wrap up the questions for
3 Mr. King.

4 Ma'am, if you would identify
5 yourself by name, please?

6 MS. BOUDART: I am Jan Boudart and I
7 am from NEIS and Frack Free Illinois. I had a
8 question. From what Mr. Jennings asked, does --
9 is Mr. King saying that it's not necessary for
10 Ameren to clean up anything that does not threaten
11 a high priority resource groundwater?

12 I apologize for my language. I
13 am not professional at all in this, but what I
14 gathered from it is that if there is a pit or
15 something like that, a coal ash pit that does not
16 threaten a high priority groundwater -- let's see
17 if I have got that right -- high priority resource
18 groundwater, that then it's not necessary for that
19 to be cleaned up? That's what I gathered from
20 what he said.

21 MS. ANTONIOLLI: Just to clarify,
22 too, at the outset these rules don't apply just to
23 one specific -- they are general rules that would
24 apply statewide. And then your question -- I'm

1 sorry, but could you repeat it one more time?

2 MS. BODART: Well, it's just that to
3 me the language is slippery. If you say high
4 priority resource groundwater, well then that
5 requires a definition by somebody as to what is a
6 high priority resource groundwater, and then it
7 has to be determined whether or not the pollution
8 that's going into something at whether that
9 something is a high priority resource groundwater
10 or not, and then that has to be defined.

11 MR. KING: There actually isn't -- I
12 didn't repeat the definition of high priority
13 resource groundwater, because the Illinois EPA has
14 already proposed a definition of that. So they
15 have already established that, here is the type of
16 groundwater that would be a high priority resource
17 groundwater.

18 HEARING OFFICER FOX: Does that take
19 care of your question, ma'am?

20 MS. BODART: It doesn't take care of
21 my question, but it takes care of that particular
22 question.

23 HEARING OFFICER FOX: Very good.
24 Anything further for Mr. King again by

1 Mr. Zaharoff, Ms. Olson, Mr. Rao, any of the Board
2 members?

3 (No response.)

4 HEARING OFFICER FOX: Mr. King, I
5 think we have -- with the help of the written
6 responses that you have prepared, which are
7 appreciated, wrapped up the questions that were
8 based on your pre-filed testimony from April 9th,
9 and with that, I think we can wrap up your
10 presentation and turn to the Environmental Groups'
11 witnesses. Thank you very much.

12 And Ms. Olson, you had a
13 question it appears.

14 MS. OLSON: I believe Midwest
15 Generation will be proceeding the Agency in
16 questioning; is that right?

17 HEARING OFFICER FOX: That -- I am
18 confirming the order of hearing we had discussed
19 earlier.

20 MS. FRANZETTI: That is what you
21 said earlier.

22 HEARING OFFICER FOX: That is.
23 Thank you. I was just confirming that,
24 Ms. Franzetti, as you said so. I believe,

1 Ms. Franzetti, it would probably be clear and
2 helpful if you and anyone that you are appearing
3 with would take this empty table. We can happily
4 give you a moment or two to prepare.

5 MS. OLSON: Would it be okay if the
6 Agency grabbed that end table?

7 HEARING OFFICER FOX: If you and
8 Ms. Franzetti wanted to work that out, I would be
9 happy to follow your wishes.

10 MS. FRANZETTI: Mr. Fox, are you
11 going to want a copy of our pre-filed questions?

12 HEARING OFFICER FOX: If you wish to
13 enter it into the record as an exhibit, I can
14 entertain a motion.

15 MS. FRANZETTI: I don't. I thought
16 the last hearing you asked me for them, so I
17 brought a copy. You are fine? Okay.

18 HEARING OFFICER FOX: I appreciate
19 the participants' patience and indulgence in
20 moving out a bit.

21 Mr. Armstrong, you had indicated
22 that you may have a question before we get
23 underway.

24 MR. ARMSTRONG: Well, I was just

1 going to note that we have some exhibits to admit,
2 including our proposed amendments and then also
3 the pre-filed testimony as well as a number of
4 attachments to the testimony that the Board had
5 asked about in their questions.

6 HEARING OFFICER FOX: Very good.
7 Why don't we do this, Mr. Armstrong. We are ready
8 to turn to the Environmental Groups' witnesses,
9 Dr. Soderberg and Ms. Barkley. Why don't we have
10 the court reporter swear them in. Then you can
11 proceed to any brief summary or any introduction
12 you would like. Then as a matter of housekeeping,
13 you can take care of any motions you would wish to
14 make to admit any of those documents into the
15 record.

16 MR. ARMSTRONG: It sounds good.
17 Thank you.

18 (Whereupon, Dr. Soderberg and
19 Ms. Barkley were duly sworn.)

20 HEARING OFFICER FOX: Mr. Armstrong,
21 if you or the witnesses would like to begin with
22 an introduction or summary, please go ahead.

23 MR. ARMSTRONG: Well, first I would
24 like to move to admit as a hearing exhibit a copy

1 of the Environmental Groups' proposed amendments
2 to Proposed New 35 Ill. Adm. Code Part 841 filed
3 May 13th, 2014.

4 HEARING OFFICER FOX: Very good.

5 And Mr. Armstrong, just for my own sake, that is
6 the document that was filed with the Board's clerk
7 yesterday, correct?

8 MR. ARMSTRONG: Correct.

9 HEARING OFFICER FOX: Very good. If
10 you have copies to distribute and would do so,
11 that would be great. The participants I am sure
12 have heard Mr. Armstrong's motion to admit the
13 proposed amendments into the record as Hearing
14 Exhibit No. 21. Is there any objection to the
15 motion?

16 MS. FRANZETTI: Just a point of
17 clarification.

18 HEARING OFFICER FOX: Yes,
19 Ms. Franzetti.

20 MS. FRANZETTI: If they are entering
21 it as an exhibit -- and I understand what you said
22 earlier about there is certain parts of it that
23 relate to the testimony, and so you are open to
24 questions on that, but I thought that you might

1 have been also saying earlier this morning that as
2 to other parts you are not. Am I correct on that?

3 MR. ARMSTRONG: Well, as to the
4 first point, Hearing Officer Fox had mentioned us
5 entering it in as a hearing exhibit. So that's
6 one of the motivations for doing it. Our
7 witnesses' testimony -- they are here to testify
8 about their pre-filed testimony. That testimony
9 supports the red line proposal that we file
10 tomorrow and takes that testimony into account.

11 My point was that the witnesses
12 are not necessarily here to testify about every
13 element of these proposed rules.

14 MS. FRANZETTI: Here is my concern
15 is I believe that anybody can file anything in
16 these proceedings as a comment at any time up
17 until there is a cut-off, a deadline set by the
18 Board for filing comment. So whether they filed
19 this yesterday or this morning really I don't
20 think is of any real significance. They are
21 entitled to file whatever they wish.

22 However, when you make something
23 an exhibit at a hearing, then it's always been my
24 understanding that then it's open to questioning

1 on that exhibit of the party who is making it an
2 exhibit, and I thought exhibits potentially carry
3 a little more weight with the Board because of
4 that ability as in a hearing exhibit to ask
5 questions about it.

6 So that's why I am raising my
7 comments, and I am a little confused about, well,
8 but you can ask questions about some of it, but
9 not all of it. I don't think it should be an
10 exhibit unless it's open to questioning without
11 caveat.

12 HEARING OFFICER FOX: Mr. Armstrong,
13 did you wish to respond?

14 MR. ARMSTRONG: Sure. I guess our
15 point would be that it is an exhibit. Questions
16 can be asked about it to the witnesses. The
17 witnesses may or may not be able to respond as to
18 certain sections of the proposal.

19 HEARING OFFICER FOX: Ms. Franzetti,
20 let me respond in this way. I didn't understand
21 you to be lodging an objection, but seeking a
22 clarification. I think you correctly pointed out
23 that this is in the Board's record. It has been
24 distributed to the participants here today, and

1 there has been a willingness on the part of the
2 environmental groups to respond to questions.

3 So its admission as an exhibit
4 would appear to do little that has not already
5 been accomplished by accepting it into the Board's
6 record. So in the absence of any other objection,
7 I will admit it into the record, noting as I had
8 in responding, I believe, both to Ms. Olson and to
9 Mr. Rieser, that at the conclusion of the
10 questioning we will certainly address issues
11 including the filing of comments and potentially
12 any responses to address some of the issues that
13 you had raised in seeking a clarification.

14 So this will be marked,
15 Mr. Armstrong, as the Hearing Exhibit No. 21 and
16 so marked and included in the record as a hearing
17 exhibit in addition to an element of the Board's
18 record at the clerk's office.

19 MS. OLSON: Has it already been
20 admitted?

21 HEARING OFFICER FOX: I beg your
22 pardon?

23 MS. OLSON: Has the exhibit been
24 admitted?

1 HEARING OFFICER FOX: I had just
2 intended to grant the motion and had asked if
3 there was any objection.

4 MS. OLSON: I have a few clarifying
5 questions on the exhibit, if you may.

6 HEARING OFFICER FOX: Ms. Olson,
7 proceed quickly, if you would.

8 MS. OLSON: Thank you. Section
9 102.202 of the Board's procedural rules require
10 proposals to be supported by a statement of
11 reasons. The statement of reasons is supposed to
12 include the purpose and effect of the rule, the
13 environmental, technical and economic
14 justifications of the rule.

15 In addition, it's supposed to
16 include all materials relied upon or consulted in
17 drafting the rule, and a statement of all affected
18 facilities and the economic impacts. My question
19 is, does the Environmental Groups propose or plan
20 to file a statement of reasons to support this
21 exhibit?

22 MR. ARMSTRONG: We do not plan to
23 file a statement of reasons to support this
24 exhibit.

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

2 HEARING OFFICER FOX: Any further
3 questions? Any other objections on the part of
4 any of the participants?

5 (No response.)

6 HEARING OFFICER FOX: This will be
7 marked as Exhibit No. 21 and admitted into the
8 record as that Hearing Officer number.

9 (Whereupon, Hearing Exhibit
10 No. 21 was marked for
11 identification and admitted
12 into evidence.)

13 HEARING OFFICER FOX: Okay.
14 Mr. Armstrong, please go ahead if you had any
15 additional issues to take up.

16 MR. ARMSTRONG: I have the pre-filed
17 testimony for Dr. Keir Soderberg to admit as an
18 exhibit.

19 HEARING OFFICER FOX: And if you
20 have copies of that, Mr. Armstrong, to distribute
21 and would go ahead and do that, I would appreciate
22 it.

23 Mr. Armstrong you had mentioned
24 that you had a copy of it. Was there a motion

1 pertaining to this document?

2 MR. ARMSTRONG: Yes. I move to
3 admit Dr. Keir Soderberg's testimony.

4 HEARING OFFICER FOX: That would be
5 Exhibit No. 22, Mr. Armstrong. Is there any
6 objection to the motion to admit Dr. Soderberg's
7 testimony as Hearing Exhibit No. 22?

8 (No response.)

9 HEARING OFFICER FOX: Neither seeing
10 nor hearing any, it will be so marked and
11 admitted, Mr. Armstrong.

12 (Whereupon, Hearing Exhibit
13 No. 22 was marked for
14 identification and admitted
15 into evidence.)

16 MR. ARMSTRONG: Also, in response to
17 a pre-filed question from Midwest Generation,
18 Question 24, there was a request for pages of a
19 treatise that Dr. Soderberg had cited to in his
20 pre-filed testimony. I have copies of that here,
21 and I would move to admit that as Exhibit 23.

22 HEARING OFFICER FOX: Having had a
23 moment to review the document entitled, "Applied
24 Contaminant Transport Modeling" circulated by

1 Mr. Armstrong, having heard his motion to admit it
2 as Hearing Exhibit No. 23, is there any objection?

3 (No response.)

4 HEARING OFFICER FOX: Neither seeing
5 nor hearing any, Mr. Armstrong, it will
6 so be marked and admitted, Exhibit No. 23.

7 (Whereupon, Hearing Exhibit
8 No. 23 was marked for
9 identification and admitted
10 into evidence.)

11 MR. ARMSTRONG: I also have copies
12 of the pre-filed testimony of Traci Barkley, which
13 I would move to admit as Exhibit 24.

14 MR. RIESER: Mr. Fox, I'm sorry.
15 This had to do with the -- Dr. Soderberg's
16 testimony. I certainly wouldn't have expected any
17 participant to have brought enough copies for
18 everybody, but are these exhibits going to be on
19 the Board's website?

20 HEARING OFFICER FOX: Doctor -- as
21 originally filed on April 9th, Dr. Soderberg's
22 testimony is posted to the Board webpage.

23 MR. RIESER: I'm sorry. The
24 exhibit, whatever was just handed --

1 MS. FRANZETTI: 23.

2 MR. RIESER: Exhibit 23, is that
3 exhibit going to be on the --

4 MR. ARMSTRONG: To clarify, I have
5 numerous copies. So if anybody would like a copy,
6 please --

7 HEARING OFFICER FOX: Mr. Rieser, to
8 your point, often particularly where there is a
9 large number of exhibits, they are not all placed
10 on the Board's website in their entirety, but our
11 clerk's office stands ready to add them if it's
12 helpful to you at any point.

13 MR. RIESER: Thank you very much.

14 HEARING OFFICER FOX: Surely. And
15 the participants have heard Mr. Armstrong's
16 motion to admit the pre-filed testimony of Traci
17 Barkley as Exhibit No. 24.

18 Is there any objection to the
19 motion?

20 (No response.)

21 HEARING OFFICER FOX: Neither seeing
22 nor hearing any, Mr. Armstrong, that will be
23 marked and admitted as Exhibit 24.

24

1 (Whereupon, Hearing Exhibit
2 No. 24 was marked for
3 identification and admitted
4 into evidence.)

5 MR. ARMSTRONG: In response to the
6 Board's pre-filed question number two to Traci
7 Barkley, there was -- or was it number two or
8 number one? Number one. The Board requested that
9 the documents that were cited to in Ms. Barkley's
10 pre-filed testimony be admitted -- be provided to
11 the Board.

12 We have copies of all those
13 documents, and we are prepared to admit them as
14 exhibits at this time.

15 HEARING OFFICER FOX: Mr. Armstrong,
16 recognizing that there are a number of those --

17 MR. ARMSTRONG: Yes.

18 HEARING OFFICER FOX: And if you
19 have copies of those, why don't we take them one
20 by one so they have separate exhibit numbers and
21 references and citations to them are as clear as
22 possible.

23 MR. ARMSTRONG: I have copies of
24 USEPA Report to Congress: Wastes from the

1 Combustion of Fossil Fuels, Volume 1 Executive
2 Summary, and this was cited to in note one of
3 Ms. Barkley's pre-filed testimony. I would move
4 to admit this exhibit as Exhibit 25.

5 HEARING OFFICER FOX: You have heard
6 Mr. Armstrong's motion to admit the material
7 requested by the Board as Exhibit No. 25. That
8 is, as he had indicated, entitled USEPA Report to
9 Congress. Is there any objection?

10 (No response.)

11 HEARING OFFICER FOX: Neither seeing
12 nor hearing any, Mr. Armstrong, that will be
13 marked and admitted as No. 25.

14 (Whereupon, Hearing Exhibit
15 No. 25 was marked for
16 identification and admitted
17 into evidence.)

18 MR. ARMSTRONG: I have a copy of
19 USEPA's Characterization of Coal Combustion
20 Residues From Electric Utilities Using Wet
21 Scrubbers For Multi-Pollutant Control. This was
22 in citation two of Ms. Barkley's testimony. I
23 move to admit this as Exhibit 26.

24 HEARING OFFICER FOX: The

1 participants have heard Mr. Armstrong's motion to
2 admit the USEPA Characterization of Coal
3 Combustion Residues as Hearing Exhibit No. 26 in
4 response to the Board's request for information.

5 Is there any objection to his
6 motion?

7 (No response.)

8 HEARING OFFICER FOX: And neither
9 seeing nor hearing any, it will be so marked and
10 admitted.

11 (Whereupon, Hearing Exhibit
12 No. 26 was marked for
13 identification.)

14 MR. ARMSTRONG: In citation three of
15 Ms. Barkley's testimony we have a copy of USEPA's
16 Characterization of Mercury-Enriched Coal
17 Combustion residues from Electric Utilities Using
18 Enhanced Sorbents for Mercury Control,
19 February 2006.

20 And I move to admit that as
21 Exhibit 27.

22 HEARING OFFICER FOX: And the
23 participants have heard Mr. Armstrong's motion to
24 admit as Hearing Exhibit No. 27 the USEPA's

1 Characterization of Mercury-Enriched Coal
2 Combustion Residues. Is there any objection to
3 the motion?

4 (No response.)

5 HEARING OFFICER FOX: Neither seeing
6 nor hearing any, Mr. Armstrong, it will be
7 admitted as Exhibit 27.

8 (Whereupon, Hearing Exhibit
9 No. 27 was marked for
10 identification and admitted
11 into evidence.)

12 MR. ARMSTRONG: Citation four of
13 Ms. Barkley's testimony was USEPA's Human and
14 Ecological Risk Assessment of Coal Combustion
15 Waste from April 2010, which has previously been
16 admitted as an exhibit to the Board.

17 But citation five of the
18 pre-filed testimony is a January 8th, 2010 letter
19 from Dr. Dennis Lemly to the Office of Management
20 and Budget, and I move to admit that as
21 Exhibit 28.

22 MS. OLSON: I have a question.

23 HEARING OFFICER FOX: Please go
24 ahead, Ms. Olson.

1 MS. OLSON: You said this has been
2 previously submitted to the Board as an exhibit.
3 Are you talking about a hearing exhibit?

4 MR. ARMSTRONG: Yes.

5 MS. OLSON: So do you know what
6 hearing exhibit this is?

7 MR. ARMSTRONG: This is not a
8 hearing exhibit, but citation four to the Board --
9 to Traci Barkley's testimony was the Human and
10 Ecological Risk Assessment from April 2010, and we
11 are not submitting copies of that, because it's
12 previously been admitted as a hearing exhibit.

13 MS. OLSON: Thank you. I was
14 confused.

15 MR. ARMSTRONG: You're welcome.

16 HEARING OFFICER FOX: And to be more
17 specific, the document, the letter from Dr. Lemly,
18 was footnote number five in Ms. Barkley's
19 testimony; is that correct?

20 MR. ARMSTRONG: Correct.

21 HEARING OFFICER FOX: Very good.
22 Ms. Olson, did you have any additional questions?

23 MS. OLSON: No. Thank you.

24 HEARING OFFICER FOX: Not at all.

1 You have -- the participants have heard the motion
2 to admit the letter from Dr. Lemly to the Office
3 of Management and Budget dated January 18th, 2010
4 as Hearing Exhibit No. 28. Is there any objection
5 to this motion?

6 (No response.)

7 HEARING OFFICER FOX: Neither seeing
8 nor hearing any, Mr. Armstrong, it will be marked
9 as Exhibit 28 and admitted.

10 (Whereupon, Hearing Exhibit
11 No. 28 was marked for
12 identification and admitted
13 into evidence.)

14 MR. ARMSTRONG: Citation six to
15 Ms. Barkley's testimony was to a journal article,
16 Survey of the Potential Environmental and Health
17 Impacts in the Immediate Aftermath of the Coal Ash
18 Spill in Kingston Tennessee, and I have here
19 copies. And I move to admit that as Exhibit 29.

20 HEARING OFFICER FOX: The
21 participants have heard Mr. Armstrong's motion to
22 admit the document, the title of which begins,
23 "Survey of the Potential Environmental and Health
24 Impacts" into the record as Hearing Exhibit No.

1 29.

2 Is there any objection?

3 (No response.)

4 HEARING OFFICER FOX: Neither seeing
5 nor hearing any, Mr. Armstrong, it will be marked
6 and admitted as Exhibit 29.

7 (Whereupon, Hearing Exhibit
8 No. 29 was marked for
9 identification and admitted
10 into evidence.)

11 MR. ARMSTRONG: So in citation seven
12 of Ms. Barkley's testimony is another journal
13 article, The Impacts of Coal Combustion Residue
14 Effluent on Water Resources: A North Carolina
15 Example, and we move to admit that as Exhibit 30.

16 HEARING OFFICER FOX: The
17 participants have heard Mr. Armstrong's motion to
18 admit the document, the title of which begins, The
19 Impacts of Coal Combustion Residue" as Hearing
20 Exhibit No. 30 in response to the Board's request.

21 Is there any objection?

22 (No response.)

23 HEARING OFFICER FOX: Neither seeing
24 nor hearing any, Mr. Armstrong, it will be marked

1 and admitted as Exhibit 30.

2 (Whereupon, Hearing Exhibit
3 No. 30 was marked for
4 identification and admitted
5 into evidence.)

6 MR. ARMSTRONG: And citation eight
7 in Ms. Barkley's pre-filed testimony is an
8 August 13th, 2013 letter from USEPA to Illinois
9 EPA. I move to admit this as Exhibit 31.

10 HEARING OFFICER FOX: And the
11 participants have heard Mr. Armstrong's motion to
12 admit USEPA's letter in response to the Board's
13 request as Exhibit No. 31.

14 Is there any objection to the
15 motion?

16 (No response.)

17 HEARING OFFICER FOX: Neither seeing
18 nor hearing any, Mr. Armstrong, it will be marked
19 as Exhibit No. 31 and admitted.

20 (Whereupon, Hearing Exhibit
21 No. 31 was marked for
22 identification and admitted
23 into evidence.)

24 MR. ARMSTRONG: And that concludes

1 the exhibits for Ms. Barkley's pre-filed
2 testimony.

3 HEARING OFFICER FOX: Thank you very
4 much for producing those. If you need a moment or
5 two to begin, Mr. Armstrong, please feel free to
6 do so.

7 MR. ARMSTRONG: And we are ready to
8 begin.

9 HEARING OFFICER FOX: As we had
10 discussed at the beginning of the hearing, the
11 first questions pre-filed for your witnesses, Mr.
12 Armstrong, for the Environmental Groups was --
13 were those filed by Midwest Generation? I believe
14 Ms. Franzetti is prepared to begin with those
15 questions.

16 Did you wish, however,
17 Mr. Armstrong, to have your witnesses begin with
18 any kind of summary or introduction before we turn
19 back?

20 MR. ARMSTRONG: No. We can go
21 ahead.

22 HEARING OFFICER FOX: Very good.
23 Ms. Franzetti, if you are ready to begin your
24 questions, please feel free to do so.

1 MS. FRANZETTI: Thank you. Good
2 afternoon, Dr. Soderberg. How are you?

3 DR. SODERBERG: Good.

4 MS. FRANZETTI: Am I pronouncing
5 your name correctly?

6 DR. SODERBERG: You are. Thank you.

7 MS. FRANZETTI: Okay. I am going to
8 be asking you some questions on behalf of Midwest
9 Generation. If at any time you don't understand
10 my questions, please tell me, and I will try and
11 rephrase it so that you can understand it. All
12 right?

13 DR. SODERBERG: Okay.

14 MS. FRANZETTI: I am going to start
15 with the first pre-filed question. In the "over
16 10 years of research and field experience in
17 geochemistry and hydrology" that you reference in
18 page one of your testimony, Exhibit 22, please
19 identify the research and field experience you
20 have concerning "coal combustion waste", as that
21 term is defined in the proposed rules.

22 DR. SODERBERG: So my background in
23 geochemistry and hydrology covers many aspects
24 including field techniques and chemistry --

1 chemical analysis. I haven't studied coal
2 combustion waste in particular in any of my
3 research projects, but I believe that my
4 background does involve techniques, field and
5 laboratory technique and data analysis that is
6 relevant to a similar study of soil and sediments
7 that is relevant to coal combustion waste.

8 MS. FRANZETTI: Although you haven't
9 studied coal combustion waste, have you studied
10 coal?

11 DR. SODERBERG: Yes. During my
12 Ph.D. we -- it wasn't part of my thesis, but we
13 investigated coal in course work and that kind of
14 thing.

15 MS. FRANZETTI: In what way did you
16 investigate coal?

17 DR. SODERBERG: Well, the laboratory
18 that I worked in is an organic -- organic
19 geochemistry laboratory. So as part of coursework
20 and laboratory learning exercises, we would
21 analyze the coal; for example, the carbon isotopes
22 in a coal sample, for example.

23 MS. FRANZETTI: So in the
24 laboratory --

1 DR. SODERBERG: Yes.

2 MS. FRANZETTI: -- you have done
3 some analysis of the isotopes that make up coal?

4 DR. SODERBERG: Yes.

5 MS. FRANZETTI: Different types of
6 coal or --

7 DR. SODERBERG: I believe that was
8 just the one example, a sample of coal. It wasn't
9 part of a larger study.

10 MS. FRANZETTI: Do you remember what
11 type of coal it was?

12 DR. SODERBERG: I do not.

13 MS. FRANZETTI: Turning to question
14 two, In the "more than five years" in which you
15 have been a consultant, please identify the
16 projects and clients for which you have consulted
17 on matters involving "coal combustion waste,"
18 again as that term is defined in the proposed
19 rules.

20 DR. SODERBERG: So last year I
21 supported a project with Earth Justice where we
22 were commenting on the USEPA's proposed rule on
23 their notice of data availability last year. And
24 I also supported another member of my company who

1 provided two affidavits in a Midwest Generation
2 enforcement action.

3 MS. FRANZETTI: Turning to that
4 first project with Earth Justice, could you
5 explain in a little more detail what your work was
6 as part of that project?

7 DR. SODERBERG: So I was reviewing
8 questionnaire data that the USEPA had gathered
9 from power generating facilities around the
10 country on the types of waste that was stored, the
11 types of coal that was used at each facility, and
12 other information about the different facilities.
13 That was one aspect of the comment was whether we
14 could use this questionnaire data in support of --
15 as opposed to that was a -- well, some aspect of
16 the USEPA's proposed rule.

17 MS. FRANZETTI: Do you recall in
18 particular what type of information you did
19 actually use from those questionnaires, what you
20 were focusing on?

21 DR. SODERBERG: Well, there were
22 data about the size of impoundments, the types of
23 coal that were used at the different facilities,
24 and the -- some chemistry data, I believe, that

1 was submitted as part of this questionnaire.

2 MS. FRANZETTI: Actually, have you
3 been out to any stations that have coal combustion
4 waste surface impoundments of the type described
5 in these proposed rules?

6 DR. SODERBERG: Not in the U.S., no.

7 MS. FRANZETTI: Where have you been?

8 DR. SODERBERG: In South Africa.

9 MS. FRANZETTI: And how many of such
10 facilities have you visited in South Africa?

11 DR. SODERBERG: Two facilities.

12 MS. FRANZETTI: What was the purpose
13 of your visiting those two facilities?

14 DR. SODERBERG: That is part of my
15 master's degree studies. We were not involved in
16 a project with those facilities. We were just
17 visiting the facilities.

18 MS. FRANZETTI: For what purpose?
19 What were you trying to learn?

20 DR. SODERBERG: We were trying to
21 learn about coal mining and coal ash disposal.

22 MS. FRANZETTI: With regard then to
23 the second project, affidavits, I believe you
24 mentioned regarding a Midwest Gen enforcement

1 action, can you be a little more specific about
2 what you are referring to?

3 DR. SODERBERG: So I wasn't -- I
4 wasn't playing a major role in those affidavits.
5 I was helping Dr. Remy Hennett who was signing and
6 writing the affidavits to look at the data. So I
7 was helping him to gather the data and analyze
8 some of the data.

9 MS. FRANZETTI: For the court.
10 reporter's benefit, would you spell Dr. Remy
11 Hennett's name?

12 DR. SODERBERG: Sorry. Dr. Remy,
13 R-E-M-Y, Hennett, H-E-N-N-E-T-T.

14 MS. FRANZETTI: And so Dr. Hennett
15 is someone you report to at your company?

16 DR. SODERBERG: He is a principal in
17 my consulting firm, yes.

18 MS. FRANZETTI: Have those
19 affidavits, in fact, to your knowledge, been filed
20 in that proceeding?

21 DR. SODERBERG: I don't remember
22 looking at or reading the final versions. I'm not
23 sure what came of those affidavits.

24 MS. FRANZETTI: Okay. Can you tell

1 me generally what the subject matter was of those
2 affidavits?

3 DR. SODERBERG: I remember looking
4 at groundwater monitoring data, some groundwater
5 water levels potentiometric surfaces, maps, and I
6 believe some of those were in hydrogeologic site
7 assessments or some report of that nature.

8 MS. FRANZETTI: So you looked at
9 that data, and then what did you do with it?

10 DR. SODERBERG: Well, we were
11 looking at the trends in chemical concentrations
12 over time, if I remember.

13 MS. FRANZETTI: For what purpose
14 were you looking at trends in chemical
15 concentrations over time?

16 DR. SODERBERG: I believe that we
17 were looking at -- indication that groundwater
18 concentrations of these chemicals give an
19 indication of seepage or leachate from coal
20 combustion waste.

21 MS. FRANZETTI: Do I understand
22 correctly you were trying to determine whether the
23 chemicals reported in this groundwater monitoring
24 data you were looking at were consistent with a

1 release from a CCW surface impoundment?

2 DR. SODERBERG: Yes. In addition to
3 trying to understand the overall geochemistry and
4 hydrology of the site.

5 MS. FRANZETTI: Okay. Did you have
6 sufficient information to understand the
7 geochemistry and hydrogeology of the site?

8 DR. SODERBERG: Well, I, again,
9 don't recall where Dr. Hennett ended up in terms
10 of his opinions for the affidavit, but there was
11 some data for the -- and I can't recall whether
12 that was enough to make any, you know, firm
13 conclusions. Again, I didn't -- I don't remember
14 looking at the final affidavit.

15 MS. FRANZETTI: Do you recall what
16 Dr. Hennett's opinions were?

17 DR. SODERBERG: I don't.

18 MS. FRANZETTI: Besides these two
19 projects that you have testified to, any other
20 projects you have worked on that involved coal
21 combustion waste?

22 DR. SODERBERG: No.

23 MS. FRANZETTI: Moving to question
24 three. Identify prior projects you have worked on

1 as a consultant for any federal or state
2 environmental agency regarding the development of
3 rules or regulations of general applicability that
4 applied to the release of contaminants into the
5 environment and corrective action to address any
6 such release.

7 DR. SODERBERG: So my firm does work
8 with state and federal agencies, but we haven't
9 worked on -- or I haven't worked on other rules or
10 regulations of general applicability to
11 site-specific type work.

12 MS. FRANZETTI: All right. So am I
13 correct the answer is none?

14 DR. SODERBERG: Correct.

15 MS. FRANZETTI: Question four,
16 Identify any prior projects which you have worked
17 on as a consultant for an industrial facility.

18 DR. SODERBERG: So -- yeah. So I
19 will mention several. It's not a complete list,
20 and I will list the sites and the state, but not
21 the client's name.

22 MS. FRANZETTI: Is the client name
23 confidential?

24 DR. SODERBERG: I don't think it's

1 confidential, but I haven't checked. So I
2 wouldn't want to put it out there.

3 MS. FRANZETTI: Okay.

4 DR. SODERBERG: So I worked on four
5 uranium mine facilities in New Mexico, one mercury
6 mine facility in Arizona.

7 MS. FRANZETTI: Mercury mine?

8 DR. SODERBERG: Mercury. One
9 uranium mill site in New Mexico, one metal working
10 facility in Indiana, one natural gas pipeline
11 compressor station in Pennsylvania, one landfill
12 Ohio, two phosphate mine related facilities in
13 Florida, two aerospace or rocket fuel related
14 facilities in California and Oklahoma and one
15 natural gas storage facility in Mississippi.

16 MS. FRANZETTI: What was the nature
17 of the project for the landfill in Ohio?

18 DR. SODERBERG: That was part of
19 litigation support pertaining to potential
20 leachate from the landfill entering the
21 groundwater.

22 MS. FRANZETTI: What type of support
23 on the issue of leachate entering groundwater were
24 you providing?

1 DR. SODERBERG: Analyzing the
2 hydrogeology and the chemical data in the leachate
3 and in the groundwater and supported an expert
4 report.

5 MS. FRANZETTI: Okay. What type of
6 landfill was it?

7 A. It's a non-hazardous waste landfill.
8 I'm not sure what class it sits in. I think at
9 various stages through the years it was classified
10 different ways.

11 MS. FRANZETTI: Was it municipal or
12 privately owned?

13 DR. SODERBERG: Privately owned.

14 MS. FRANZETTI: Was it still
15 operating or closed?

16 DR. SODERBERG: Still operating.

17 MS. FRANZETTI: And what did you
18 conclude in the report that you prepared regarding
19 the impacts on groundwater from that landfill?

20 DR. SODERBERG: Well, that landfill
21 in particular had very many decades of history,
22 and initially did not have much in the way of a
23 liner, and then it had some portions of it that
24 were clay lined and some portions of it that were

1 more recent and so had more -- involved more
2 complex liner systems.

3 And so the conclusions -- this
4 is an ongoing project. We haven't finalized those
5 conclusions yet, but there are various sort of
6 levels of leachate that leave that landfill, and
7 it's a question -- it's a complicated question
8 about how far the leachate makes it into the
9 subsurface.

10 MS. FRANZETTI: Why is the question
11 complicated about --

12 DR. SODERBERG: Well, hydrogeologic
13 is complicated, and chemistry is complicated.

14 MS. FRANZETTI: Okay. And are you
15 working with that client to close that landfill
16 since it's impacted the groundwater?

17 DR. SODERBERG: I did not say that
18 it has impacted the groundwater, and we are not
19 working with the client to close the landfill, and
20 I am not prepared in this part of this hearing to
21 give specific testimony on that landfill.

22 MS. FRANZETTI: Okay. I understand,
23 but -- so do you know whether or not the unlined
24 areas of that landfill have impacted groundwater?

1 DR. SODERBERG: I can't recall the
2 specific conclusions that we did come to there.

3 MS. FRANZETTI: Okay. You don't
4 think that they have?

5 MS. BUGEL: I am going to object,
6 asked and answered.

7 MS. FRANZETTI: Well, I am just
8 making sure he doesn't have -- you don't have any
9 recollection of whether the unlined portions of
10 that landfill have impacted groundwater?

11 DR. SODERBERG: So leachate does go
12 into the subsurface under the portions of the
13 landfill. The impact to groundwater is a separate
14 question. It's related, but it's separate.

15 MS. FRANZETTI: Have you looked at
16 that question?

17 DR. SODERBERG: I don't recall the
18 specifics of what we concluded with that
19 interaction.

20 MS. FRANZETTI: Okay. So you have
21 looked at whether or not the leachate impacted
22 groundwater, but you are telling me you don't
23 recall whether or not there were any impacts; is
24 that right?

1 DR. SODERBERG: I am not prepared to
2 give a specific conclusion for that landfill.

3 MS. FRANZETTI: Okay. And is that
4 because you think it's confidential, Dr.
5 Soderberg?

6 DR. SODERBERG: I think it's an
7 ongoing project. It's part of litigation, and I
8 don't feel like I should provide a conclusion, and
9 I am not the one who is signing that report.

10 MS. FRANZETTI: So you are not the
11 testifying expert?

12 DR. SODERBERG: Exactly.

13 MS. FRANZETTI: Any other landfill
14 projects you have worked on?

15 DR. SODERBERG: No. There was
16 uranium tailing ponds associated with the mill in
17 New Mexico. That's a tailing pond, not a
18 landfill.

19 MS. FRANZETTI: I'm sorry. I have
20 never worked on uranium mines. How does a tailing
21 pond differ from the types of surface impoundments
22 we are dealing with in this proceeding?

23 DR. SODERBERG: It's quite similar.
24 I think it's quite similar, but it's tailings that

1 result from a mill. It's -- it's going to be
2 potentially a different type of material than what
3 comes out of coal combustion.

4 MS. FRANZETTI: Okay. I understand
5 that.

6 DR. SODERBERG: But you are right.
7 There are solids, there are liquids, and there are
8 issues with seepage, certainly as there are with
9 surface impoundments that we are talking about.

10 MS. FRANZETTI: Are you looking at
11 the issue of whether there is any seepage, as you
12 say, from this uranium tailing pond?

13 DR. SODERBERG: Yes.

14 MS. FRANZETTI: What have you found?

15 DR. SODERBERG: So there is -- there
16 is seepage -- now, in that case it's again a
17 complicated question about where that seepage ends
18 up with respect to the groundwater and the
19 different aquifers that are involved, but yes,
20 there is seepage.

21 MS. FRANZETTI: And is any
22 corrective action being done as part of the work
23 you are working on?

24 DR. SODERBERG: That -- yes. So we

1 came in late on that project. That was an -- it's
2 an old tailings pond associated with the uranium
3 mine industry of the 60's and 70's, and I believe
4 that that pond was capped back in the early
5 1990's.

6 MS. FRANZETTI: Okay. Is there any
7 corrective action going on as part of the project
8 you are working on for that uranium tailings pond?

9 DR. SODERBERG: That we were more --
10 you know, the follow-up litigation associated with
11 that closing of that tailings pond is what we were
12 involved in.

13 MS. FRANZETTI: Is the pond closed?

14 DR. SODERBERG: I'm not sure the
15 legal status or the regulatory status of that, but
16 they did cap it and regrade it.

17 MS. FRANZETTI: Okay. Did they
18 remove all the uranium tailings before they capped
19 it?

20 DR. SODERBERG: I will have to check
21 for that. I will have to check.

22 MS. FRANZETTI: Do you recall if you
23 ever advocated they should remove all the uranium
24 tailings before they capped the pond?

1 DR. SODERBERG: Again, this was an
2 old project. We came in after the fact for that
3 one.

4 MS. FRANZETTI: Oh, I understand. I
5 am just asking whether you or your company
6 recommended that they should first remove all the
7 uranium tailings before they capped the pond?

8 DR. SODERBERG: I don't recall that
9 we did that, but --

10 MS. FRANZETTI: Actually, same
11 question on the landfill in Ohio. Are you
12 recommending they remove the waste from that
13 landfill?

14 DR. SODERBERG: No.

15 MS. FRANZETTI: I am moving to
16 question five, Dr. Soderberg. Identify the scope
17 of any work you have been requested to perform on
18 behalf of the clients you are representing here
19 today, including any work related to any
20 coal-fired generating stations.

21 DR. SODERBERG: You mean in addition
22 to the pre-filed testimony and the testimony
23 today?

24 MS. FRANZETTI: Well, perhaps. Let

1 me clarify. You obviously prepared testimony.
2 You are appearing here today. Did you assist in
3 the preparation of the proposed revisions to the
4 proposed Part 841 rules?

5 DR. SODERBERG: Yes.

6 MS. FRANZETTI: Have you done
7 anything else with respect to this rulemaking to
8 assist your client?

9 DR. SODERBERG: No.

10 MS. FRANZETTI: Okay. You already
11 mentioned that your firm was working on the
12 Midwest Gen enforcement action. Is your firm
13 working on behalf of these clients with respect to
14 any enforcement action against other coal-fired
15 electric generating stations?

16 DR. SODERBERG: Not that I am aware
17 of.

18 MS. FRANZETTI: I am only turning to
19 ask. I am going to start another area of
20 questions, but do you want me to keep going or to
21 take a lunch break?

22 HEARING OFFICER FOX: Hold on one
23 second. Ms. Olson appears to have a question.

24 MS. OLSON: I have been saving all

1 my follow-ups on this area for when you are
2 finished. So if you are done, I would --

3 MS. FRANZETTI: You go right ahead.

4 MS. OLSON: Thank you. Hi. My name
5 is Joanne Olson. I work for Illinois EPA, and I
6 just have a few quick follow-up questions for you.

7 So going back to question one,
8 you said that you studied coal in graduate school;
9 is that right?

10 DR. SODERBERG: That's right, yeah.

11 MS. OLSON: And how long did you
12 study coal in graduate school?

13 DR. SODERBERG: It was a brief
14 exercise as part of a class on the organic
15 geochemistry.

16 MS. OLSON: So was it a single
17 class?

18 DR. SODERBERG: Well --

19 MS. OLSON: A single class period?

20 Excuse me.

21 DR. SODERBERG: No. I mean, it was
22 discussed in the class, and then there was a
23 laboratory.

24 MS. OLSON: Did it last the entire

1 semester?

2 DR. SODERBERG: The entire semester
3 was about organic geochemistry, but the coal was
4 probably -- I can't offer how -- what percentage
5 of that class was about coal.

6 MS. OLSON: Is that because you
7 don't recall?

8 DR. SODERBERG: That's correct. I
9 don't recall what percentage of that class was
10 about coal.

11 MS. OLSON: In your work on coal,
12 can you tell us what you learned?

13 MS. BUGEL: The scope of that
14 question seems awfully broad to me.

15 MS. OLSON: The isotopic analysis,
16 in particular?

17 DR. SODERBERG: Well, so that --
18 isotope analysis of carbon and coal can be used in
19 many different ways. We were, I think,
20 investigating that as far as thinking about where
21 the coal -- how the coal was formed, the types of
22 environments that it was formed in, and the kind
23 of events surrounding the ecosystem that led to
24 the ultimate formation of the coal.

1 MS. OLSON: I want to move on to a
2 response that you had to question two about your
3 work on coal combustion waste units or surface
4 impoundments. You said you worked on two units in
5 South Africa; is that correct?

6 DR. SODERBERG: We visited two, yes.

7 MS. OLSON: Do you recall the name
8 of those -- the facility at -- where those units
9 were located?

10 DR. SODERBERG: So the one was
11 S-Comm was the name of the company, and the other
12 one was in a town called Witbank.

13 MS. OLSON: Do you recall whether or
14 not those facilities were lined?

15 DR. SODERBERG: I do not recall.

16 MS. OLSON: And do you recall the
17 size of each of the surface impoundments?

18 DR. SODERBERG: I do not recall.

19 MS. OLSON: And do you recall how
20 long you worked on that project revolving around
21 the visit for the South Africa.

22 DR. SODERBERG: It was probably
23 about one day of a visit for each.

24 MS. OLSON: Was there any follow-up

1 work associated with your visit?

2 DR. SODERBERG: No.

3 MS. OLSON: In response to, I
4 believe it was question four, you provided a
5 nonexclusive list of projects that you worked on.
6 I understand that you don't want to provide the
7 names of the people or the particular projects,
8 but would be willing to provide a complete list of
9 the projects that you worked on in follow-up to
10 this -- after in post-hearing comments?

11 DR. SODERBERG: Yes.

12 MS. OLSON: Do you know how many of
13 those projects involve surface impoundments or
14 similar structures?

15 DR. SODERBERG: Many of -- yeah,
16 certainly the mining facilities had settling ponds
17 and different ways of storing ore that was brought
18 up and different grades of ore and that kind of
19 thing, and then the uranium mill site had a
20 tailings pond.

21 MS. OLSON: For any of those
22 projects, did you work with the closure of a
23 storage structure or surface impoundment?

24 DR. SODERBERG: Not directly, the

1 mill tailings pond had been closed already when we
2 were working on that.

3 MS. OLSON: So you mentioned that
4 the tailings pond -- is that the one that you said
5 was closed?

6 DR. SODERBERG: I believe so, yeah.

7 MS. OLSON: Was that closed when you
8 began involvement on the project?

9 DR. SODERBERG: Yes.

10 MS. OLSON: And do you know how it
11 was closed?

12 DR. SODERBERG: From what I
13 remember, it had been regraded and capped.

14 MS. OLSON: Is a cap typically
15 installed to close a unit where there is nothing
16 inside the unit remaining?

17 DR. SODERBERG: I imagine so.

18 MS. OLSON: Do you know whether or
19 not any material was remaining in the pond that
20 was capped?

21 DR. SODERBERG: I cannot recall.

22 MS. OLSON: You mentioned that there
23 was a landfill project that you worked on. And
24 the question was, did you recommend removing the

1 waste in the landfill, and I think you said no, is
2 that a fair --

3 DR. SODERBERG: Yeah.

4 MS. OLSON: Do you know, can you
5 tell us why you didn't recommend removal?

6 DR. SODERBERG: Well, you know, that
7 landfill was permitted with -- certainly the
8 active portions of the landfill are lined
9 according to the current standards. So that's why
10 it was -- that's why I said that.

11 MS. OLSON: And the list of projects
12 that you have worked on, which is almost complete
13 or partially complete, that you named for us, have
14 you ever recommended removal of a waste as a
15 method of closure?

16 DR. SODERBERG: Are you talking
17 about --

18 MS. OLSON: The uranium mine, the
19 natural gas line --

20 DR. SODERBERG: Yes.

21 MS. OLSON: The landfill --

22 DR. SODERBERG: So certainly a
23 removal of contamination sediments or other waste
24 rock, for example, is -- yes, that's part of the

1 remediation process. Myself and my work with my
2 firm is more advising and reviewing that type of
3 remediation, and not doing it in the field type
4 thing, and so --

5 MS. OLSON: And specifically for
6 impoundments, have you recommended removal?

7 DR. SODERBERG: So --

8 MR. ARMSTRONG: Could I ask a
9 clarifying question?

10 MS. OLSON: Sure.

11 MR. ARMSTRONG: With respect to coal
12 ash impoundments?

13 MS. OLSON: No. Any impounding
14 structure or -- surface impoundment or similar
15 structure.

16 DR. SODERBERG: So if you include,
17 say, a settling pond which has accumulated
18 sediments over time, that -- the removal of those
19 sediments certainly has been part of the
20 remediation of some of the sites that I have done.

21 MS. OLSON: Have you recommended
22 removal of all sediments in any of those ponds?

23 DR. SODERBERG: I think in each case
24 it's relative to some cleanup standards where you

1 remove and do confirmatory sampling.

2 MS. OLSON: So is it a fair
3 statement to say that the nature of a closure
4 and/or remedial project is very site-specific?

5 DR. SODERBERG: Yes.

6 MS. FRANZETTI: Could I just ask a
7 question?

8 MS. OLSON: Yes.

9 MS. FRANZETTI: I'm sorry,
10 Dr. Soderberg. I am a little confused between
11 settling ponds versus she was using the term
12 "surface impoundments." Can you explain what you
13 are referring to as a settling pond?

14 DR. SODERBERG: So a settling pond
15 is, I would say, any kind of structure that's set
16 up to dam up wastewater that has solids in it and
17 then the solids will fall out and then the water
18 is released out of that.

19 MS. FRANZETTI: And at how many
20 facilities have you done work relating to settling
21 ponds?

22 DR. SODERBERG: I would have to go
23 back and check, but it's an -- at each of the
24 uranium mines, for example, you would have to

1 de-water the mine, and there would be a need for a
2 settling ponds. Also in the phosphate mine
3 related facilities in Florida, those were -- I
4 remember working on sites where there were ponds as
5 well.

6 MS. FRANZETTI: Can you give me some
7 ideas of the size of the ponds, the settling ponds
8 that you have worked on?

9 DR. SODERBERG: Obviously, they vary
10 in size. I can't recall a specific --

11 MS. FRANZETTI: That's okay. I'm
12 not asking you to recall specifics. Just give me
13 a sense of what's the smallest, what's the largest
14 roughly.

15 DR. SODERBERG: I mean, the largest
16 may have been roughly on the order of, say, the
17 size of a football field.

18 MS. FRANZETTI: And the nature of
19 your work regarding settling ponds has been what?

20 DR. SODERBERG: Well, these that I
21 have worked on have been in place or they were
22 active decades ago, and so we were reviewing what
23 happened with them and what issues that were
24 potentially with leachate and groundwater

1 contamination.

2 MS. FRANZETTI: So are most of them
3 inactive that you have worked on?

4 DR. SODERBERG: Well, I mean,
5 inactive -- can you define inactive?

6 MS. FRANZETTI: Good point. Are
7 they still being used to receive the wastewater
8 that you were saying the solids settle out from?

9 DR. SODERBERG: The sites are
10 inactive. They are not -- but they -- but, you
11 know, those ponds potentially were still receiving
12 stormwater runoff and so --

13 MS. FRANZETTI: Did you have to work
14 under any regulatory structure with regard to
15 those settling ponds as you did the work for the
16 client?

17 DR. SODERBERG: Well, the settling
18 ponds --

19 MS. BUGEL: Can I ask a clarifying
20 question? What do you mean by work under a
21 regulatory structure?

22 MS. FRANZETTI: Sure. Let me
23 clarify. Were there any regulations in place that
24 you needed to refer to in doing the work you were

1 doing on the settling ponds to determine what the
2 applicable requirements were?

3 DR. SODERBERG: So in terms of their
4 operation, they would have been -- had NPDES
5 permits, as far as I recall, and then in terms of
6 the closure, I can't recall what regulations were
7 involved in the closure.

8 MS. BUGEL: Did you say you can
9 recall or you can't?

10 DR. SODERBERG: I can't. I can't
11 recall.

12 MS. BUGEL: Can I ask a follow-up
13 question? You can't recall what regulations were
14 involved or applicable to closure, but can you
15 recall if any regulations were applicable to
16 closure?

17 DR. SODERBERG: I believe that there
18 were regulations. There were permits and that
19 that sort of thing.

20 MS. FRANZETTI: No further
21 questions.

22 HEARING OFFICER FOX: Let's jump
23 back to Ms. Olson. You are indicating you do have
24 some follow-up.

1 MS. OLSON: One more. So you were
2 talking about in some of the projects you removed
3 materials from settling ponds. Can you tell us,
4 if you remember, the largest quantity of material
5 on a project that you worked with that was removed
6 from one of these ponds?

7 DR. SODERBERG: Yeah. I can't
8 recall. In particular, there was a set of ponds
9 associated with a chromium tanning facility that
10 we just worked on and so I can kind of remember
11 that the removal action was -- involved about
12 34,000 tons.

13 HEARING OFFICER FOX: Anything
14 further, Ms. Olson?

15 MS. OLSON: One minute. That's it.
16 Thank you.

17 HEARING OFFICER FOX: I would like
18 to turn to Board Member O'Leary.

19 Board MEMBER O'LEARY: Going back to
20 the projects in Africa, exactly -- you said
21 projects. What were those projects by that type
22 of material? I mean, a coal mining facility or
23 what?

24 DR. SODERBERG: So the -- I'm going

1 back to about 12 years ago now. So I am trying to
2 remember those two days, but we visited the S-Comm
3 facility, which was a power generation facility
4 that had fly ash disposal that we discussed and
5 looked and walked around.

6 The one in Witbank, that's where
7 much of the coal mining occurs, and the
8 impoundments that I remembered there, there was
9 some coal, raw coal storage, and so I am not -- I
10 can't recall really if there was coal combustion
11 waste there. It was really just sort of a site
12 visit.

13 Board MEMBER O'LEARY: For each site
14 you were just there one day and left?

15 DR. SODERBERG: Yes.

16 Board MEMBER O'LEARY: Was there
17 certain regulations that they had to follow there?

18 DR. SODERBERG: In terms of the
19 visit or in terms of the --

20 Board MEMBER O'LEARY: In terms of
21 government regulations?

22 DR. SODERBERG: Well, I don't --
23 yeah. I don't remember the regulations in South
24 Africa, but they are doing their best.

1 Board MEMBER O'LEARY: Last
2 question. On natural gas pipelines, what kind of
3 settling ponds or impoundments are there?

4 DR. SODERBERG: So there were some
5 old lagoons at this facility in Pennsylvania that
6 are now removed. I wasn't part of that side of
7 things, but now we are treating the groundwater
8 that was associated with those lagoons.

9 Board MEMBER O'LEARY: So these are
10 lagoons. What type of lagoons were they, do you
11 know?

12 DR. SODERBERG: In terms of what was
13 in there them or what was --

14 Board MEMBER O'LEARY: Yeah.

15 DR. SODERBERG: So they had
16 various -- as part of the compressor station
17 activities, various oils that were associated with
18 the hydraulics and the engines. I believe that's
19 what it was.

20 Board MEMBER O'LEARY: Those per se
21 wouldn't be lagoons, would they?

22 DR. SODERBERG: Well, I'm not sure
23 exactly what the -- I'm not familiar with what the
24 nature of the material that was in those lagoons.

1 It was described to me as lagoons, and then there
2 was groundwater contamination associated with
3 that.

4 HEARING OFFICER FOX: If I may
5 follow-up on that. You had referred, Dr.
6 Soderberg, I believe, to an S-Comm facility and to
7 a second that was located near a community that's
8 pronounced, I believe, as Witbank. Just for the
9 clarity of record, do you recall the spelling of
10 that name?

11 DR. SODERBERG: Yes, that's,
12 W-I-T-B-A-N-K.

13 HEARING OFFICER FOX: Thanks very
14 much.

15 MS. BUGEL: Hearing Officer, I do
16 have a few questions still on background on
17 redirect if --

18 HEARING OFFICER FOX: Okay.
19 Ms. Franzetti, did you have any additional
20 questions on your own questions one through five
21 at this stage?

22 MS. FRANZETTI: No, I do not.

23 HEARING OFFICER FOX: Very good.
24 Ms. Bugel, why don't we proceed to those, and look

1 ahead towards lunch at the conclusion of those.

2 MS. BUGEL: Dr. Soderberg, you have
3 studied isotopes as part of your background?

4 DR. SODERBERG: Yes.

5 MS. BUGEL: Can you explain how the
6 study of isotopes is related to coal ash
7 contamination of groundwater?

8 DR. SODERBERG: Well, the study of
9 isotopes is quite a broad topic. It's a series of
10 tools that we can use to track the fate of water
11 and the fate of chemicals in the environment.

12 So we would potentially use the
13 stable isotopes of water to look at the
14 infiltration of water into the subsurface and in
15 mixing with the groundwater, and that's just one
16 example out of an entire field of geochemistry,
17 and I am not familiar with the study specifically
18 at coal combustion waste facilities.

19 MS. BUGEL: You have also -- you
20 also have a background in ecohydrology?

21 DR. SODERBERG: Yes.

22 MS. BUGEL: And can you explain how
23 that is related to coal ash contamination of
24 groundwater?

1 DR. SODERBERG: So ecohydrology is
2 the -- it's a branch of hydrology that looks at
3 the interactions and the fate of water with
4 vegetation and soils, and so this is related to
5 the -- the movement of water. In terms of coal
6 combustion waste facilities, it would be related
7 to the infiltration of stormwater, the
8 infiltration of leachate into the subsurface, how
9 fast that water moves, as well as the interaction
10 with the vegetation, say, for -- that grows on any
11 kind of cap or embankment.

12 MS. BUGEL: And do you also have a
13 background in environmental geochemistry?

14 DR. SODERBERG: Yes.

15 MS. BUGEL: And can you explain how
16 that is related to the coal ash contamination of
17 groundwater?

18 DR. SODERBERG: Well, yeah,
19 environmental geochemistry, again, is a broad term
20 and it's -- it tends to refer more to the
21 geochemistry of -- and movement of pollution
22 contaminants in the environment. So this is kind
23 of the academic term for studying the movement of
24 contaminants relating to coal combustion waste.

1 MS. BUGEL: And do you also have a
2 background in biogeochemistry?

3 DR. SODERBERG: Yes.

4 MS. BUGEL: And can you explain how
5 that is related to coal ash contamination of
6 groundwater?

7 DR. SODERBERG: Sure. So
8 biogeochemistry, again a broad term. It would
9 relate to any sort of molecular biology, as well
10 as the, you know, biological processes in the soil
11 that could potentially be involved in the
12 attenuation or degradation of contaminants.

13 MS. BUGEL: And you have worked on
14 remediation cases; is that right?

15 DR. SODERBERG: Yes.

16 MS. BUGEL: Can you briefly list the
17 number and just a quick detail or two about the
18 remediation cases you have worked on?

19 DR. SODERBERG: So I have -- I would
20 list the same sites that I did previously. They
21 each involved some aspect of remediation. So I
22 don't know if -- I probably shouldn't repeat that.

23 MS. BUGEL: That's fine. Thank you.
24 And you have worked for environmental agencies

1 before?

2 DR. SODERBERG: Yes.

3 MS. BUGEL: Can you tell us what
4 agencies you have worked for?

5 DR. SODERBERG: Yes. So I have
6 worked for the City of Portland, the City of New
7 York, the New Jersey Department of Environmental
8 Protection.

9 MS. BUGEL: And were any of those
10 cases remediation cases?

11 DR. SODERBERG: Yes.

12 MS. BUGEL: Can you tell us which
13 ones?

14 DR. SODERBERG: So the Portland --
15 City of Portland case was about sediment
16 contamination in the -- in Portland, the
17 Willamette River. The City of New York relates to
18 a canal in Brooklyn, and the city -- or the New
19 Jersey state work is about contamination at gas
20 stations.

21 MS. BUGEL: Thank you. I don't have
22 any further questions.

23 HEARING OFFICER FOX: Very good,
24 Ms. Franzetti, did you have any additional

1 follow-ups on your questions number one through
2 five at this stage?

3 MS. FRANZETTI: No.

4 HEARING OFFICER FOX: I thought I
5 knew what that finger meant. Ms. Olson?

6 MS. OLSON: I have one follow-up
7 question. You mentioned the work that you did for
8 cities and states and your involvement in those
9 projects. Were you in charge of making the
10 decisions, the remediation decisions, at those
11 sites and on those projects?

12 DR. SODERBERG: No.

13 HEARING OFFICER FOX: Nothing
14 further, Ms. Olson?

15 MS. OLSON: No.

16 HEARING OFFICER FOX: Ms. Franzetti,
17 we have heard you say that you at least have
18 exhausted follow-up for one through five. It is
19 1:20. Let's break for lunch. I am sure I am
20 disappointing no one with that. Let's resume, Ms.
21 Franzetti, with your question number six, which
22 addresses subpart A when we return at 2:00 p.m.

23 (Whereupon, a lunch break was
24 taken.)

1 HEARING OFFICER FOX: Two o'clock
2 having just come and gone, we are prepared to be
3 back on the record. Just before we did, Ms. Bugel
4 had suggested procedurally that she had a question
5 she wished to raise. She assured me it was a
6 quick, single one, but let's turn to you for that,
7 and we can resume where we had planned to.

8 MS. BUGEL: Yes. I just have one
9 follow-up question on background for Dr.
10 Soderberg.

11 And earlier Ms. Franzetti asked
12 you if you had ever made a recommendation on the
13 uranium tailings facilities that you worked on in
14 the landfill. She asked if you had ever made a
15 recommendation regarding removal. Do you remember
16 that question?

17 DR. SODERBERG: Yes.

18 MS. BUGEL: And I just wanted to
19 follow-up and ask you, did you ever have an
20 opportunity to make a recommendation for removal
21 at those facilities?

22 DR. SODERBERG: No. No, I didn't.

23 MS. BUGEL: Thank you. I have no
24 further questions.

1 MS. FRANZETTI: I do. Was your
2 answer meant to mean that the client prevented you
3 from saying you thought removal should occur?

4 DR. SODERBERG: No. It was the
5 nature of our interaction with the specific -- so
6 the tailings pond had already been closed as far
7 as I am aware, and then the landfill, we were
8 involved in the litigation and not in the
9 operation of the landfill.

10 MS. FRANZETTI: So is it your
11 opinion that those tailings should have been
12 removed?

13 DR. SODERBERG: You know, I didn't
14 form an opinion on that. Certainly there was
15 evidence of seepage of the coal water from the
16 tailings. So removal would be a way of reducing
17 and minimizing that seepage.

18 MS. FRANZETTI: But necessarily the
19 only way?

20 DR. SODERBERG: Not necessarily the
21 only way.

22 MS. FRANZETTI: Can we move on to
23 question six?

24 HEARING OFFICER FOX: Anything

1 further before we move on, Ms. Olson?

2 MS. OLSON: No.

3 HEARING OFFICER FOX: Ms. Franzetti,
4 please go ahead with number six.

5 MS. FRANZETTI: Dr. Soderberg, these
6 questions relate actually to the last paragraph on
7 page two of your testimony, not the referenced
8 first paragraph.

9 DR. SODERBERG: Okay.

10 MS. FRANZETTI: So with that I will
11 go to 6(a) and it's -- the question is, You refer
12 to the Agency's response to ELPC's questions that
13 states "it cannot in all instances identify
14 specific impoundments that are suspected of
15 causing groundwater contamination." First, the
16 exact language of the Agency's response was
17 "suspected of causing groundwater exceedances",
18 correct?

19 DR. SODERBERG: I don't have that in
20 front of me, but if that's -- yeah, that's
21 possible, yes.

22 MS. FRANZETTI: Okay. Second, prior
23 to the adoption of these rules, why do you expect
24 the Agency to know about the existence of every

1 impoundment in the state that is causing an
2 exceedance of any groundwater standard?

3 DR. SODERBERG: So for that, the
4 reason I was bringing that up was due to the
5 exclusion of impoundments that are not operating,
6 but are shown to -- or thought to not be causing
7 groundwater exceedance. I can read that part of
8 the proposed rule about exclusions of those
9 impoundments, but the idea was that if you are
10 going to have an exclusion, you are going to have
11 to show that there is grounds for that exclusion.

12 MS. FRANZETTI: I'm not sure I
13 understand, but bear with me. In your opinion, if
14 the Agency is going to provide in the rules that a
15 formerly operating surface impoundment that is not
16 causing an exceedance of a groundwater standard is
17 excluded from the rules, they would need to know
18 about that impoundment now; is that what you are
19 saying?

20 DR. SODERBERG: Yes.

21 MS. FRANZETTI: Why don't you point
22 me to the section of the proposed rules that you
23 were referring to in your answer?

24 DR. SODERBERG: Okay. So in the

1 paragraph of my pre-filed testimony that you are
2 referencing, I refer to Subsection 841.105(a)(2),
3 correct?

4 MS. FRANZETTI: Yes. It's from the
5 Agency's proposed rules, correct?

6 DR. SODERBERG: From the Agency's
7 proposed rules.

8 MS. FRANZETTI: Ah-huh.

9 DR. SODERBERG: So this is
10 applicability, and I will just read that. So
11 except as specified in subsection B of this
12 section, this part applies to all surface
13 impoundments at power generating facilities
14 containing coal combustion waste or leachate from
15 coal combustion waste that are -- getting to (2)
16 here, not operated on -- not operated after the
17 effective date of the rules, but whose coal
18 combustion waste or leachate from coal combustion
19 waste causes or contributes to an exceedance of
20 the groundwater quality standards on or after the
21 effective date of these rules.

22 MS. FRANZETTI: Can you explain to
23 me what -- well, let me stop there and rephrase.

24 I take it you don't think this

1 provision of the proposed rules is appropriate?

2 MS. BUGEL: Can you clarify? I feel
3 like that's misstating the witness' testimony and
4 "appropriate" is a very subjective term.

5 MS. FRANZETTI: Okay. What do you
6 think about this section of the proposed rules?

7 DR. SODERBERG: Well, combined with
8 the Agency's response that I referenced,
9 indicating that you can't necessarily associate
10 one monitoring well with one impoundment, it's
11 unclear how you are going to connect a groundwater
12 exceedance with a specific impoundment, and
13 conversely, how are you going to determine whether
14 an impoundment that contains CCW is not causing an
15 exceedance?

16 MS. FRANZETTI: All right. So your
17 issue with this is it's unclear to you how this
18 determination about whether coal combustion waste
19 or leachate from coal combustion waste is causing
20 or contributing to an exceedance of the
21 groundwater standard?

22 DR. SODERBERG: Right. How and when
23 that determination would be made.

24 MS. FRANZETTI: And because you

1 think there is an uncertainty or lack of clarity
2 to how that determination is going to be made,
3 what is your recommended solution to that?

4 DR. SODERBERG: I believe that the
5 Environmental Groups' proposed amendments had some
6 changes to that, proposed changes to that section.
7 Let me just confirm with my colleague.

8 MS. FRANZETTI: Take your time.

9 DR. SODERBERG: Yeah. So if you
10 turn to that section of the Environmental Groups'
11 proposed amendments, there is a new subsection C
12 that I will just read so that we get all clear
13 about what we are looking at.

14 MS. FRANZETTI: And Dr. Soderberg,
15 are you sure you are in a subsection C?

16 DR. SODERBERG: On the next page.

17 MS. FRANZETTI: Okay.

18 DR. SODERBERG: Sorry. 841.105(c).

19 MS. FRANZETTI: Okay.

20 DR. SODERBERG: A unit that is
21 otherwise exempt from the requirements of this
22 part under the operation of subsection B of this
23 section shall maintain records demonstrating how
24 an exemption in subsection B of this section

1 applies. Justification for an exemption under
2 subsection B of this part also should be included
3 in any hydrogeologic site characterization for the
4 exempted unit's power generating facilities, the
5 groundwater monitoring plant for any unit at the
6 same power generating facility and each
7 statistical analysis for any unit at the same
8 power generating facility.

9 MS. FRANZETTI: Could you explain to
10 me how this justification provision that is the
11 second sentence there in 841.105(c), addresses
12 your concern?

13 DR. SODERBERG: I mean, it provides
14 a provision or a requirement to list -- or not
15 list, but to discuss the potentially exempt units,
16 and to justify why it's exempt. So that's that's
17 my main concern.

18 MS. FRANZETTI: Were you finished
19 with your answer, or do you want to supplement
20 your answer after conferring with counsel?

21 DR. SODERBERG: Yeah. Counsel
22 pointed out that the units are now in the current
23 wording -- current language of this 841.105, that
24 this rule, you know, applies to all units except

1 for these requirements in subsection C.

2 MS. FRANZETTI: Take a look on the
3 prior page, on page three. Take a look first at
4 841.105(b), and would you agree that a part of
5 what the Environmental Groups' proposed rules did
6 was to move the language of (a)(2) down to -- and
7 it's the exception section in (b)(2) with some
8 further language changes to it? Do you agree with
9 that?

10 DR. SODERBERG: Yes, I would agree
11 with that.

12 MS. FRANZETTI: Okay. And isn't
13 this also a relevant provision to the issue I am
14 asking you questions about?

15 DR. SODERBERG: Yes.

16 MS. FRANZETTI: And is it the -- to
17 your understanding, and if you don't know, tell me
18 when I am getting outside of what changes are
19 related to your testimony. Okay?

20 Is one of the purposes of this
21 is that now there has to be an affirmative showing
22 by the owner or operator of the site that the
23 surface impoundment that was not operating at the
24 time of the effective date of these rules is not

1 causing or contributing to an exceedance of
2 groundwater standards? Is that how you understand
3 this proposed revision in 841.105(b)(2)?

4 DR. SODERBERG: An affirmative
5 showing?

6 MS. FRANZETTI: Ah-huh.

7 DR. SODERBERG: Can you explain that
8 further?

9 MS. FRANZETTI: I will try. I
10 thought that 841.105(b)(2) is providing an
11 exception if a pond isn't operating on the
12 effective date of the rule and its CCW or leachate
13 from CCW does not cause or contribute to an
14 exceedance of the standard -- and then I go to (c)
15 where you started, and that's the affirmative type
16 showing that I think these proposed changes to the
17 rules are trying to accomplish, but you tell me if
18 your understanding is different.

19 DR. SODERBERG: That's -- yeah,
20 that's my understanding.

21 MS. FRANZETTI: Okay. And so
22 from -- because in your opinion there can be times
23 when it may be unclear or difficult to show that a
24 given groundwater impact is or is not associated

1 with a surface impoundment, these changes are
2 appropriate?

3 DR. SODERBERG: It's my opinion that
4 the changes are appropriate, but the inability to
5 in every case associate an impoundment with a
6 monitoring well is coming from the Agency's
7 comments that I say.

8 MS. FRANZETTI: Okay. Now, staying
9 for a moment with 841.105(c) and this
10 justification section, can you explain what it
11 means to have a justification for an exemption
12 included in any hydrogeologic site
13 characterization for the exempted unit's power
14 generating facility?

15 DR. SODERBERG: Well, I think the
16 idea there is that such a justification in
17 recordkeeping should have a place in some report
18 that is submitted and reviewed by the Agency, and
19 this gives it sort of a place, and now, what that
20 justification would entail is not specified here,
21 but it would involve some evaluation of the
22 hydrogeology and potentially some existing
23 groundwater chemistry data, but the details are
24 not specified here.

1 MS. FRANZETTI: Where -- are the
2 details specified somewhere else in these proposed
3 rules?

4 DR. SODERBERG: I don't believe so,
5 no.

6 MS. FRANZETTI: I understand what
7 you are saying in terms of there needs to be a
8 written submission where this justification is to
9 be made, but it seems to me that this proposal is
10 requiring that that written submission be made
11 multiple times, not just in the hydrogeologic site
12 characterization, but also in the groundwater
13 monitoring plan for any unit and also in each
14 statistical analysis for any unit. Why must this
15 proposed justification keep getting made in all of
16 those different submissions?

17 DR. SODERBERG: Conditions change at
18 a site, they can, and it's a little unclear what
19 you referenced about statistical analysis of a
20 unit, but it is --

21 MR. ARMSTRONG: May I ask a
22 follow-up question?

23 MS. FRANZETTI: Well, not yet. Let
24 me just clarify for the witness. I am using the

1 language that's in the last few words of
2 841.105(c). I am supposed to include this
3 justification in each statistical analysis for any
4 unit. Does that help you understand?

5 DR. SODERBERG: Yes. Thank you.

6 MS. FRANZETTI: And why would I have
7 to do it in each statistical analysis?

8 DR. SODERBERG: Well, I think the,
9 you know, statistical analysis that's required
10 under this part is envisioned as a site-wide
11 statistical analysis, and the -- what we can
12 review that in other sections, but the -- you
13 know, the point here is that it's -- a statistical
14 analysis in -- whether it's on an annual basis
15 where you should reflect -- be able to reflect
16 changes in the hydrogeology in the site that may
17 have occurred prior to that analysis and that may
18 bring some of these units, depending on the
19 analysis, into play for the rules. It seems like
20 there is room for changes to occur at the site.

21 MS. FRANZETTI: Dr. Soderberg, would
22 you turn to page 25 of the Environmental Groups'
23 proposed rules, and when you get there,
24 specifically Section 841.235. Let me know when

1 you are there.

2 DR. SODERBERG: Okay.

3 MS. FRANZETTI: Okay. You just made
4 reference to an annual statistical analysis, but
5 isn't it true that under the Environmental Groups'
6 proposal, the statistical analysis is no longer
7 proposed to be annually, as the Agency provided
8 for in its rules, but rather every time that
9 monitoring is conducted pursuant to 841.230 of
10 this part?

11 DR. SODERBERG: Right, I mentioned
12 an annual statistical analysis as an example.
13 It's consistent with, you know, changes that might
14 occur at the site to update your statistics when
15 you get new data.

16 MS. FRANZETTI: Every time you get
17 new data?

18 DR. SODERBERG: That's what -- yeah,
19 I mean, you update your statistics whether or not
20 you go through the whole process of submitting a
21 report. That's, you know, potentially another
22 thing, but you certainly do update your statistics
23 and review that when you get new data.

24 MS. FRANZETTI: So in the work --

1 let me back up. In the work you have done, do you
2 work with groundwater monitoring wells where you
3 are sampling them on a regular basis?

4 DR. SODERBERG: Yes.

5 MS. FRANZETTI: Okay. And how
6 frequently typically are you --

7 DR. SODERBERG: Quarterly.

8 MS. FRANZETTI: Okay. When you get
9 the most recent quarter of data and on its face it
10 looks pretty similar to the last quarter, do you
11 go through a statistical analysis of that data?

12 DR. SODERBERG: What you just
13 described as it being very similar to the
14 previous, that is part of an analysis of the data
15 and so, yes, you do that. It's not necessarily
16 part of a full report, but you perform a
17 statistical and some other data analysis when you
18 get new data.

19 MS. FRANZETTI: Okay. You and I
20 need to try and make sure we are both talking
21 about the same thing.

22 DR. SODERBERG: Okay.

23 MS. FRANZETTI: I just understood
24 you to say that the way in which you used the term

1 "statistical analysis" can mean that I have my
2 quarterly data set. Further, let's say it's the
3 second quarter of the year. I have my first
4 quarter of the year data set for a particular
5 well. I look at the results. They seem pretty
6 similar to me. That's a type of statistical
7 analysis, as you are using that phrase, correct?

8 DR. SODERBERG: Yes, correct.

9 MS. FRANZETTI: Okay. Is that the
10 statistical analysis that is being referred to in
11 this proposed Section 841.235?

12 DR. SODERBERG: It's the type of
13 statistical analysis that's referred to in the
14 Unified Guidance from EPA that's incorporated by
15 reference in the proposed rule.

16 MS. FRANZETTI: Okay. So all --

17 DR. SODERBERG: To conduct that type
18 of initial broad assessment of the data, yes.

19 MS. FRANZETTI: All right. So all
20 that this proposal is trying to achieve is to
21 say -- is as you get in quarterly sampling data,
22 if it looks about the same as what you got in a
23 prior quarter, that's the review we want you to
24 do?

1 DR. SODERBERG: No. That's part.
2 That's an example of the type of statistical
3 analysis that's referred to in the Unified
4 Guidance, but it typically involves more detailed
5 types of analysis.

6 MS. FRANZETTI: Okay, Doctor.
7 What's -- what does proposed Section 841.235
8 require of the owner/operator in terms of a
9 statistical analysis every time that monitoring is
10 conducted pursuant to 841.230?

11 DR. SODERBERG: A review of the data
12 consistent with the statistical guidance that's --
13 group that's provided and incorporated by
14 reference, and then if you go to 841.235(g), that
15 this analysis shall be submitted to the Agency in
16 accordance with the schedule approved by the
17 Agency in the groundwater monitoring plans
18 pursuant to Section 841.210 of this part.

19 MS. OLSON: Where are you reading
20 from?

21 DR. SODERBERG: This was 841.235(g)
22 of the proposed amendments.

23 MS. BUGEL: 841.21 -- 235(g) of the
24 proposed amendments?

1 MS. FRANZETTI: Exhibit 21. And the
2 scope of the statistical analysis that Exhibit 21
3 proposed rules is requiring can only be determined
4 by looking at the statistical guidance that is
5 referenced in the rules?

6 DR. SODERBERG: Yes. It should
7 follow the statistical guidance documents that are
8 referenced in the rules.

9 MS. FRANZETTI: What I am struggling
10 to understand, Doctor, is how does the
11 owner/operator of the unit determine the scope and
12 extent of this statistical analysis that is being
13 proposed as a requirement every time a well is
14 sampled?

15 DR. SODERBERG: That's a good
16 question.

17 MS. FRANZETTI: Thank you. Coming
18 from a Princeton man, I take that as quite a
19 compliment.

20 DR. SODERBERG: I think that
21 that's -- that's general applicability of the
22 statistical analysis in that -- in the way that
23 the rule is written is done to accommodate the
24 Agency's needs in terms of what they need to see

1 at a given site.

2 MR. ARMSTRONG: I have a quick
3 follow-up question.

4 Dr. Soderberg, is a statistical
5 analysis required under IEPA's proposal, IEPA's
6 original proposed rule?

7 DR. SODERBERG: Yes.

8 MS. FRANZETTI: And do you --
9 whether it's IEPA's proposal or the Environmental
10 Groups' proposal, do you see a difference in the
11 type of statistical analysis that is required
12 other than the timing of the statistical analysis?

13 DR. SODERBERG: Well, there is some
14 additional parts of this statistical analysis that
15 are proposed in the Environmental Groups' amended
16 proposed rule. For example, if you look at
17 Section 841.225(c), there is a clarification on
18 the minimum sample size as recommended by the 2009
19 Unified Guidance.

20 In addition, there is a
21 requirement under Section 841.235(d) that this
22 statistical analysis will also include an updated
23 potentiometric surface map. That's -- for
24 example, those are the main differences.

1 MS. BUGEL: Are there any other
2 differences?

3 DR. SODERBERG: Yeah. So let's see
4 here. Under Section 841.220(d) --

5 MS. BUGEL: I'm sorry. What?

6 DR. SODERBERG: 841.220(d), the
7 owner/operator shall recalculate background
8 chemical consistent concentration consistent with
9 the recommendations contained in the 2009 Unified
10 Guidance, but no less often than every three
11 years.

12 MR. ARMSTRONG: I have no more
13 follow-up questions.

14 HEARING OFFICER FOX: Thank you.
15 Ms. Franzetti.

16 MS. FRANZETTI: Dr. Soderberg, you
17 made mention of the fact that there is the
18 additional change that requires at least eight
19 data points, which, of course, I am having trouble
20 getting back to that section.

21 MS. ANTONIOLLI: Are we sticking
22 with the applicability for now -- section?

23 MS. FRANZETTI: No. I am not on the
24 applicability section. I am where he was in that

1 last answer.

2 MS. OLSON: But don't the questions
3 kind of stem from the applicability section? Is
4 that how we get to where we are at?

5 MS. FRANZETTI: How we got there may
6 be viewed as a tortuous path, but we seem -- we
7 are on this topic of statistical analysis, and it
8 stems out of the applicability section, subsection
9 C, and I would like to stay with the sections he
10 mentioned.

11 So with respect to -- and I am
12 trying to find your change.

13 DR. SODERBERG: That was 841.225(c).

14 MS. FRANZETTI: That's it. Okay.
15 It's in the separate -- right. Okay.

16 What gets a little confusing
17 here -- and maybe you can help clarify -- is it's
18 that section, subsection C, of 841.225 seems to be
19 saying you need a minimum of eight data points
20 before you can do a statistical analysis; is that
21 correct?

22 DR. SODERBERG: Well, as we
23 discussed, the statistical analysis has many
24 different levels, but if you are thinking of a

1 specific statistical test, the Unified Guidance
2 does talk about a minimum of -- they say a minimum
3 of eight to ten data points. Now, every
4 statistical test will have its own requirements,
5 and its own assumptions that will also have to be
6 met.

7 MS. FRANZETTI: Okay. Go up to
8 841.220 for determining background values.
9 Subsection A speaks about how the owner or
10 operator of a unit must determine the background
11 values and must submit the background value
12 determination with the -- and the Environmental
13 Groups' proposal crosses out annual -- statistical
14 analysis. How do I do that statistical analysis
15 without having a minimum of eight data points?

16 DR. SODERBERG: Another good
17 question.

18 MS. FRANZETTI: Thank you.

19 DR. SODERBERG: The reason that in
20 my pre-filed testimony I referred to the Agency's
21 technical support document where they developed
22 the statewide statistical comparisons for relevant
23 aquifers, when you have too few data points or for
24 whatever reason you are violating an assumption of

1 a statistical test, it's a good idea to broaden
2 your horizons, look at different statistical
3 tests, and to provide the context for which to
4 interpret these results.

5 As specified, this procedure of
6 providing that context and doing sort of a
7 background review is provided in the 2009 Unified
8 Guidance on statistics.

9 MS. FRANZETTI: Okay. I am not sure
10 I understand. When if I am the owner/operator of
11 the unit I have done three-quarters of sampling --

12 DR. SODERBERG: Right.

13 MS. FRANZETTI: So I have three data
14 points per monitoring location, not a minimum of
15 eight, how am I supposed to do the statistical
16 analysis that is referenced in 841.220(a).

17 DR. SODERBERG: So you can look at
18 the Agency's technical support document for an
19 evaluation of the statewide background statistics
20 for that chemical constituent for the relevant
21 aquifer. That would give you some idea of the
22 background that you would be expecting for that
23 aquifer.

24 You can -- there are provisions

1 that are not -- you know, in the Unified Guidance
2 for dealing with small numbers of data points, but
3 it's not going to give you a valid, complete
4 statistical result.

5 MS. FRANZETTI: Okay. But under
6 your proposal, I -- until I would get to eight
7 minimum data points, I may have to use something
8 generic as the background value like a statewide
9 value?

10 DR. SODERBERG: Yes. That if you
11 have too few data points you can look at that.
12 There are other -- you know, you can also look at
13 the -- some statistical tests will give you a
14 result with a minimum of, say, four data points.
15 That has lower statistical power. You have a
16 higher chance of an error. The other part of my
17 pre-filed testimony that I would like to highlight
18 is where I suggest when you have a new monitoring
19 well, you have no data to begin with. Have a
20 period of more frequent monitoring at the
21 beginning, whether it's monthly or quarterly for
22 two years and that sort of thing.

23 That would give you a sort of
24 jump start for these types of statistical

1 analyses. I will add the caveat as described in
2 the Unified Guidance, there are some potential
3 issues with having -- monitoring too frequently in
4 time.

5 So you can imagine, you know,
6 you need eight data points. You take samples
7 every day for eight days. That's not going to
8 give you a good sense of what's happening. But,
9 yes, you can have a period of more frequent
10 monitoring after installing a monitoring well.

11 MS. FRANZETTI: You mentioned that
12 some of the statistical tests, though, do allow
13 you to use less than eight sample points?

14 DR. SODERBERG: Right.

15 MS. FRANZETTI: Am I correct,
16 though, that the intention of the proposed
17 revision to 841.225(c) that specifies a minimum of
18 eight data points is that you are disallowing the
19 use of those alternative statistical methods that
20 allow use of three or four data points?

21 DR. SODERBERG: So there is a
22 distinction there about whether a statistical test
23 can be -- is allowed to use a certain number of
24 data points. The point I was making is that you

1 will -- you can put it in four numbers, and get a
2 result, the Unified Guidance obviously does show
3 that, but it provides this recommendation for
4 eight to ten data points as a minimum to increase
5 the power of the statistical test and to reduce
6 the error, chances for error.

7 MS. FRANZETTI: And you are
8 advocating taking what is a recommendation in a
9 guidance document and making it a mandatory
10 regulation, correct?

11 DR. SODERBERG: Correct.

12 MS. FRANZETTI: Going back now to
13 where we started at Section 841 -- bear with me --
14 841.105(c), the last sentence regarding the
15 justification. It is your intent that with every
16 hydrogeologic site characterization, every
17 groundwater monitoring plan for any unit and each
18 statistical analysis, there shall be included a
19 justification for any unit at the site which the
20 owner or operator believes is exempt from these
21 regulations?

22 DR. SODERBERG: I would say that,
23 yes, with a caveat that if you look at the section
24 that it's looking at, 841.235(g), that this

1 analysis shall be submitted to the Agency in
2 accordance with the schedule approved by the
3 Agency.

4 MS. FRANZETTI: Okay. Quick
5 question. On 841.105(b)(1), are you knowledgeable
6 as to why the -- that provision that excluded
7 units operated under a solid waste landfill permit
8 issued by the Agency is proposed for deletion by
9 the Environmental Groups?

10 DR. SODERBERG: I am not
11 knowledgeable on that.

12 MS. FRANZETTI: Can anybody on the
13 panel here advise me why that provision is
14 proposed to be deleted?

15 MR. ARMSTRONG: I will not testify
16 as to anything, but I can explain the reasoning
17 behind the deletion of this.

18 As you recall, the Agency
19 testified during the last set of hearings that
20 there were no impoundments that were subject to
21 this exemption in the state. So, therefore, it
22 seemed superfluous to us, and that also goes for
23 (b)(2).

24 MS. FRANZETTI: Okay. But, Mr.

1 Armstrong, I think you had questioned the Agency
2 as to wasn't the Lincoln Stone Quarry landfill a
3 CCW landfill that is operated pursuant to a solid
4 waste landfill permit, right?

5 MR. ARMSTRONG: Well, I don't know
6 if I am being questioned here --

7 MS. FRANZETTI: No. I am --

8 MR. ARMSTRONG: But if you read
9 (b) (2), it says operated pursuant to procedural
10 requirements for a landfill exempt from permits
11 under 35 Illinois Administrative Code 815.

12 MS. FRANZETTI: No. I understand.
13 I am reacting to (b) (1).

14 MR. ARMSTRONG: (b) (1).

15 MS. FRANZETTI: Don't you agree that
16 that could apply to Midwest Generation's Joliet
17 Lincoln Quarry landfill?

18 MR. ARMSTRONG: So, again, the
19 reasoning for the deletion of this was the
20 Agency's statement that no impoundment was
21 intended to be -- to qualify for this exemption.

22 MS. FRANZETTI: Okay. So if you and
23 I were to talk more about Lincoln Stone Quarry,
24 and I could show you that this language may apply

1 to it, you might back off of this deletion?

2 MR. ARMSTRONG: Let's talk off line.

3 MS. FRANZETTI: Okay.

4 HEARING OFFICER FOX: Ms. Olson, I
5 believe you had a follow-up question.

6 MS. OLSON: Mr. Armstrong, you
7 indicated that you were not providing testimony on
8 section -- proposed Section 841.105(b)(1). Can
9 you please identify who would be made available to
10 provide testimony on that section?

11 MR. ARMSTRONG: Well, this is one of
12 the elements that we would discuss in our
13 post-hearing comments. I don't know that we need
14 testimony to say what the Agency said at the last
15 hearing. I think the record reflects that.

16 MS. OLSON: I respectfully disagree,
17 and request that witnesses be made available to
18 testify on this section. There is a policy
19 reason. There is an effect, and I believe all of
20 these issues should be addressed in a hearing
21 format where there is the ability to question a
22 witness and cross-examine witnesses.

23 HEARING OFFICER FOX: Ms. Olson, let
24 me in response to that statement, we clearly left

1 open the possibility for addressing post-hearing
2 filings. I believe we have heard expressed some
3 interest in submitting a motion for a hearing at
4 the conclusion of these questions. If we can
5 address the appropriate procedural avenues for
6 addressing that, we certainly will.

7 Mr. King, do you have a
8 question?

9 MR. KING: Can I follow-up on that?

10 HEARING OFFICER FOX: Do you have a
11 question for Dr. Soderberg?

12 MR. KING: Well, hopefully it will
13 end up in a question. We will see. But there is
14 a definition in the proposal of surface
15 impoundments and it says -- and it excludes -- it
16 says, and which is not a landfill, as defined in
17 810.103. What (b) (1) has added is that there has
18 to be a permit issued by the Agency, which is an
19 additional factor.

20 So if you don't have that in
21 there, you have created an exemption for
22 unpermitted landfills. Is that your intention?

23 MR. ARMSTRONG: So I think that our
24 intention as is clear from 841.105(a) is that the

1 part applies to all surface impoundment means
2 units at power generating containing coal
3 combustion waste or leachate from coal combustion
4 waste, and I don't think by removing the exemption
5 we therefore narrow the applicability of the rule.

6 MS. FRANZETTI: No. I think you
7 mean expand.

8 MR. ARMSTRONG: By -- exactly. By
9 removing the exemption, we do not -- I meant to
10 say that by removing the exemption we do not
11 narrow the applicability of the rule.

12 MS. FRANZETTI: Okay. Do you
13 understand where Mr. King is coming from, though,
14 with respect to -- would you -- let's do this,
15 perhaps, for right now.

16 MR. ARMSTRONG: Sure.

17 MS. FRANZETTI: Take a look at your
18 definition of surface impoundment, because I had
19 the same question, is if it is something which is
20 not a landfill. All right? So right now let's
21 say with the Lincoln Stone Quarry, that is clearly
22 a landfill. It has got a permit.

23 MR. ARMSTRONG: Correct.

24 MS. FRANZETTI: And CCW materials go

1 into it. So it in part is excluded by this
2 language in the definition of certain surface
3 impoundments, because it is a landfill. All
4 right? And a surface impoundment is something
5 which is not a landfill. Would you agree with me
6 so far?

7 MR. ARMSTRONG: I would agree that
8 that is the definition that was provided in the
9 Agency's March 25th, 2014 proposal, that a surface
10 impoundment means a natural topographical
11 depression manmade excavation or dyke area, et
12 cetera, et cetera, and which is not a landfill as
13 defined in 35 Illinois Administrative Code
14 810.103.

15 So the agency has drawn a
16 distinction between surface impoundments and
17 landfills. We kept the Agency's language in our
18 definition, and so, therefore, we are stating that
19 the rule applies to all surface impoundment units
20 at power generating facilities containing coal
21 combustion waste or leachate from coal combustion
22 waste.

23 MS. FRANZETTI: And as Mr. King
24 pointed out, you are comfortable with excluding

1 anything that is a landfill, whether it's
2 permitted or not?

3 MR. ARMSTRONG: So in terms of our
4 proposal -- I mean, I think our proposal speaks
5 for itself.

6 MS. FRANZETTI: It certainly does.
7 We are just trying to understand why you made some
8 of the changes, because this one is puzzling in
9 that the Agency was only proposing to exclude
10 landfills that -- solid waste landfills that have
11 a permit. You are now proposing, I submit, a
12 bigger exclusion that it's any landfill. If you
13 can meet the definition of a landfill, and a
14 landfill definition, I think, exclude surface
15 impoundments and you don't need a permit, we are
16 going to have a lot of -- potentially under your
17 proposal people claiming, "I am not a surface
18 impoundment. I am a landfill. I know I don't
19 have a permit, but that's okay. I am putting
20 stuff into the land. So I am not a surface
21 impoundment." But if that's what you intend,
22 please tell us.

23 HEARING OFFICER FOX: Ms. Franzetti,
24 I didn't understand that to be phrased as a

1 question to the witness, to the Environmental
2 Groups' witnesses.

3 MS. FRANZETTI: I tried to salvage
4 it at the end. Does he understand what we are
5 saying, and does it cause them either to reflect
6 and say, we may want to revisit what we have done
7 here and change it, or no, is that really what
8 their intent is?

9 Because we are trying to get --
10 at least speaking for myself, I am trying to
11 understand what you did, why you did it, so that I
12 can evaluate whether I think it makes sense and
13 may be able to support it, or I have got issues
14 with it, and I am going to bring those issues to
15 your attention.

16 HEARING OFFICER FOX: And,
17 Mr. Armstrong -- I'm sorry. You have plainly
18 indicated you haven't been sworn as a witness to
19 do pre-filed testimony. Do you want to address
20 how procedurally you can respond or are prepared
21 to respond to the issue that Ms. Franzetti has
22 raised?

23 MR. ARMSTRONG: I think it might be
24 best to respond in written comments if that would

1 be acceptable.

2 HEARING OFFICER FOX: And
3 Ms. Franzetti, do you have a response to that?

4 MS. FRANZETTI: You know, I don't
5 need a written comment. If our exchange here does
6 provide you with a basis to want to reconsider
7 this change, then that's really all I want to
8 hear, and then I want to hear from you when you
9 are done reconsidering it, and let me know, you
10 know, let us know, yes/no, we are standing on
11 that, or upon reconsideration we think maybe we
12 will remove our deletion of 841.105(b). If you
13 want to wait to do it in written comments,
14 obviously I can't stop you, but it would be nice
15 to be trying to move forward on some of these
16 issues where maybe we could get consensus before
17 we are just all filing written comments with the
18 Board.

19 I mean, I don't want to write a
20 comment that says, I think this deletion makes
21 absolutely no sense, and here's why, and the Board
22 having seen some of my comments, I may go on for
23 four paragraphs to say why, if we can resolve it
24 ahead of time.

1 MS. BUGEL: Can I suggest that at
2 one of the breaks we have a chance to confer on
3 this?

4 MS. FRANZETTI: Ah-huh.

5 MS. BUGEL: You know, I think we are
6 seeing your point. I think there are other ways
7 to see it, too. I think this is one of the areas
8 that could be very subjective in reading how this
9 language applies. I think we need a chance to
10 confer, and then informally or formally, I think
11 we can get back with both counsel for IEPA and for
12 Midwest Gen and, you know, talk about some of
13 these things.

14 MS. FRANZETTI: And that's fine.
15 That's really, Faith, what I would appreciate.
16 And you may not be able to do it today during a
17 break. Don't -- you know, I am certainly not
18 saying it has to be done that quickly, but I would
19 hope we could do it outside of simply a formal
20 written comment procedure.

21 HEARING OFFICER FOX: And
22 Ms. Franzetti, it appears that we will have at
23 least one more break today, and it appears to be
24 quite likely that we will be breaking overnight to

1 resume tomorrow. So if that presents an
2 opportunity, may I merely note that. I don't want
3 to overlook Ms. Olson first, and I believe
4 Mr. Rieser had indicated that he had a question.

5 MS. FRANZETTI: Well, can I go with
6 just one more thing for your deliberation? In all
7 candor when I saw this, I thought your intention
8 was to bring the Joliet Lincoln Quarry landfill
9 under these rules. That's the way I read it, and
10 so that's why you are getting all these questions
11 from me, because I really don't understand that.

12 Maybe you don't think that the
13 landfill program is adequately regulating that
14 landfill. You think these would be a better
15 program, but that's really, Faith, what I am
16 trying to understand. Okay?

17 MS. BUGEL: Right.

18 HEARING OFFICER FOX: Are you ready
19 to recognize Ms. Olson, Ms. Franzetti?

20 MS. FRANZETTI: Yes.

21 MS. OLSON: I believe the question
22 that Mr. Hearing Officer posed of whether or not
23 there was an objection to post-hearing comments,
24 to address this in post-hearing comments. So I

1 just want to state for the record the Agency's
2 position, which I have stated before, which is
3 that if these things are not addressed with an
4 opportunity to be addressed in hearing with sworn
5 testimony, that it -- it be noted by the Board,
6 and any such responses, because I do believe that
7 it is an unfair advantage that you can just file a
8 post-hearing comment without having to hash these
9 issues out in front of counsel at hearing.

10 HEARING OFFICER FOX: So noted,
11 Ms. Olson. Mr. Rieser, I believe you had a
12 question.

13 MR. RIESER: And I am going to
14 second what Ms. Olson just said. To point out, I
15 mean, we could ask for another hearing, but if it
16 is the judgment of the Environmental Groups that
17 they didn't have to follow any statement of
18 justification on behalf of -- in support of their
19 proposed rules despite the Board's clear direction
20 to the contrary and they don't want to testify --
21 you can have a hearing and the Board can't make
22 them testify, but at some point the Board has to
23 take this proposal for what it's worth.

24 It does take all testimony, but

1 I do think it's unfair not to have the proponent
2 of a rule subject to discussion about that rule in
3 hearing, and I don't think it answers it to say,
4 well, we can talk at breaks. We can do that, but
5 there is a lot of other people who are interested
6 in this besides Ms. Franzetti and besides the
7 Agency. The whole purpose of the public hearing
8 is to have these discussions.

9 HEARING OFFICER FOX: Thank you, Mr.
10 Rieser. Ms. Dexter, I am sorry. Ms. Antoniolli
11 was ahead of you.

12 MS. ANTONIOLLI: Along those same
13 lines and I agree with Mr. Rieser and Ms. Olson
14 and what they had to say about the sworn testimony
15 options, but also, you know, in this applicability
16 section with the changes to this new proposed
17 section C, it seems this would also bring the
18 facility at Hutsonville Pond D into the
19 regulations as well by requiring an additional
20 hydrogeologic site characterization, and the
21 remaining requirements under that section where
22 it's closing under an approved plan in a separate
23 site-specific rule that's already been promulgated
24 for this site. So just so that we can clarify

1 that that wasn't the intent of these change as
2 well.

3 MR. ARMSTRONG: I can clarify that
4 very quickly. Hutsonville D was subject to 35
5 Illinois Administrative Code Part 840, but --

6 MS. ANTONIOLLI: Yes. It says right
7 here at 840, but this says that a unit that is
8 otherwise exempt from the requirements of part --
9 of this part and subsection B, must also do these
10 things.

11 MR. ARMSTRONG: But is required only
12 to maintain records demonstrating how the
13 exemption applies. So in terms of Hutsonville
14 Pond D, that requirement is very limited to the
15 fact of that pond being exempt through -- because
16 it is subject to part 840.

17 MS. ANTONIOLLI: That needs to be
18 clarified, too, that it wouldn't be an additional
19 hydrogeologic site characterization that's needed
20 under these rules, and that what is already done
21 under part 840 is sufficient, because then it
22 seems that if there was a site that was exempt
23 under one of these other subsections, it would
24 be -- these requirements would still be needed.

1 MS. OLSON: I am objecting to this
2 entire line. Like if you are not going to be a
3 sworn witness, this is not going anywhere. This
4 is not the purpose of the hearing to have
5 discussions with lawyers about what it could mean.
6 We would like a witness that can testify to the
7 meaning of this proposal.

8 HEARING OFFICER FOX: And
9 Ms. Antonioli, your position has been made noted
10 on the record. Let's quickly go to you, Ms.
11 Dexter, and we can close this discussion.

12 MS. DEXTER: Right. I just wanted
13 to note that there has been a lot of
14 characterization of our testimony before it's
15 happened. I think that we will find that there is
16 probably going to be fewer questions than people
17 are afraid that there will be by the time we are
18 done today, and these sorts of things -- and part
19 of the reason that we didn't want -- because the
20 nature of these are -- it's going to be a lot of
21 lawyers thinking about how these regulations work,
22 which it's hard to put a witness up, you know, it
23 will become a debate among lawyers when we talk
24 about it, which is why we are doing it this way.

1 I just wanted to make sure that
2 it's clear that we are open to -- you know, we are
3 flexible for how we are going to support our
4 rules. We obviously are going to present ways of
5 doing that. I'm just saying we don't want to be
6 debating all day about how to interpret things.

7 HEARING OFFICER FOX: Let's proceed
8 then with the questions that are in the record.
9 Ms. Franzetti, were you prepared to go to the next
10 in your series of questions that were filed on
11 April 30th?

12 MS. FRANZETTI: Yes.

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

15 MS. OLSON: I have a bunch of
16 follow-ups. Would you like me to wait until you
17 are completely done, until you are done with a
18 section? How would you like to handle that?

19 MS. FRANZETTI: You know, it's hard
20 to answer that question without knowing. Are you
21 going to stay within the basic scope of what we
22 have been discussing?

23 MS. OLSON: Just what you have been
24 questioning on for the last few minutes.

1 MS. FRANZETTI: Then I think it's
2 better for transcript purposes if you jump in and
3 ask your questions.

4 MS. OLSON: Thank you. So there was
5 a lot of -- there has been a lot of discussion on
6 these rules and what they mean.

7 So my first general question for
8 you is, did you draft these proposed changes?

9 DR. SODERBERG: No. I made a couple
10 comments, but I didn't write the -- all the
11 changes.

12 MS. OLSON: So do you know why all
13 the changes in the applicability section were
14 made?

15 DR. SODERBERG: No.

16 MS. OLSON: Okay. With that in
17 mind, let me ask you just a few more questions
18 about applicability. Do you agree that these
19 rules are rules of general applicability?

20 DR. SODERBERG: Yes.

21 MS. OLSON: And they are not
22 site-specific?

23 DR. SODERBERG: Yes.

24 MS. OLSON: And do you also agree

1 that it's possible for a facility to have only one
2 surface impoundment?

3 DR. SODERBERG: Is it possible?

4 Sure.

5 MS. OLSON: And so at that facility
6 there would be no other units that are subject to
7 this rule; is that right?

8 DR. SODERBERG: Yeah.

9 MS. OLSON: So with that facility
10 that only has one surface impoundment, let's also
11 say it's possible that that facility is exempt,
12 that unit is exempt under the proposal as
13 submitted by the Environmental Groups; is that a
14 fair --

15 DR. SODERBERG: Okay.

16 MS. OLSON: Okay. So under the
17 section -- proposed Section 841.105(c), would that
18 unit that's the single unit on a site that is
19 exempt have to do a hydrogeologic site
20 characterization?

21 DR. SODERBERG: The site would have
22 to do a hydrogeologic site characterization.

23 MS. OLSON: Even though there are no
24 other units on that site?

1 DR. SODERBERG: I mean, yeah. I
2 think that it would -- if the justification can be
3 made, I suppose, without a hydrogeologic site
4 characterization, that justification is, I guess,
5 what is required in this subsection.

6 MS. OLSON: Would they have to do a
7 groundwater monitoring plan for the facts that
8 we've just established?

9 DR. SODERBERG: Well, I think they
10 would -- the justification would have to show that
11 the coal combustion waste or leachate from the
12 coal combustion waste is not causing or
13 contributing to the groundwater exceedance.

14 MS. OLSON: So is that a no?

15 DR. SODERBERG: Repeat the question.

16 MS. OLSON: Do they have to do a
17 groundwater monitoring plan?

18 DR. SODERBERG: Right. So they have
19 to justify that they are not violating groundwater
20 quality standards.

21 MS. OLSON: Would they have to do a
22 groundwater monitoring plan as proposed in Section
23 841.210?

24 DR. SODERBERG: I don't know.

1 MS. OLSON: Okay. Would they have
2 to do a statistical analysis as proposed by the
3 Environmental Groups in 841.235?

4 DR. SODERBERG: So the justification
5 under the applicability that we are talking about
6 refers to a statistical analysis that is, as far
7 as I can see, subject to the approval by the
8 Agency or interaction with the Agency of some
9 kind.

10 MS. OLSON: So was that a yes or a
11 no?

12 DR. SODERBERG: I don't know whether
13 that, you know, interpretation of the language
14 requires that, but I will just stick to the
15 justification would have to show that it's not
16 contributing or causing exceedances to the
17 groundwater quality standards.

18 MS. OLSON: So let me see if I
19 understand this proposal, that if there was a site
20 with only one unit that is exempt, it would not
21 have to do a hydrogeologic site characterization.
22 It would not have to do a groundwater monitoring
23 plan. It would not have to do an annual
24 statistical analysis -- or a statistical analysis;

1 is that right?

2 DR. SODERBERG: I don't think I said
3 yes to each of those things. I don't know how the
4 interpretation would play out.

5 MS. OLSON: So which of those three
6 things or all of those three things do they have
7 to do or do they not have to do?

8 MS. BUGEL: I think this has been
9 asked and answered and the witness has answered, I
10 don't know to some of those.

11 MS. OLSON: Can you get back to me
12 on that one?

13 DR. SODERBERG: In what format?

14 MS. OLSON: I'm not sure. I mean, I
15 guess supplement, if you could, when you find out
16 or --

17 MR. ARMSTRONG: Could I ask a
18 follow-up question that might clarify this issue?
19 Does section 84 -- does Section 841.105(b) of the
20 proposed amendments provide that the part does not
21 apply to any surface impoundment units except for
22 the requirements of subsection C of this section?

23 DR. SODERBERG: Yes.

24 MR. ARMSTRONG: So would the

1 requirements, for example, of a groundwater
2 monitoring plan in 841.210 apply to a unit?

3 DR. SODERBERG: Yes.

4 MR. ARMSTRONG: So if -- you know,
5 given that the -- if the part does not apply to
6 any surface impoundment unit except for the
7 requirements of subsection C of this section,
8 would that mean then that other parts, other
9 requirements of the part do not apply to that
10 surface impoundment unit?

11 DR. SODERBERG: I am going to leave
12 the interpretation of that up to the lawyers and
13 stay out of it.

14 MR. ARMSTRONG: Okay.

15 MS. OLSON: I have my next question.
16 Can the Environmental Groups provide someone who
17 can answer that question as a witness?

18 MR. ARMSTRONG: As we sit here, no.
19 We cannot provide a sworn witness on that.

20 MR. RAO: May I ask a follow-up
21 question of Dr. Soderberg? The language that's
22 being proposed under Section 841.105(c), can that
23 be used as a general guidance as to what you would
24 like to see in a demonstration or a justification

1 that the owner or operator has to maintain to show
2 that the unit is not exceeding groundwater quality
3 standards?

4 DR. SODERBERG: Yes, I think that
5 there has to be a --

6 MR. RAO: Some of the elements of
7 what --

8 DR. SODERBERG: Yes. You consider
9 the hydrogeology. You consider any chemical data
10 that's available.

11 MR. RAO: Okay. Thank you.

12 MS. OLSON: I have a few more, if we
13 are continuing.

14 HEARING OFFICER FOX: Please go
15 ahead, Ms. Olson.

16 MS. OLSON: Can you explain to us
17 what a satisfactory demonstration or justification
18 would entail under proposed Section 841.105(c)?

19 DR. SODERBERG: From an -- okay.
20 From a scientific perspective you are asking.
21 Ideally you understand the type of leachate that
22 is potentially being generated from the type of
23 CCW that is in this impoundment. And ideally you
24 are able to associate that impoundment with some

1 monitoring of groundwater, and your assessment of
2 the hydrogeology and of the -- any, you know,
3 groundwater chemistry data and leachate data shows
4 you that there is no connection between those --
5 the leachate and the groundwater, and the leachate
6 is not threatening groundwater, that would be a
7 justification.

8 MS. OLSON: So if I was a facility,
9 and I had one sample result that showed that the
10 groundwater standards were not being exceeded, in
11 your opinion, would that be a sufficient
12 justification for a demonstration?

13 DR. SODERBERG: Just presenting that
14 one data point?

15 MS. OLSON: That one sample result.

16 DR. SODERBERG: No.

17 MS. OLSON: How many sample results
18 would be sufficient?

19 DR. SODERBERG: I would, you know,
20 refer to the statistical methods that are
21 referenced in the other parts of this proposed
22 rule.

23 MS. OLSON: Is there anything in the
24 proposed rules that states or explains to the

1 regulated community how to get sufficient
2 justification and/or demonstration?

3 DR. SODERBERG: I don't believe --
4 well, so I think that's one of the reasons for
5 raising this is that there is this proposed
6 exemption without an explanation of what would be
7 required for any justification.

8 MS. OLSON: And is there anything in
9 the proposed regulation submitted by the
10 Environmental Groups that provides guidance on the
11 Agency on how to evaluate a demonstration or
12 justification submitted by a regulated entity?

13 DR. SODERBERG: No. I don't believe
14 there is.

15 MS. BUGEL: Can I ask a follow-up
16 question on that?

17 MS. OLSON: Yes. Sorry. Yes.

18 MS. BUGEL: Prior to the edits that
19 the Environmental Groups proposed that require
20 this demonstration, was there anything in the rule
21 that explained how the Agency would determine
22 units that were -- that the rule did not apply to?

23 DR. SODERBERG: No.

24 MS. OLSON: Are you done?

1 MS. BUGEL: Yes. Thank you. Kind
2 of following my follow-up, we kind of segwayed
3 into the statistical analysis portion of the
4 proposal.

5 So I have got one question here
6 that's -- for the sites that you have worked on,
7 have you done a statistical analysis for those
8 sites?

9 DR. SODERBERG: Yes.

10 MS. OLSON: And for those sites, did
11 you calculate a statistical -- calculate
12 statistical significance for each parameter every
13 time there was a monitoring result.

14 DR. SODERBERG: Every sampling
15 round, yes, you recalculate.

16 MS. OLSON: So if you sampled once a
17 week, you would recalculate the statistical
18 significance for each parameter once a week?

19 DR. SODERBERG: I am thinking more
20 along quarterly lines, but, yes, and then you --
21 it's common to submit a quarterly report with
22 those analyses.

23 MS. OLSON: And how many parameters
24 were you evaluating?

1 DR. SODERBERG: It varies by site,
2 but it can be from half a dozen parameters to more
3 than that, yeah.

4 MS. OLSON: How many parameters were
5 you evaluating on the landfill project that you
6 testified to earlier?

7 DR. SODERBERG: I believe that
8 focused on sulfate, TDS and ammonia. So three.

9 MS. OLSON: So three parameters?

10 DR. SODERBERG: I think those were
11 the main ones.

12 MS. OLSON: There was some
13 questioning about -- let me back up for a second.

14 You said there was -- for the
15 number of parameters you said anywhere from a half
16 a dozen, and then we asked about the landfill and
17 you said three parameters. Can you tell us what
18 the high end of the projects that you worked on
19 for the number of parameters that you sampled?

20 DR. SODERBERG: The high end would
21 be a site that involves sampling for organics and
22 semi-volatiles where you get up to, you know,
23 dozens and dozens of results.

24 MS. OLSON: And you have worked on

1 one of those sites?

2 DR. SODERBERG: Yeah.

3 MS. OLSON: Do you know how many
4 parameters need to be sampled under the proposed
5 rule?

6 DR. SODERBERG: I would have to look
7 at that.

8 MS. OLSON: Kind of changing gears
9 now for a minute, you testified earlier -- there
10 was quite a bit of questions on the eight data
11 points questioning, and you made a statement
12 that -- and correct me if I am wrong. I am just
13 trying to lay some background on the question.

14 If there were not eight data
15 points, then you could use the generic statewide
16 background values? Is that a fair
17 characterization of your testimony?

18 DR. SODERBERG: Yes. And I -- I
19 mean, use it for what is the next question. I
20 didn't say what you could use that for
21 necessarily. I don't think you would be
22 triggering anything with that type of comparison,
23 but it gives you a sense of what to expect in
24 terms of background values.

1 MS. OLSON: Do you know whether or
2 not that statewide background that you are
3 referring to was developed to be used as
4 background at specific sites in Illinois?

5 DR. SODERBERG: I'm sorry. Can you
6 repeat the question?

7 MS. OLSON: Do you know whether or
8 not the statewide background that you have
9 mentioned was developed to be used to -- at a
10 specific site for a background calculation?

11 DR. SODERBERG: I do not know that.

12 MS. OLSON: And then I am going to
13 jump back to the previous line of questioning. I
14 apologize. We were talking about parameters and
15 statistical analysis and running statistics every
16 time you take a sample and you have the results.

17 Did you have any non-detects in
18 your experience?

19 DR. SODERBERG: Yes.

20 MS. OLSON: And did you run the
21 statistical analysis for non-detects?

22 DR. SODERBERG: You can incorporate
23 non-detects into statistical analyses.

24 MS. OLSON: And were they

1 incorporated each time --

2 DR. SODERBERG: Yes.

3 MS. OLSON: -- the statistical
4 analysis was developed?

5 DR. SODERBERG: Yes.

6 MS. OLSON: That's all I have for
7 follow-up right now.

8 HEARING OFFICER FOX: Thank you, Ms.
9 Olson.

10 Ms. Franzetti, we have been back
11 at it for well over an hour at this point. Would
12 anyone object if we took a break for 20 minutes to
13 3:40 p.m.?

14 (No response.)

15 HEARING OFFICER FOX: I am not
16 seeing or hearing any objection. Let's take a
17 break and meet in 20 minutes at 3:40 p.m.

18 (Whereupon, a short break was
19 taken.)

20 HEARING OFFICER FOX: Thank you all
21 for returning promptly from the break. I do want
22 on the record to take up a couple of procedural
23 and timing issues. I think Mr. Rieser will accuse
24 me of stating the obvious, that we are very likely

1 to require going into a second day of hearing, and
2 as the original notice of hearing did provide.
3 Since we can fully expect to continue, I would
4 like to wrap up by approximately 5:00 p.m. today
5 so that we can continue tomorrow fully recharged
6 perhaps.

7 I want to stress two things
8 about the hearing tomorrow. The hearing was
9 noticed today to begin at 10:00 a.m. It was
10 noticed to begin tomorrow at 9:00 a.m. in this
11 room. If I could implore you, please, to be
12 prompt so that we can get right underway, that
13 will help us, of course, make the best use of
14 time.

15 The one factor I want to stress
16 is that the Board's regularly scheduled meeting
17 will take place tomorrow. It will take place in
18 this room. It's a public meeting. Certainly any
19 of you may attend, but we will need a take a break
20 at approximately 10:50 so that we may conduct that
21 meeting right here in this room and we can
22 determine at that time whether it makes sense to
23 return right away or to build a lunch break into
24 that. That I think it makes the most sense to

1 leave as an open question, but that will deprive
2 us of some time tomorrow to continue with these
3 questions and answers, and I wanted to make sure
4 that you were all aware that there would, perhaps,
5 be a lengthy break in the middle of the day that
6 would prevent us from continuing through this.

7 Any questions about that before
8 we begin?

9 UNIDENTIFIED FEMALE VOICE: Because
10 the determination has been made that you will meet
11 again tomorrow, could I ask that the people that
12 have come to make public comments today be able to
13 make them before we adjourn?

14 HEARING OFFICER FOX: I would
15 suspect that the participants would have no
16 objection to that. I believe, ma'am, that there
17 are approximately four persons.

18 UNIDENTIFIED FEMALE VOICE: Can all
19 those that have not made their public comment yet
20 please raise their hands?

21 HEARING OFFICER FOX: Four
22 exactly -- five, it appears. With this caveat
23 that they -- as the other folks were requested to
24 do -- limit their remarks to three minutes and be

1 prepared to follow one right after another so that
2 we can handle those comments as efficiently as
3 possible.

4 But I didn't hear any objection,
5 and before we do break for the day, we can address
6 those quickly. I have, in fact, these names. Is
7 it Evan Craig? Is present.

8 Gloria Charland, is that
9 correct, ma'am, is also present. Daniel
10 Villalobos?

11 MR. VILLALOBOS: David.

12 HEARING OFFICER FOX: Very good is
13 also present. Mary Fran Troha, did I pronounce
14 that correctly ma'am?

15 MS. TROHA: Troha.

16 HEARING OFFICER FOX: And Joseph --
17 is it Dubaniewicz?

18 MR. DUBANIEWICZ: I will not be
19 speaking.

20 HEARING OFFICER FOX: No comment.
21 Okay. We can give you a chance to revisit that,
22 if you wish.

23 There is a name John Heinz that
24 appears to have been crossed out, however. Is a

1 Mr. Heinz present?

2 (No response.)

3 HEARING OFFICER FOX: Very good.

4 And Tracey Taylor is also present. That is five
5 persons, and we can take that up before we do
6 finally adjourn for the day today.

7 UNIDENTIFIED FEMALE VOICE: Thank
8 you.

9 HEARING OFFICER FOX: Before we go
10 back into the questions -- and we were dealing
11 with the Midwest Generation questions -- I believe
12 the Environmental Groups had an issue that they
13 wished to bring to the Board's attention; is that
14 correct, Ms. Dexter?

15 MS. DEXTER: Yes. So in order to
16 expedite this conversation about the intent of the
17 amendments that the Environmental Group has
18 proposed, we would like to swear in Andrew
19 Armstrong as a witness with the caveat that we are
20 not waiving any privileged information, and if
21 things get to the point of -- where we feel there
22 is a danger, we are going to instruct him not to
23 answer those questions.

24 HEARING OFFICER FOX: And his

1 questions -- the questions, I assume, would be to
2 the legal underpinnings and the various legal
3 bases for the amendments that have been proposed
4 by the Environmental Groups?

5 MS. DEXTER: Yes.

6 HEARING OFFICER FOX: Very good.

7 Why don't we go back on the record -- we are back
8 on the record, rather.

9 We can have the court reporter
10 swear in Mr. Armstrong for questions in just a
11 moment, Mr. Armstrong, and if, Ms. Franzetti, you
12 would wish to double back at all with any
13 questions that you had raised, we may certainly
14 entertain questions of that nature before we move
15 on to -- I believe it would be on number seven of
16 your questions.

17 MS. FRANZETTI: Well, Mr. Fox, I
18 have talked to the Environmental Groups' legal
19 counsel, and there is a concern that Dr. Soderberg
20 has come in from out of town. And while he is
21 happy to spend tomorrow with us, he would like to
22 be done by the end of the day tomorrow and not
23 have to come back again.

24 And so it's fine with me if --

1 as I said to them, if I ask a question, and it
2 really is more Mr. Armstrong who should consider
3 it, that I will skip it and keep -- try to keep
4 going with Dr. Soderberg and get him done and then
5 ask the questions of Mr. Armstrong. So I would
6 not -- I won't double back right now.

7 HEARING OFFICER FOX: Very good.
8 And you have raised at least tangentially the
9 issue of the possibility that two days of hearing
10 may not be necessary. Obviously I think all of us
11 would like to avoid a third day of this second
12 hearing. We have not provided notice of a
13 continued hearing on Friday. So we wouldn't have
14 a basis to do that, but if you would wish not to
15 double back and to go forward taking advantage of
16 both Dr. Soderberg's and Mr. Armstrong's
17 testimony, let's do that.

18 Anything further before we
19 resume with your questions, Ms. Franzetti?

20 MS. FRANZETTI: Well, just that I
21 think we may need another day of testimony. I
22 agree it can't be Friday, but let's see how it
23 goes. I just think that -- so that there is not
24 the added expense for the Environmental Groups to

1 bring Dr. Soderberg back, we really want to work
2 to get him done by the end of the day tomorrow,
3 but it may be necessary. You know, we will see
4 how many questions there are that would be for
5 Mr. Armstrong.

6 HEARING OFFICER FOX: And without
7 meaning to sound glib, Ms. Franzetti, seeing how
8 it goes sounds like our best course so that we can
9 see where we stand at about this point tomorrow.

10 MR. ARMSTRONG: Can I just make one
11 more note on that? Granted we will see how it
12 goes with the remaining witnesses, but perhaps if
13 there are a number of questions for me, and as yet
14 an unscheduled hearing date, perhaps it would be
15 appropriate for our groups to respond in writing
16 to those questions and therefore obviate or at
17 least decrease the need for additional hearings.

18 HEARING OFFICER FOX: Another basis
19 for waiting to see how it goes, without meaning to
20 sound glib.

21 If the court reporter could
22 swear Mr. Armstrong in. Dr. Soderberg, you still
23 are sworn at this point.

24

1 (Whereupon, Mr. Armstrong was
2 duly sworn.)

3 HEARING OFFICER FOX: Ms. Franzetti,
4 we are in order to go back to you.

5 MS. FRANZETTI: Okay.
6 Dr. Soderberg, we are on 6(b) of the questions.
7 You state that "for sites with groundwater
8 exceedances, it could be warranted for the Agency
9 to conclude that all impoundments at the site are
10 contributing to exceedances." Please explain the
11 basis and justification for this statement.

12 DR. SODERBERG: So one
13 clarification. When I say all impoundments, I am
14 referring to all impoundments containing CCW, and
15 then again the justification is just this
16 inability in all cases to associate a given unit
17 with a given monitoring well or groundwater
18 exceedance.

19 MS. FRANZETTI: Okay. Moving to
20 the -- I am going to jump actually to questions
21 9(a) and (b) which we're a bit out of order in
22 this, so if you will bear with me.

23 9(a). Do you believe opening up
24 the entire property to assessment is necessary to

1 comply with the proposed rule and if so, why?

2 DR. SODERBERG: I believe that an
3 assessment of the entire property -- certainly the
4 hydrogeological assessment is necessary to
5 understand what's happening at the site in terms
6 of the hydrogeology, in terms of the aquifers that
7 are potentially impacted.

8 You know, I am -- in saying that
9 and thinking about sites that have, you know,
10 several impoundments and potentially one of those
11 impoundments might be exempted from the rule, you
12 have to kind of understand where that impoundment
13 lies with respect to the groundwater chemistry and
14 the hydrogeology in order to think about a
15 justification for exempting that impoundment.
16 That's the scenario that I am envisioning.

17 MS. FRANZETTI: Have you considered,
18 though, that it may be the case at facilities that
19 the impoundments are located in one general area
20 from the rest of the facility, and hence an
21 absolute requirement to include the entire site
22 property in a hydrogeological assessment goes
23 beyond what is necessary for purposes of
24 regulating the CCW surface impoundments?

1 DR. SODERBERG: Yeah. I mean, the
2 property could, I suppose, have all kinds of
3 configurations. So opening the entire property,
4 that language may not be necessarily the best.

5 MS. FRANZETTI: Okay.

6 DR. SODERBERG: But the scenario you
7 described may be valuable to -- in terms of
8 establishing up gradient wells, for example, and
9 having some distance on the property that's away
10 from the impoundments could be useful in that that
11 part of the property that's away from the
12 impoundments could still be useful for the
13 assessment of background or other impacts.

14 MS. FRANZETTI: Question 9(b). If
15 this approach were incorporated into the proposed
16 rules, what are you recommending the rules require
17 a site owner or operator would be required to do
18 to adequately address the Agency's conclusion that
19 all existing or former impoundments at the site
20 are contributing to the exceedances?

21 DR. SODERBERG: So for clarification
22 here to address the Agency's conclusion --

23 MS. FRANZETTI: Well, I guess I
24 should say, perhaps it's your conclusion that you

1 start with, that all existing or former
2 impoundments at the site are contributing to the
3 exceedances?

4 DR. SODERBERG: Well, certainly if
5 as you -- your question states, the Agency
6 concludes that all existing or former impoundments
7 are contributing to the exceedances, that would
8 need to be adequately addressed as part of a
9 corrective action plan.

10 I just -- I mean, the wording
11 there, I see what you are getting at, and again,
12 my intent in this paragraph that you are referring
13 is stemming from the exclusion or potential for
14 exclusion of some impoundments, and then if -- if
15 the Agency were to conclude that all existing or
16 former impoundments could be contributing to
17 exceedances, as you say in your question, then the
18 rule would apply to all of those impoundments.
19 That's, you know, the intent of that paragraph.

20 MS. FRANZETTI: Do I understand
21 correctly that really why you are advocating
22 expand the rule to apply or open up the scope of
23 the rule to the entire property to assessment is
24 that's just the easiest, surest way to make sure

1 you are not overlooking an impoundment somewhere
2 on that property?

3 DR. SODERBERG: Yeah, I think that's
4 a good characterization.

5 MS. FRANZETTI: Okay.

6 MS. OLSON: Could I ask a follow-up
7 question?

8 MS. FRANZETTI: Yes.

9 MS. OLSON: There was a lot of
10 discussion about Agency conclusions. Isn't it
11 true that this is something that you are saying
12 the Agency could conclude, but we never actually
13 made that conclusion?

14 DR. SODERBERG: Correct.

15 MR. OLSON: That's it.

16 MS. BUGEL: Can I ask a follow-up
17 question as well on this?

18 MS. FRANZETTI: Yes.

19 MS. BUGEL: In your opinion --
20 again, following up on the questions about, you
21 know, a requirement that a property owner include
22 all impoundments at a site in its -- in the
23 applicability of the rule and the reporting to the
24 Agency, could part of that include a demonstration

1 that certain impoundments are, in fact, not
2 contributing to exceedances?

3 DR. SODERBERG: Yes.

4 MS. BUGEL: And would a property
5 owner have a mechanism to make that sort of
6 demonstration?

7 DR. SODERBERG: Well, I mean, under
8 the -- it's -- yeah, I mean, as I read the rule
9 that was proposed by the IEPA on March 25th, there
10 was no mechanism for that. That is just my
11 reading of it.

12 MS. BUGEL: Is there a mechanism for
13 that with the Environmental Groups' proposed
14 amendments to the rule?

15 DR. SODERBERG: I believe so, yes.

16 MS. BUGEL: And, in your opinion,
17 what -- what approach could a property owner use
18 to demonstrate that an impoundment is not causing
19 or contributing to an exceedance?

20 DR. SODERBERG: A non-operating
21 impoundment?

22 MS. BUGEL: Right.

23 DR. SODERBERG: I think I have
24 discussed that previously, so --

1 MS. FRANZETTI: I agree, in the
2 interest of time.

3 Okay. Moving on to question
4 6(c). Please explain the basis and justification
5 for your recommendation to expand the scope of the
6 proposed rules to include all stormwater
7 impoundments at a facility.

8 DR. SODERBERG: Again, I -- my
9 intent was to refer to the stormwater impoundments
10 that contain CCW that receive stormwater in that,
11 and I think that -- that those fall into the
12 category of a unit under the definitions in the
13 proposed rule.

14 MS. FRANZETTI: Now, in that
15 regard -- and I am -- I am possibly going to be
16 covering a later question, but given your answer,
17 with respect to impoundments that contain CCW and
18 get stormwater you said you believe should be
19 subject to the rule, is it also true that you
20 think an impoundment that contains any leachate as
21 well as -- as well as stormwater ought to be
22 subject to the rule -- CCW leachate? I'm sorry.

23 DR. SODERBERG: Yeah, I would just,
24 I think, refer to the Agency's definitions on

1 that.

2 MS. FRANZETTI: Well, let's refer
3 to, though -- on this point, Dr. Soderberg, you
4 need to refer not to the Agency's, but to the
5 Environmental Groups' proposed definitions,
6 because I think there is a significant change.

7 DR. SODERBERG: Okay. Let's read --

8 MS. FRANZETTI: All right. So look
9 at -- yeah, page five of the Environmental Groups'
10 proposed definition of leachate deletes the
11 Agency's exclusion that provided, leachate does
12 not include stormwater runoff that may come into
13 contact with fugitive ash. Were you a -- the
14 proponent of that deletion?

15 DR. SODERBERG: No.

16 MS. FRANZETTI: All right.

17 DR. SODERBERG: Not that I recall.

18 MS. FRANZETTI: When you talk about
19 impoundments and stormwater, if leachate can
20 constitute stormwater that comes into contact with
21 fugitive ash, isn't it true then that a stormwater
22 basin, no matter how small -- because at a power
23 plant that rainfall might have come in contact
24 with fugitive ash, therefore, would become subject

1 to these rules under this proposed definition of
2 leachate?

3 DR. SODERBERG: So the first part I
4 would say -- I would look also at the definition
5 of unit, that it -- back to your question about
6 whether leachate itself in a unit would be -- or
7 would be proposed -- would be considered to be
8 subject to the rule, and I just wanted to make
9 that -- the point that the definition for unit
10 includes leachate from CCW.

11 MS. FRANZETTI: Right. And so if
12 leachate includes fugitive ash, would you agree
13 that rainfall can pick up fugitive ash at a power
14 plant?

15 DR. SODERBERG: Certainly rainfall
16 and stormwater runoff can pick up fugitive ash
17 and --

18 MS. FRANZETTI: And you think that's
19 reasonable to subject every stormwater retention
20 area at a power plant to these rules?

21 DR. SODERBERG: I believe there was
22 a size exclusion, wasn't there?

23 MS. FRANZETTI: Do you want to look
24 at 841.105(b)(3)(C)?

1 DR. SODERBERG: Yes.

2 MS. FRANZETTI: Bottom of page
3 three.

4 So Dr. Soderberg, you are saying
5 that, well, it won't include every one until maybe
6 you get to 25 cubic yards in that stormwater
7 retention basin of CCW? Is that what you are
8 telling me?

9 MS. OLSON: Are we looking at (b) (3)
10 or (b) (4)?

11 MS. FRANZETTI: I thought it's
12 (b) (3) (C).

13 DR. SODERBERG: I was also thinking
14 of (b) (4), one cubic yard.

15 MS. FRANZETTI: Yes. Sorry.

16 MR. ARMSTRONG: I might be able to
17 inject the explanation for the deletion of
18 leachate.

19 MS. FRANZETTI: Okay.

20 MR. ARMSTRONG: So the intent behind
21 the deletion of this sentence here was just we
22 wanted to -- this was more in relation to whether
23 a coal impoundment is receiving waste or
24 stormwater flow, and so there may be an

1 unintentional combination that you point out
2 between the definition of unit, which includes any
3 surface impoundment at a power generating facility
4 that contains leachate with the definition of
5 leachate. So I, therefore -- our intent is not to
6 regulate only -- only stormwater retention ponds
7 that might have runoff where it's coming in
8 contact with coal.

9 MS. FRANZETTI: Or CCW?

10 MR. ARMSTRONG: Or CCW. It's just
11 if it doesn't contain CCW or leachate from --

12 MS. FRANZETTI: Okay. So this is
13 yet another issue that we might give further
14 thought to and make further revisions in what you
15 propose?

16 MR. ARMSTRONG: Yes.

17 MS. FRANZETTI: Okay. Moving then
18 to question 6(d).

19 Dr. Soderberg, with respect to
20 your recommendation that the rules should apply to
21 the site property as a whole, have you performed
22 any cost-benefit analysis of that recommendation?
23 And I should say, and that all impoundments are
24 contributing to exceedances is a part of that,

1 consider the whole site.

2 DR. SODERBERG: I have not performed
3 a cost-benefit analysis.

4 MS. FRANZETTI: Okay. Moving to
5 (e). In addition to coal-fired electric
6 generating stations, would you make the same
7 recommendation for any industrial facility that
8 stores or otherwise handles coal or coal
9 combustion waste materials?

10 DR. SODERBERG: Yes, insofar as that
11 storage could contribute leachate to groundwater
12 at the surface.

13 MS. FRANZETTI: Question seven. In
14 the second paragraph on page two of your pre-filed
15 testimony, you state that "[i]t is also unclear
16 whether" -- wait a second. Give me a moment. We
17 may have covered this with the questions I was
18 asking earlier on leachate. No. This is a
19 separate issue about raw coal. Sorry. Ms. Court
20 Reporter, let me start again.

21 Question number seven. In the
22 second paragraph on page 2 of your pre-filed
23 testimony, you state that "[i]t is also unclear
24 whether stormwater runoff that comes in contact

1 with raw coal is considered as containing
2 leachate." You make this same statement on page
3 three of your pre-filed testimony regarding the
4 Section 841.110 Definition of "Leachate." Given
5 that the proposed rules' definition of "leachate"
6 provides, in relevant part, that leachate is any
7 liquid "that has been -- that has been or in
8 direct contact with, percolated through or drained
9 from coal combustion waste" and does not mention
10 "raw coal," and similarly the proposed rules'
11 definition of "coal combustion waste" does not
12 include a reference to "raw coal," what is unclear
13 to you regarding the proposed rules' exclusion
14 from the definition of leachate of stormwater
15 runoff that comes in contact with raw coal.

16 DR. SODERBERG: Yeah. I agree that
17 the leachate definition clearly excludes raw coal,
18 and I think my language was not potentially as
19 artfully written as it could have been. The
20 reason I brought up the issue of raw coal and
21 stormwater contact is that there is a potential
22 for bringing in additional constituents of concern
23 that you would not be worried about with leachate
24 from the CCW if there is significant leachate from

1 raw coal that may be flowing into an impoundment
2 or entering groundwater.

3 MS. FRANZETTI: And so how does --
4 how does your recommendation in this regard play
5 out under the proposed rules? What is it you are
6 advocating?

7 DR. SODERBERG: So I am not
8 necessarily advocating that this is included in
9 the proposed rule. It's something that is just an
10 issue that I wanted to raise that may be up for
11 discussion.

12 MS. FRANZETTI: Okay. Skipping
13 eight, because it duplicated six, part of six.
14 We've already gone through 9(a) and (b), so we are
15 at 10, question 10.

16 In the first paragraph on page
17 three of your pre-filed testimony, you state that
18 the groundwater monitoring plan and annual reports
19 should list all units at a given site. Please
20 specify what you mean by "all units" and I am
21 asking specifically as well, do you mean all
22 exempt units?

23 DR. SODERBERG: Yes. I would go
24 with the definition of units as either in the --

1 it's unchanged in the proposed amended rules from
2 the Environmental Groups. In terms of just
3 accounting for all units at a site, I think it's
4 worth listing them.

5 MS. FRANZETTI: And continuing to
6 list them in every annual report, I take it?

7 DR. SODERBERG: Yes.

8 MS. FRANZETTI: Question 11. In the
9 second paragraph on page three of your pre-filed
10 testimony, you state that "the rule could be
11 applicable to all impoundments, active or
12 inactive, for monitoring and corrective action and
13 closure as needed." What is your proposed
14 definition of an "inactive impoundment"?

15 DR. SODERBERG: I am not proposing a
16 definition. I -- you know, the -- I will leave
17 that to the lawyers. The inactive language I
18 believe came up -- I don't have a specific
19 reference, but in some of the questions, the
20 previous questions and answers of the first
21 hearing.

22 MS. FRANZETTI: Well, what's your
23 understanding -- when I use the phrase "inactive
24 impoundment," what does that mean to you?

1 DR. SODERBERG: I would say that
2 it's maybe not receiving coal combustion waste and
3 that would, you know, be distinct from the
4 definition of operating, that if a unit is
5 receiving -- has coal combustion waste and is
6 receiving stormwater runoff, it is still being
7 operated under the rule -- under this rule.

8 MS. FRANZETTI: And that would be
9 equivalent in your mind to an active impoundment
10 versus an inactive?

11 DR. SODERBERG: Well, I think it's
12 actively, you know, a potential source of leachate
13 if it's receiving CCW or if it's receiving
14 stormwater runoff.

15 MS. FRANZETTI: Okay. Moving to
16 question 12 under the definitions section of the
17 proposed rules, 841.110. On page 12 -- On page
18 two of your pre-filed testimony and on page three,
19 under the "Section 841.110 Definitions" heading,
20 you state that the Board should include a
21 definition of "operate." What definition of
22 "operate" are you recommending the Board should
23 include? And that question, of course, was
24 written before receipt of yesterday's proposed

1 revised rules by the Environmental Groups. So am
2 I correct that the proposed definition is at the
3 top of page six of the proposed rules, Exhibit 21?

4 DR. SODERBERG: Yes.

5 MS. FRANZETTI: Moving on to
6 question 13.

7 MS. OLSON: Can I ask a follow-up?

8 MS. FRANZETTI: Yes.

9 MS. OLSON: Is it your opinion,
10 Dr. Soderberg, that any impoundment that does not
11 have a cap is considered to be in operation?

12 DR. SODERBERG: If it contains CCW
13 and is receiving precipitation or stormwater
14 runoff.

15 MS. OLSON: So it if receives
16 rainfall and the rain fell directly into the
17 surface impoundment and it wasn't routed there,
18 you would consider that to be in operation?

19 DR. SODERBERG: Yes.

20 MS. OLSON: So is it fair to say
21 that if it's not capped it's in operation?

22 DR. SODERBERG: Yeah. If it still
23 contains CCW, yeah.

24 MS. OLSON: Thanks.

1 MS. FRANZETTI: Moving on to
2 question 13. Also under the "Section 841.110
3 Definitions" heading, you state that the Board
4 should include a definition of "releases." What
5 definition of "releases" are you recommending, and
6 is that also now contained on page six of the
7 Environmental Groups' proposed rules?

8 DR. SODERBERG: Yes.

9 MS. FRANZETTI: Okay. And counsel,
10 I didn't have a chance to double check, but you do
11 cite to the Illinois Environmental Protection Act
12 there. Is that a verbatim --

13 MR. ARMSTRONG: It's truncated.
14 There is several non-relevant clauses after this
15 language.

16 MS. FRANZETTI: And, counsel, I
17 would ask you to consider perhaps further
18 truncating -- we don't have to discuss it now, but
19 emitting kind of threw me for a CCW surface
20 impoundments release. So I would ask you to
21 consider that further truncation of the
22 definition.

23 Moving to question 14(b)
24 monitoring, sections 841.200 through 235. On page

1 four of your pre-filed testimony you state that
2 "the Agency should add requirements in subpart B
3 for characterizing and monitoring the
4 groundwater-to-surface water pathway including
5 sampling of the hyporheic zone." Define what you
6 mean by the hyporheic zone.

7 DR. SODERBERG: So this is a zone in
8 the subsurface where surface water and groundwater
9 interact.

10 MS. FRANZETTI: Explain how the
11 monitoring of the groundwater-to-surface water
12 pathway would be performed.

13 DR. SODERBERG: So the
14 groundwater-to-surface water pathway would be
15 characterized -- could be characterized in
16 establishing the -- first the hydrogeologic
17 gradient maybe between an impoundment and the
18 surface water so you are looking at even an
19 existing set of monitoring wells to potentially
20 characterize that, looking at the water levels in
21 those monitoring wells, and then the actual
22 exchange in the hyporheic zone is -- there are
23 various techniques that are standard and are
24 listed, some as it references in my pre-filed

1 testimony.

2 You essentially are putting in
3 shallow monitoring wells, but they are really just
4 direct drive wells that are fairly inexpensive to
5 install that are establishing the vertical
6 hydraulic gradient to show whether you are losing
7 water out of the surface water or groundwater is
8 discharging from the surface water.

9 MS. FRANZETTI: Are those
10 piezometer?

11 DR. SODERBERG: Yeah, mini
12 piezometer that are screened to a specific depth.

13 MS. FRANZETTI: Let me back up and
14 ask a couple of questions about that answer.

15 Is there any distance between
16 the facility and a surface water, which for you
17 would be surface to say you really don't have to
18 look at a groundwater to surface water pathway.
19 The nearest surface water is too far away?

20 DR. SODERBERG: There is not a
21 distance that I could pick out of thin air. I
22 would have to evaluate that at the site.

23 MS. FRANZETTI: Okay. But there
24 could be some situations where the location of the

1 facility and the location of the surface water are
2 sufficiently far apart that this pathway is not
3 reasonable to evaluate.

4 DR. SODERBERG: Yeah. The
5 distance -- the horizontal distance is maybe one
6 component of that evaluation, but you also are
7 considering where the groundwater is relative to
8 the surface water and relative to the site.

9 MS. FRANZETTI: Mr. Rieser.

10 MR. RIESER: If I may just follow-up
11 on a couple of things.

12 MS. FRANZETTI: Well, all right.
13 You have been a little chatty today, but we will
14 let you go.

15 MR. RIESER: I'm sorry about that.
16 The sampling in this hyporheic zone, does that
17 change depending on season from how much
18 precipitation there has been, the height of the
19 water in -- the height of the surface water?

20 DR. SODERBERG: It can, yes.

21 MR. RIESER: So if it appeared that
22 that place is variable does that mean that people
23 have to sample at a bunch of different locations
24 to find this out?

1 DR. SODERBERG: I think that you can
2 typically get a sense of that for a given surface
3 water. You know, a given stream you can kind of
4 get a sense of what that groundwater/surface water
5 exchange is with a limited number of locations,
6 you know, when, you know -- you have to evaluate
7 that on a case by case basis, but, yes, you can do
8 it with a limited number of locations.

9 MR. RIESER: So how would you
10 evaluate that on a case by case basis?

11 DR. SODERBERG: Well, you would look
12 at the surface water network and whether you have
13 wetlands in different areas, and there is -- you
14 can look at the hydrogeology of the site.

15 MR. RIESER: And then related to
16 that, would the question of whether the
17 groundwater was oozing to surface water or surface
18 water was oozing to groundwater, would that
19 question change depending on the precipitation and
20 the level of the surface water?

21 DR. SODERBERG: It can.

22 MR. RIESER: So is there a way to
23 account for that in this discussion?

24 DR. SODERBERG: Without monitoring?

1 MR. RIESER: In any way.

2 DR. SODERBERG: Well, I mean, yeah,
3 you can -- you can attempt to get some additional
4 information about that through performing a water
5 balance, some kind of catchment analysis
6 associated with that surface water, but the most
7 direct evidence is with this monitoring.

8 MR. RIESER: Thank you.

9 HEARING OFFICER FOX: Ms. Franzetti,
10 Ms. Olson appears to have a question. Do you mind
11 if we turn to her?

12 MS. FRANZETTI: Not at all.

13 MS. OLSON: I have got a couple --
14 but in response to Mr. Rieser's question about
15 the -- how do you say that?

16 DR. SODERBERG: Hyporheic.

17 MS. OLSON: Hyporheic zone. Excuse
18 me and thank you. There is -- it seems there is
19 some testimony that it's not always in the same
20 spot; is that correct?

21 DR. SODERBERG: Oh, it's not about
22 whether it's always in the same spot, necessarily.
23 It's potentially a highly dynamic zone sort of
24 vertically. Horizontally it's not really going to

1 be moving away from the stream.

2 MS. OLSON: Thank you. I was going
3 to ask you if it's vertical or horizontal, but it
4 seems pretty clear that it's moving vertically up
5 and down, and is that tied to the water table?

6 DR. SODERBERG: Yes.

7 MS. OLSON: And so could you
8 describe how one would monitor this zone for the
9 Mississippi River?

10 DR. SODERBERG: You know, I think it
11 would be a similar -- probably more substantial
12 monitoring wells that you would want to have
13 there, and it's a similar type of evaluation,
14 vertical hydraulic gradient.

15 MS. FRANZETTI: Why do the
16 monitoring wells have to be more substantial than
17 your mini piezometers?

18 DR. SODERBERG: They probably are
19 going through -- they may be deeper, and they may
20 be subject to flooding and getting knocked over
21 type of thing, getting destroyed.

22 MS. FRANZETTI: Do mini piezometers
23 have a depth limit?

24 DR. SODERBERG: Yes. I can't pick a

1 number out, but yeah, you are driving it into the
2 ground so you have some limit to how deep you go.

3 MS. FRANZETTI: Okay. Approximate?

4 DR. SODERBERG: Tens of meters.

5 MS. FRANZETTI: Okay.

6 DR. SODERBERG: Depending on the
7 sediment.

8 MS. FRANZETTI: Why can they flood
9 versus a monitoring well?

10 DR. SODERBERG: Well, I mean, there
11 is some component usually that's sticking out of
12 the ground and that might get knocked over.

13 MS. FRANZETTI: Oh, it's just open?
14 It's not capped on top?

15 DR. SODERBERG: I am sure it can be
16 capped, but it could also get knocked over,
17 destroyed.

18 MS. FRANZETTI: Just because it's so
19 little versus a full monitoring well?

20 DR. SODERBERG: Yeah. You could put
21 a steel casing in the monitoring well that could
22 be -- withstand getting hit by a log or something.

23 MS. FRANZETTI: I see what you are
24 saying, because it's that close to the shoreline?

1 DR. SODERBERG: Yes.

2 MS. FRANZETTI: Because it has to be
3 to try and monitor the hyporheic zone.

4 DR. SODERBERG: Yes.

5 HEARING OFFICER FOX: I think we had
6 a question first from Ms. Olson, but I won't
7 overlook you.

8 MS. OLSON: I just have a few more
9 follow-ups around the Mississippi River. In your
10 opinion, how many sets of monitoring wells would
11 be needed to capture the hyporheic zone of the
12 Mississippi River?

13 MS. BUGEL: Can I clarify the
14 question? Are we talking about the whole
15 Mississippi River, or are we talking about a
16 site where there is an impoundment to?

17 MS. OLSON: We are talking about
18 sites along the Illinois border where there would
19 be an impoundment.

20 MS. BUGEL: So your question is
21 limited to sites with impoundments?

22 MS. OLSON: Along the Illinois
23 border of the Mississippi River.

24 DR. SODERBERG: Without looking at a

1 specific site, I would start with, say, three sets
2 of nested wells and get a sense of what's
3 happening with the groundwater there.

4 MS. OLSON: So when you say start
5 with, what do you mean? Would that number
6 increase?

7 DR. SODERBERG: If I didn't get a
8 good characterization, then I might have to
9 increase that, yes.

10 MS. OLSON: And what would that be
11 increased to?

12 DR. SODERBERG: Without thinking of
13 a specific site, I can't give you a number.

14 MS. OLSON: Is it an infinite number
15 of wells?

16 DR. SODERBERG: No.

17 MS. OLSON: Can you be more specific
18 about an estimate of the number of wells that
19 would be needed?

20 DR. SODERBERG: No. Not thinking
21 about -- unless I can think about a specific site.

22 MS. FRANZETTI: While they are
23 talking, is there any rule of thumb generally as
24 to spacing between monitoring wells for this

1 purpose of characterizing the hyporheic zone?

2 DR. SODERBERG: There is a wide
3 variety of kind of environments that you would
4 need to try to characterize. So I can't -- small
5 streams, wet lands, large rivers.

6 MS. FRANZETTI: Oh, I'm sorry. I
7 thought we were still on the Mississippi River.
8 My question was still on the Mississippi River. I
9 was just trying to ask you, is there an except
10 rule of thumb when you are dealing with trying to
11 characterize the hyporheic zone next to a large
12 river like that for what your spacing should be
13 for the distance between one set of nested
14 monitoring wells and another?

15 DR. SODERBERG: I would have to --
16 it would depend on your question in terms of the
17 scope of what you are trying to understand with
18 respect to the hyporheic zone, but I would point
19 to the guidance documents that are referenced. I
20 would have to go look at those.

21 MS. OLSON: I have got some more.

22 MS. FRANZETTI: Okay. Go ahead.

23 MS. OLSON: Are you aware of the
24 changes of the stage of the river of the

1 Mississippi along the Illinois border?

2 DR. SODERBERG: I am aware
3 generally, yes.

4 MS. OLSON: Do you know -- how do
5 you know height?

6 DR. SODERBERG: I don't know.

7 MS. OLSON: If a river had the
8 possibility of a 40-foot change in height over the
9 course of a year based on the stages of the
10 seasons and so forth, would that change your
11 interpretation of how many monitoring wells would
12 be needed to determine the hyporheic zone?

13 DR. SODERBERG: So in a case even --
14 yes, you would potentially need to go with maybe
15 temporary monitoring wells that you are deploying
16 from a boat where you can go into the -- where you
17 can deal with the -- some water depth and then you
18 are installing these wells to either collect a
19 sample or to monitor the -- the water pressure
20 down there. So this is -- these are also
21 characterized in the guidance documents.

22 MS. OLSON: Would the levees along
23 the Mississippi River impact the hyporheic zone?

24 DR. SODERBERG: Yes.

1 MS. OLSON: Can you explain how?

2 DR. SODERBERG: Well, they modify
3 the -- both the surface water and the -- what's
4 happening with any seepage or any movement of
5 groundwater, and that's adjacent to the river.

6 MS. FRANZETTI: Do dams have that
7 same effect, that control, flow of water? I don't
8 know if you are familiar with our Chicago Sanitary
9 and Ship Canal in the lower Des Plaines. We have
10 a series of locks and dams. Does that have a
11 similar affect as you were just describing?

12 DR. SODERBERG: Yes, anything that
13 affects the surface water flow would also affect
14 the hyporheic zone.

15 HEARING OFFICER FOX: Ms. Franzetti,
16 I think Mr. Rieser indicated that he had a
17 question.

18 MR. RIESER: Yeah. And I am
19 still -- I want to go back to something that I
20 think you said in response to one of Ms. Olson's
21 questions about that there would be fluctuations
22 vertically, but not horizontally, and my image --
23 if what you are trying to capture is the interface
24 between the surface water and the groundwater, my

1 image is of the surface water of the interface
2 between salt and fresh water in an estuary which
3 is going to move with the tide, and that may be
4 the wrong image, but I am hoping you can explain
5 why horizontally that interface point is not going
6 to change depending on the level of the river?

7 DR. SODERBERG: Right, yeah. Sorry
8 for the confusion. I think that was an incomplete
9 answer. It's a three-dimensional problem. I
10 think depending on the situation it could be more
11 of a vertical shift or more of a horizontal shift,
12 so --

13 MR. RIESER: So if you were going
14 to, again, measure the issue of what's happening
15 at the water phase, you not only have to have nest
16 wells to measure vertical, but you have to have a
17 certain array of wells to measure the horizontal?

18 DR. SODERBERG: Yes.

19 MR. RIESER: Thank you.

20 MS. FRANZETTI: Dr. Soderberg, have
21 you had to do this, placing and monitoring of
22 wells in the hyporheic zone on any of the projects
23 that you have worked on?

24 DR. SODERBERG: Yes. We had -- yes,

1 I have.

2 MS. FRANZETTI: And how many
3 projects have you done this on?

4 DR. SODERBERG: So this -- we did
5 this by the Potomac River in Washington DC for a
6 de-watering project two years ago.

7 MS. FRANZETTI: Okay. Any other
8 projects, or could we just talk about this one?

9 DR. SODERBERG: Yeah. The other
10 projects -- let's just talk about that one, yeah.

11 MS. FRANZETTI: Okay. And did you
12 determine where the wells should go, and what
13 their depth should be for purposes of
14 characterizing the hyporheic zone?

15 DR. SODERBERG: No. This was
16 another hydrogeologist in our firm who made the
17 siting and depth determinations.

18 MS. FRANZETTI: Okay. Do you know
19 how many wells wound up being put in?

20 DR. SODERBERG: Well, that was a
21 special situation where there was a tunnel being
22 built near the river. So there had to be
23 additional characterizations --

24 MS. FRANZETTI: For the tunnel?

1 DR. SODERBERG: For a de-watering
2 effort around the tunnel.

3 MS. FRANZETTI: Okay. So it's not
4 particularly applicable to what we are talking
5 about?

6 DR. SODERBERG: It's not only for
7 characterizing the hyporheic zone.

8 MS. FRANZETTI: Okay. So it's hard
9 to separate out what was just for just the
10 hyporheic zone and what was related to the
11 de-watering for the tunnel? Is that what you are
12 telling me?

13 DR. SODERBERG: That's right.

14 MS. FRANZETTI: Okay. Never mind.
15 Question 14(c)?

16 MS. OLSON: I have got a few. I am
17 sorry.

18 MS. FRANZETTI: I will see 14(c) by
19 tomorrow, I hope.

20 MS. OLSON: I have got three
21 different lines of follow-ups. So I guess the
22 first one, which is based on Ms. Franzetti's last
23 line of questioning is, why did you do the
24 monitoring for a de-watering project?

1 DR. SODERBERG: Most of the
2 monitoring for the de-watering project was deeper
3 to characterize the -- the aquifer or the
4 characteristics of where the tunnel was being
5 built, but this was a small number of wells that
6 were associated with that that were shallower.

7 MS. OLSON: So I'm sorry. Why did
8 you do it? Is it because of the site?

9 DR. SODERBERG: For understanding
10 the hydrogeology of the site.

11 MS. OLSON: Okay. So it was not
12 required by a regulation to do that?

13 DR. SODERBERG: No, no it wasn't.

14 MS. OLSON: Have you done -- been
15 involved in projects where these monitoring wells
16 have gone in as a standard practice at a
17 remediation site with no de-watering?

18 DR. SODERBERG: I have not.

19 MS. OLSON: Kind of changing my
20 follow-up back to Mr. Rieser's questions, which
21 were on the Mississippi River, can you
22 characterize the horizontal extent of monitoring
23 wells? We kind of talked about the vertical. How
24 far out would you have to place monitoring wells

1 from the river to capture this information?

2 DR. SODERBERG: Again, I can't put a
3 number on it without thinking about the specific
4 site situation, but --

5 MS. OLSON: This is the Mississippi
6 where the difference in the stage of the river
7 could be up to 40 feet.

8 DR. SODERBERG: I would want to
9 characterize the -- have this as part of the
10 overall characterization of the potential
11 groundwater-to-surface water pathway from the
12 impoundment to the Mississippi River, and given
13 that there is -- well, I think that the monitoring
14 wells on site that characterize the groundwater
15 table and the potentiometric surface -- so that
16 characterization of that potentiometric surface
17 would give you a sense, and especially if you were
18 able to track the changes in that surface through
19 time and seasonally would be ideal, would give you
20 a sense of exchange with the surface water.

21 MS. OLSON: So what's the largest
22 extent horizontally out that you have seen
23 personally?

24 DR. SODERBERG: It's all part of the

1 same system potentially, and so, you know, if
2 the -- again, I can't put a number on it without
3 thinking about the sites, and I don't want to --

4 MS. OLSON: That's okay.

5 DR. SODERBERG: -- put a number on
6 it, yeah.

7 (Whereupon, a discussion was had
8 off the record.)

9 MS. OLSON: Just one more. Is there
10 a continuous array between surface water bodies
11 and the impoundment?

12 DR. SODERBERG: It depends on what
13 you mean by continuous array, but you are trying
14 to characterize a continuing potentiometric
15 surface.

16 MS. OLSON: That's all I have for
17 right now. Thanks.

18 MS. BUGEL: Could I ask one
19 follow-up question as well? Just one question
20 about piezometers. Can you compare piezometers to
21 the groundwater monitoring wells we have been
22 talking about in this proceeding?

23 DR. SODERBERG: The distinction I
24 was making with the mini piezometer and a

1 monitoring well is a mini piezometer is typically
2 just a simple unit that is pushed directly into
3 the subsurface. A monitoring well would be a
4 drilled well that is constructed with --
5 sand-packed and with grout and is developed as a
6 full well.

7 MS. BUGEL: And does this affect the
8 cost of these monitors?

9 DR. SODERBERG: Yes. They are
10 typically quite inexpensive to install.

11 MS. BUGEL: That's all.

12 MS. FRANZETTI: 14(c). What
13 standard applies to the groundwater-to-surface
14 water pathway for determining whether any
15 exceedance exists?

16 DR. SODERBERG: So I am not
17 recommending -- I don't know in -- necessarily in
18 Illinois where that -- which standard would be
19 applied. I am not recommending one or the other.

20 MS. FRANZETTI: You do appreciate
21 the point of that question being that is it the
22 groundwater standard or is it the surface water
23 standard, correct?

24 DR. SODERBERG: Correct.

1 MS. FRANZETTI: Have you had to deal
2 in any states where they actually have gone
3 through a whole separate rulemaking to develop
4 what they call groundwater-to-surface water
5 interface standards?

6 DR. SODERBERG: Not that I can
7 recall.

8 MS. FRANZETTI: Never done any work
9 in Michigan, for example?

10 DR. SODERBERG: No.

11 MS. FRANZETTI: Okay. Then you are
12 not familiar with the fact that even after
13 Michigan did go through a whole regulatory process
14 to derive what they -- shorthand was referred to
15 as GSI standards, that they ran into several years
16 of problems with it stymying the progress on
17 reaching clean-up goals for sites and led to a
18 whole new legislative law in 2012 called Act 190?
19 You are not familiar with any of that?

20 MS. BUGEL: I am going to object to
21 the attorney testifying and also to the fact that
22 this has already been asked and answered. He
23 wasn't familiar with Michigan.

24 MS. FRANZETTI: I was just trying to

1 probe whether any of that rings -- you know, he
2 may have heard about that, and that it is a
3 significant regulatory issue.

4 MS. BUGEL: I still make the same
5 objection.

6 HEARING OFFICER FOX: Dr. Soderberg,
7 if you can answer about your awareness of what has
8 been posed by Mrs. Franzetti's question, please do
9 that.

10 DR. SODERBERG: Okay. I am not
11 aware of that.

12 MS. FRANZETTI: Okay. Are you aware
13 that we don't have in Illinois anything called a
14 hyporheic zone standard, a groundwater-to-surface
15 water interface standard; are you aware of that?

16 DR. SODERBERG: I am not aware of
17 that.

18 MS. FRANZETTI: Do you think that
19 would be a handicap in this approach that you are
20 recommending under the rules?

21 DR. SODERBERG: I suppose -- well,
22 my recommendation is trying to kind of understand
23 this -- these systems from a scientific
24 perspective. So with respect to that, I'm not

1 sure about the handicap that you mentioned.

2 MS. FRANZETTI: Okay. All right.

3 Fair enough.

4 MR. ARMSTRONG: Can I ask one
5 follow-up question? Aside from trying to
6 determine the level of contamination at that
7 point, does the installation of piezometers or
8 other monitoring of the hyporheic zone yield any
9 other information?

10 DR. SODERBERG: Well, yeah. I mean,
11 certainly it informs you on the overall hydrology
12 and hydrogeology of the site.

13 HEARING OFFICER FOX: Ms. Olson, a
14 follow-up?

15 MS. OLSON: Are you aware of the
16 definition of groundwater in the Environmental
17 Protection Act for the state of Illinois?

18 DR. SODERBERG: Not -- no, not off
19 the top of my head.

20 MS. OLSON: Are you aware of the
21 definition of groundwater contained in the
22 Agency's proposal?

23 DR. SODERBERG: Okay. I can read
24 that, if you like.

1 MS. OLSON: Sure. It remains
2 unchanged from the Environmental Groups' proposal,
3 and it's on page five of their proposal. So
4 please go ahead.

5 DR. SODERBERG: So groundwater means
6 underground water which occurs within the
7 saturated zone of geologic materials where the
8 fluid pressure and the force may be equal to or
9 greater than atmospheric pressure.

10 MS. OLSON: So in your opinion would
11 the water in the hyporheic zone be considered
12 groundwater under this definition or surface
13 water?

14 DR. SODERBERG: Groundwater.

15 MS. OLSON: So then in Illinois, are
16 you aware that they have adopted groundwater
17 quality standards?

18 DR. SODERBERG: Yes.

19 MS. OLSON: So, in your opinion,
20 would the groundwater quality standards that have
21 been adopted by the Pollution Control Board apply
22 to the water in the hyporheic zone?

23 DR. SODERBERG: Based on this
24 definition, yes.

1 MS. OLSON: That's it.

2 HEARING OFFICER FOX: Anything
3 further on 149(c). Neither seeing nor hearing any
4 questions, why don't we -- Ms. Franzetti, why
5 don't you go to question number 15, and we can at
6 least cover one more.

7 MS. FRANZETTI: In the second
8 paragraph on page four of your pre-filed
9 testimony, you state that "[t]he Board should add
10 a provision to subsection 841.205(c) to require
11 that the monitoring system be adequate for
12 assessing the overall groundwater flow and
13 direction at the site as well as changes to the
14 flow regime due to leachate from CCW
15 impoundments."

16 Explain whether you are
17 recommending a rule that requires daily and/or
18 quarterly monitoring of water levels at each
19 monitoring well and if so, for what period of
20 time?

21 DR. SODERBERG: I would recommend --
22 and I mean, you know, that quarterly monitoring of
23 water levels would be certainly adequate, and I
24 would say through the post-closure period or

1 post-closure care period, I guess.

2 MS. FRANZETTI: So throughout the
3 entire time that the owner/operator has to monitor
4 any of its wells?

5 DR. SODERBERG: Yes.

6 MS. FRANZETTI: Okay. (b), Under
7 your recommended rule for measurement of water
8 levels, what determines when the water level
9 monitoring may cease to be done on either a daily
10 or quarterly basis? Only the termination of the
11 post-closure period; is that correct?

12 DR. SODERBERG: Yes, right.

13 MS. FRANZETTI: Do you want me to
14 try one more?

15 HEARING OFFICER FOX: Go ahead.

16 MS. FRANZETTI: 16. In the last
17 sentence on page four of your pre-filed testimony,
18 you state that "the rules require more detailed
19 guidance on statistical comparisons to numerical
20 groundwater standards and background values." Do
21 you agree that each groundwater situation, because
22 of varying conditions and circumstances, such as
23 the presence of a synthetic liner, historical use
24 of the impoundment, and the site's hydrogeology,

1 are unique and may require flexibility in order to
2 make an accurate assessment of the groundwater
3 situation?

4 DR. SODERBERG: Yes. The
5 statistical comparisons are -- that are
6 recommended through the guidance documents that
7 are referenced in the proposed rule are quite
8 broad and allow for that type of flexibility.

9 MS. FRANZETTI: 16(a), Do you agree
10 that rules of general applicability should be
11 flexible enough to allow the Agency to adapt them
12 to a given situation?

13 DR. SODERBERG: Yes. And then I
14 would -- I mean, it hinges on the definition of
15 "flexible," but certainly you want to be able to
16 apply whatever tool you need to, to accurately
17 assess the situation in the statistical analysis
18 or the hydrogeological analysis.

19 HEARING OFFICER FOX: Ms. Franzetti,
20 why don't we stop there. It looks like the next
21 couple questions have some likelihood of
22 triggering follow-up and I would like to try to
23 adhere to the 5 o'clock recess that I had referred
24 to.

1 That does bring us to the five
2 persons whose names I had called earlier to offer
3 public comments. Again, I would ask you to try to
4 limit yourself to three minutes, and I think it
5 would be best if you could step up to the front
6 behind the -- Dr. Soderberg and Mr. Armstrong so
7 that you can face the court reporter and be heard
8 a little more clearly. That sounds perfect. If
9 you would provide her your full name and any group
10 you might represent, Mr. Craig, and begin when you
11 are ready.

12 MR. CRAIG: My name is Evan Craig,
13 C-R-A-I-G. I live in Lake County, Illinois, and I
14 would like to thank you for this -- and I am here
15 as a volunteer with the Sierra Club. I would like
16 to thank you for the opportunity to testify
17 finally. I am a busy engineer. I took a day off
18 to come and speak to you about the problem of coal
19 ash ponds in my county. Lake County, as I am sure
20 you know, has an old coal-fired power plant
21 operating on the shore of Lake Michigan, and I am
22 concerned about the known impacts of ash ponds on
23 the groundwater there.

24 I am even more concerned about

1 the potential and unknown impact of the ash ponds
2 on Lake Michigan water there. My drinking water
3 comes from Lake Michigan. So I am concerned about
4 the leachate from the ash pond, minimally treated
5 at the power plant and discharged directly into
6 the lake.

7 Waukegan received over two
8 inches of rain in the past 24 hours and over five
9 inches in the past 48 hours this week. I am
10 concerned that this flushes dissolved toxic metals
11 like arsenic, cyanide, cadmium and mercury that
12 are known to be in these ash ponds into the lake.

13 I question why these ash ponds
14 have not already been required and I don't here
15 discussion that they be required to be covered to
16 avoid rain or stormwater, as you call it, and to
17 prevent windborne distribution of the ash
18 throughout the surrounding urban area.

19 I note the company I work for
20 would not initiate a project without the resources
21 to complete it. So I expect companies that own
22 and operate ash ponds to have the resources to
23 clean them up promptly when their operation is
24 terminated. I urge the Pollution Control Board to

1 require ash pond owners to set aside funds for the
2 eventual removal and clean-up of their ash ponds
3 so that these do not -- so these burdens don't
4 fall on the public.

5 The energy coal-fired power
6 plant I am talking about has been losing money,
7 and it's only recently emerged from bankruptcy.
8 So the likelihood that it will be closed and that
9 the ash ponds there might remain for many years is
10 a real possibility.

11 I ask you to take steps now to
12 assure this will not burden the community either
13 financially or as an un-remediated threat or
14 blight on its Lake Michigan lakefront. I would
15 like to ask that you move beyond the strategy of
16 mitigated risk toward a precautionary measure
17 approach that truly protects our environment, as
18 the name of the Illinois Environmental Protection
19 Agency promises to all Illinois citizens. Thank
20 you.

21 HEARING OFFICER FOX: Mr. Craig,
22 thank you for your comment, which, of course, now
23 part of our record and for your help to our court
24 reporter in making a clear record.

1 Ms. Charland is our next
2 commenter. It looks like you are ready to step
3 forward as well. If you would spell your name and
4 let us know who you may represent.

5 MS. CHARLAND: Gloria Charland,
6 C-H-A-R-L-A-N-D. I am an impacted citizen from
7 Lake County, Illinois like Evan. I have lived
8 there for 30 years. My husband and children live
9 there, my grandchildren live there, and my
10 87-year-old mother lives there.

11 I am a school teacher and my
12 students and their parents also live in Lake
13 County. Lake County and Waukegan like other
14 communities in Illinois are jeopardized by the
15 serious public health threat of coal combustion
16 waste, CCW, in your lingo.

17 We have an active coal burning
18 power plant on the shores of Lake Michigan in
19 Waukegan, and next to that plant and Lake Michigan
20 are two active coal ash ponds as well. In 2010,
21 five wells near the plant were tested, verifying
22 that these coal ash ponds have already
23 contaminated our groundwater exceeding USEPA
24 groundwater standards and arsenic, sulfate, iron,

1 manganese, chloride and boron.

2 In 2012, the IEPA issued the
3 plant a notice for violating heavy metal water
4 quality standards in groundwater wells near the
5 CCW ponds and concluded that this contamination
6 had been caused by leakage from the two coal ash
7 ponds.

8 And if groundwater contamination
9 were not a serious concern, as of course it is, I
10 am concerned about this contamination leaching
11 into Lake Michigan. As I had mentioned before,
12 these two sites are right on the lakefront.

13 Even if corrective measures have
14 been taken to address the contamination issues, I
15 believe that stricter regulations are necessary.
16 Having coal ash ponds right next to Lake Michigan,
17 a major source of our drinking water, is just too
18 risky. Recently, the plant was taken over by NRG
19 Energy, Incorporated, and the community has not
20 yet been informed as to what NRG plans to do with
21 the plant, and, of course, the coal ash ponds.

22 As I understand it, the IEPA is
23 proposing rules for regulating CCW waste at power
24 plants in Illinois to protect our environment and

1 protect citizens like me and my family from future
2 water contamination by these sites in Waukegan.

3 However, under these proposed
4 rules, NRG, the new owner, can choose to close
5 that plant and not remove the coal ash. This
6 would leave the clean-up costs to our community.

7 I urge the IEPA to strengthen
8 these proposed rules to protect citizens like me
9 and my family. Companies such as NRG Energy need
10 to be required to demonstrate that they have the
11 financial means and commitment to clean up these
12 coal ash ponds and not put the financial burden on
13 our community. Thank you for the opportunity to
14 testify.

15 HEARING OFFICER FOX: Ms. Charland,
16 thank you for your comment, and we are ready for
17 Mr. David Villalobos; is that correct?

18 MS. VILLALOBOS: Yes.

19 HEARING OFFICER FOX: Please step
20 forward, and if you would again spell your name
21 and let us know who you may represent.

22 MS. VILLALOBOS: David Villalobos,
23 last name is, V-I-L-L-A-L-O-B-O-S. I am a
24 volunteer with the Clean Power Lake County

1 campaign. Some of what I wanted to state have
2 already been narrated by Evan and Gloria, but I
3 think that strengthens our concern then.

4 Thank you for the opportunity to
5 voice my concerns. As I said, my name is David
6 Villalobos. I am a lifelong resident of Waukegan,
7 and I live where the coal burning power plant is
8 at in my community. I will start off with a piece
9 of information. As stated, in 2012 the Illinois
10 Environmental Protection Agency issued the plant
11 in Waukegan, which at that point in time was owned
12 by Midwest Generation, a note of violation for
13 heavy metal water quality standards in the
14 groundwater near the ash ponds, concluding that
15 the violations had been caused by waste leaking
16 from the ash ponds.

17 What this for me addresses is my
18 concern that the -- relating to regulations for
19 businesses required to pay the cost of
20 remediation. As stated, the Midwest Generation
21 power plant has changed ownership, and that
22 ownership has gone to the owner of NRG. NRG may
23 decide to shut down the plant and as such not have
24 to deal with the cost for remediation.

1 In my opinion, the closure of
2 the plant would be beneficial to Waukegan's
3 community health, yet there also has been a long
4 history of industries on Waukegan lakefront that
5 have polluted the land, exited the site and left
6 the residents of Waukegan with a bleak lakefront
7 that needs millions of dollars of remediation.

8 Waukegan as a community has been
9 unable to afford to revitalize the lakefront due
10 to remediation costs. Waukegan cannot afford to
11 have another industry leave the cost of
12 remediation to the citizens of the community. I
13 ask that you make it a regulation that as an
14 owner, that owner provides financial assurance
15 they will pay all the costs for remediation,
16 should they exit a site.

17 My community has been directly
18 affected for multiple decades from coal ash
19 pollution, and I believe that stronger regulations
20 need to be put into place. Thank you for this
21 opportunity to voice my concern.

22 HEARING OFFICER FOX: Thank you,
23 sir. Your comments are, of course, reflected in
24 the record.

1 Ms. Troha, please step forward,
2 and if you would also again please spell your name
3 and let us know who you may represent.

4 MS. TROHA: Mary Fran Troha;
5 M-A-R-Y, F-R-A-N, T-R-O-H-A.

6 As a lifelong resident of
7 Waukegan, I spent my childhood in the 1950s in an
8 economically prosperous Waukegan. It's a far cry
9 from my city today. Please bear with me as I give
10 a brief history lesson.

11 In the 1950s, recreational
12 opportunities abounded; swimming, beach parties,
13 boating, family picnics, fish for dinner directly
14 off fishing boats in the harbor. My daughter born
15 in the early '80s could not swim in the lake. No
16 beach parties were ever held. She never ate a
17 fish from an offshore fishing boat.

18 And why was this? Because
19 citizens of Waukegan were blissfully unaware that
20 factories along the lakefront had poisoned our
21 lakefront. By the early '70s when I returned home
22 from college, the downtown had all but closed due
23 to citizens that moved away and the factories had
24 closed, taking little to no financial

1 responsibility for the seven brownfields left near
2 the lake.

3 I ask today where was the
4 regulation at the state level to prevent the
5 demise of my economy and my city? Today as a
6 taxpayer I am funding several Superfund sites on
7 our lakefront. Our 80-year-old coal plant
8 continues to spew sulfur dioxide into the air I
9 breathe and is responsible for two coal ash wastes
10 whose poisonous leachate and runoff could
11 potentially affect the drinking water of 50
12 million people, and there is still no adequate
13 regulatory responsibility imposed by my state
14 government to protect my health or my pocket book.

15 As an Illinois taxpayer and
16 voter, I want regulations that enforce a strict
17 timeline to ensure present coal ash pond safety
18 and assurance that these impoundments are closed
19 in a timely, effective way. I want complete
20 removal of all coal waste from our community. And
21 further, my community should not be financially
22 responsible for any of this and -- nor should I as
23 a taxpayer be left to cover their clean-up costs.
24 Regulations must direct the company to pay the

1 bill.

2 Our existing coal ash ponds
3 represent a deterrent to the redevelopment of
4 Waukegan lakefront. The Waukegan marina with the
5 lakefront ecosystem, our positioning on the
6 regional rail lines create a unique opportunity
7 for forward looking businesses to establish
8 themselves in this spot in Illinois, adding to the
9 tax base and creating jobs.

10 In this new millennium, your
11 agency now bears the responsibility that
12 government in the past failed to take. Take
13 seriously your responsibility to recommend the
14 most stringent and enforced coal ash treatment
15 regulations. The lack of regulation that hurt my
16 city can be replaced by tough regulation that can
17 help to rebuild my city. Thank you.

18 HEARING OFFICER FOX: Thank you,
19 ma'am. The next name we have on the list was Mr.
20 Dubaniewicz, if I am pronouncing that correctly.
21 You did want to go ahead and comment; is that
22 correct?

23 MR. DUBANIEWICZ: Yeah, I buckled
24 under pressure.

1 HEARING OFFICER FOX: You are fine
2 right there, sir, but given your surname, I will
3 make an extra point of asking you to spell it for
4 our court reporter.

5 MR. DUBANIEWICZ: Certainly. Joseph
6 Dubaniewicz, D-U-B-A-N-I-E-W-I-C-Z. I live in
7 Lake County, Illinois and work as a chronic
8 volunteer and -- in Waukegan. And I am concerned
9 with the quality of the groundwater and the Lake
10 Michigan water near the Midwest Generation
11 coal-fired power plant.

12 One of the organizations that I
13 volunteer with is called Green Town Waukegan
14 Community Garden. It occupies a city block, and
15 we have built several dozen raised beds for
16 growing vegetables. The seeds and seedlings and
17 soil are donated by conservation groups, and the
18 water is supplied by the city of Waukegan.

19 We grow vegetables and the
20 garden is open to the public for free harvesting
21 and as the season continues. We also have native
22 plant beds for birds and bees and butterflies to
23 flourish. The garden overlooks Lake Michigan and
24 they are both in the harbor.

1 Not so many fishing boats as
2 before, because the fish are tainted by chemicals.
3 For the garden, the plants are non-GMO, and the
4 use of raised beds is to avoid possible toxic
5 groundwater, not necessarily because of Midwest
6 Generation coal ash, but because the site was
7 previously a dry cleaning store. So the ground is
8 not that great, but the added soil helps that
9 situation.

10 Regardless, the use of city
11 water is a concern and the ecological purity of
12 the garden's water and oil -- excuse me -- water,
13 air and soil resources is paramount. If the coal
14 ash remains and percolates through the air and
15 water, our future is grim. We are feeding the
16 community's low income residents, and their health
17 is my concern. Is it your concern? Thanks for
18 listening.

19 HEARING OFFICER FOX: Sir, thank you
20 for your comment. Ms. Taylor we are ready for
21 you. Once again, if you would spell your name and
22 let us know who you may represent.

23 MS. TAYLOR: That's Tracey,
24 T-R-A-C-E-Y, Taylor, T-A-Y-L-O-R. I am also a

1 volunteer on the Clean Power Lake County Coalition
2 campaign.

3 Thank you for the opportunity to
4 testify. My name is Tracey Taylor, and I am a
5 resident of Lake County where the coal ash ponds
6 in Waukegan reside. As a former Unocal
7 Corporation employee in Schaumburg, Illinois, I
8 have directly experienced regulations that
9 required Unocal to remediate the sole on their
10 property at the close of the Unocal '76 gas
11 station.

12 That corporation was responsible
13 for 100 percent financial responsibility for that
14 project in a sale of the property. As a former
15 marketing representative of coal products produced
16 at a Clinton, Iowa polyethylene resin plant, I am
17 well aware that there were plant regulations and
18 ethics concerning the surrounding community and
19 environment.

20 Coal ash problems are occurring
21 in Waukegan, Illinois now, and allowing these
22 problems to continue endangers our community.
23 Complete removal of all waste on the site should
24 be the assumed closure plan and any other plan

1 chosen must show that alternatives were
2 considered.

3 Further, strict timelines must
4 be enforced to ensure impoundments are closed in a
5 timely and effective way. Allowing coal plant
6 operators to continue dumping coal ash into
7 leaking impoundments puts our communities at risk.

8 The weight of coal ash problems
9 is a tremendous burden that Waukegan should not be
10 held responsible for. Given the potential cost of
11 addressing aged impoundments and groundwater
12 contamination, this rule needs a financial
13 assurance requirement placed on the companies that
14 are responsible for the coal ash ponds to make
15 sure that Illinois taxpayers are not left to cover
16 the bill.

17 We must require companies with
18 coal ash ponds to show they have the financial
19 means to clean them up so communities are not left
20 with the responsibility and the price tag. The
21 rules should be revised to give the public 60 days
22 to comment on the plans proposed by the facility
23 and to allow the Agency to hold a public meeting
24 on the plan when there is strong interest from the

1 public. Thank you all for your time and for the
2 opportunity to testify.

3 HEARING OFFICER FOX: Ms. Taylor,
4 thank you for your comments today. Am I correct
5 that there is no one else present who wishes to
6 offer a comment to the Board?

7 (No response.)

8 HEARING OFFICER FOX: Neither seeing
9 nor hearing any indication that there is, I think
10 we are prepared to recess for the day. As I
11 mentioned -- Ms. Olson, did you have a question?

12 MS. OLSON: I have a matter to
13 address before we recess for the day.

14 HEARING OFFICER FOX: Why don't you
15 go ahead.

16 MS. OLSON: We prepared responses to
17 the Board's questions. In the event that we were
18 to get to them tomorrow, I thought maybe we should
19 pass them out today so that everyone has time to
20 review them.

21 I think we are on Exhibit 32.
22 So I would like to mark this as Exhibit -- our
23 responses to the Board's questions as Exhibit 32,
24 and move it into the record.

1 HEARING OFFICER FOX: You are
2 correct, Ms. Olson, about the exhibit number. It
3 is, indeed, number 32. The participants have
4 heard the motion to admit the responses of the
5 Agency to the Board's questions.

6 Ms. Olson, why don't I give you
7 a moment to circulate that, and we can see if
8 there is any objection on their part.

9 Ms. Olson, thank you for
10 distributing those. I believe the participants
11 have had a chance at least quickly to review what
12 Ms. Olson has moved to admit into the record as
13 Hearing Exhibit No. 32.

14 Is there any objection?

15 (No response.)

16 HEARING OFFICER FOX: Neither seeing
17 nor hearing any, Ms. Olson, it will be marked and
18 admitted as Exhibit No. 32.

19 (Whereupon, Hearing Exhibit
20 No. 32 was marked for
21 identification and admitted
22 into evidence.)

23 MS. OLSON: Thank you.

24 HEARING OFFICER FOX: Before we did

1 recess, were there any other procedural issues to
2 take up?

3 (No response.)

4 HEARING OFFICER FOX: Neither seeing
5 nor hearing any, as I stressed right after the
6 last break, we will resume at 9 o'clock tomorrow
7 morning, which is different, of course, than our
8 beginning time of 10 o'clock today. If you would
9 all make an extra effort to be quick, we can get
10 underway and make the best use of the
11 approximately two hours we have before we need to
12 break for the Board meeting.

13 Is there anything else for the
14 good of the cause?

15 (No response.)

16 HEARING OFFICER FOX: Seeing no --

17 MS. BUGEL: I have one question
18 about papers and boxes. Can we leave them in the
19 room?

20 HEARING OFFICER FOX: You may do so.
21 I would candidly recommend not doing so, not
22 because I am aware of any specific risks or
23 problems, but it would be probably wisest to leave
24 with them and to bring them back in the morning.

1 I know that's a bit of a burden, but I think that
2 would be the safest course to make sure that you
3 have got what you need. If you would like to
4 bring them upstairs to the Board's clerk's office,
5 that would be one option and I think they would be
6 a little more secure there.

7 Anything else? We can see you
8 all at 9:00, and we are off the record for today.

9 (END OF PROCEEDINGS.)
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C E R T I F I C A T E

I, KARI WIEDENHAUPT, do hereby certify that the foregoing was reported by stenographic and mechanical means, which matter was held on the date, and at the time and place set out on the title page hereof and that the foregoing constitutes a true and accurate transcript of same.

I further certify that I am not related to any of the parties, nor am I an employee of or related to any of the attorneys representing the parties, and I have no financial interest in the outcome of this matter.

I have hereunder subscribed my hand on the 23rd day of may 2014.



KARI WIEDENHAUPT, CSR



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