

1 BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

2

3 IN THE MATTER OF:)
)
 4 PROPOSED SITE SPECIFIC)
 RULE FOR CITY OF)
 5 SPRINGFIELD, ILLINOIS,) R09-8
 OFFICE OF PUBLIC) (Site-Specific
 6 UTILITIES, CITY WATER,) Rulemaking - Water)
 LIGHT and POWER and)
 7 SPRINGFIELD METRO SANITARY)
 DISTRICT FROM 35 ILL. ADM.)
 8 CODE 302.208(g); NEW 35)
 ILL. ADM. CODE 303.446)

9

10

11 Proceedings held on December 16, 2008, at 10:11 a.m., at
 12 the Illinois Pollution Control Board, 1021 North Grand
 Avenue East, Springfield, Illinois, before Marie E.
 Tipsord, Hearing Officer.

13

14

15

16 Reported By: Karen Waugh, CSR, RPR
 CSR License No: 084-003688

17

18 KEEFE REPORTING COMPANY
 11 North 44th Street
 Belleville, IL 62226
 19 (618) 277-0190

20

21

22

23

24

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

APPEARANCES

Board Members present:

Chairman G. Tanner Girard
Board Member Thomas E. Johnson
Board Member Shundar Lin

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BY: Ms. Joey Logan-Wilkey
Assistant Counsel
Division of Legal Counsel
1021 North Grand Avenue East
Springfield, Illinois 62794-9276
On behalf of the Illinois EPA

HODGE DWYER ZEMAN

BY: Ms. Christine G. Zeman
BY: Ms. Katherine D. Hodge
BY: Ms. Lauren C. Lurkins
Attorneys at Law
3150 Roland Avenue
Springfield, Illinois 62705-5776
On behalf of the City of Springfield, Illinois,
Office of Public Utilities, City Water, Light and
Power and Springfield Metro Sanitary District

	INDEX	
	WITNESS	PAGE NUMBER
1		
2		
3	CWLP Panel	13
	Bill Murray	
4	Dave Farris	
	Doug Brown	
5	Gregg S. Humphrey	20
	Traci Barkley	23
6	Robert G. Mosher	39
	Christine G. Zeman	54
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		

1

EXHIBITS

2 (No exhibits entered.)

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

PROCEEDINGS

(December 16, 2008; 10:11 a.m.)

HEARING OFFICER TIPSORD: Good morning. My name is Marie Tipsord, and I've been appointed by the Board to serve as a hearing officer in this proceeding entitled "In the Matter of Proposed Site Specific Rule for the City of Springfield, Illinois, Office of Public Utilities, City Water, Light and Power and Springfield Metro Sanitary District from 35 Ill. Admin Code 302.208(g); New 35 Illinois Admin Code 303.446. With me today to my right is the presiding board member, Acting Chairman G. Tanner Girard. To his immediate right is Board Member Dr. Shundar Lin, and to my immediate left is Board Member Thomas Johnson.

This rulemaking was sent to first notice by the Board on September 16, 2008, and was published for first notice on October 10, 2008, at 32 Ill. Reg. 16303. The Board held its first hearing in this proceeding on November 3, 2008.

The purpose of today's hearing is twofold. First, this rulemaking is subject to Section 27(b) of the Environmental Protection Act. Section 27(b) of the Act requires the Board to request the Department of Commerce and Economic Opportunity to conduct an economic impact

1 study on certain proposed rules prior to the adoption of
2 those rules. If DCEO chooses to conduct the economic
3 impact study, DCEO has 30 to 45 days after such request
4 to produce a study of the economic impact of the proposed
5 rule. The Board must then make the economic impact study
6 available or DCEO's explanation for not conducting the
7 study available to the public for at least 20 days before
8 public hearing on the economic impact of the proposed
9 rule.

10 In accordance with Section 27(b) of the Act, the
11 Board requested by a letter dated September 18, 2008,
12 that DCEO conduct an economic impact study for the
13 above-referenced rulemaking. The Board has received no
14 response. A copy of the Board's letter is available here
15 in the middle of the table, and we will accept comments
16 concerning DCEO's actions today.

17 The second reason for today's hearing is that we
18 have questions that have been prefiled, and on December
19 12, the petitioner filed a motion to strike questions or
20 clarify and a motion to exclude witnesses of Prairie
21 Rivers Network. As they laid out in both of those
22 motions, the response time will not have had time to run
23 by today's hearing. Therefore, before I rule on the
24 motions, which I will do so orally here at the hearing, I

1 will allow anyone to respond to the objections on the
2 record and then make my ruling. We will first address
3 the motion to strike the questions, and with that, I
4 think we'll go ahead and do that, and is there any
5 response to the motion to strike? Did you have a
6 response?

7 MS. BARKLEY: I'd like to respond. I went
8 through and I --

9 THE REPORTER: Can I have your name, please?

10 MS. BARKLEY: Traci Barkley, T-R-A-C-I,
11 Barkley, B-A-R-K-L-E-Y. I'm with Prairie Rivers Network.
12 I went through each of our questions and looked at the
13 comments that were made in the motion to strike or
14 clarify, and I'd like the opportunity to clarify why
15 these questions were asked. There were only two
16 questions where I can see where the questions that were
17 asked might be somewhat irrelevant to this adjusted
18 standard, and those were number 27 and 28.

19 HEARING OFFICER TIPSORD: Okay.

20 MS. BARKLEY: And I don't know if you want
21 me to go through and -- question by question, but I can
22 generally say that some of -- as far as some of the
23 questions being related to Hunter Lake or being used for
24 discovery, that's not the case at all. It's actually as

1 we're working on another issue, which is the Hunter
2 proposed reservoir, we've learned of information that
3 applies to CWLP's practice that do have bearing, I think,
4 to the adjusted standard in terms of other options, which
5 is why questions weren't asked before. I think this
6 process has moved very quickly and it's -- I feel like
7 we've worked within the guidelines and timelines that
8 have been given, but it has taken the full amount of time
9 that's been given to us to process information,
10 understand it and be able to ask the questions that we'd
11 like to ask today.

12 As far as new information or repeat questions
13 that petitioner thinks that have already been answered,
14 some of these questions were answered in part either in
15 our phone conference or at the last hearing, but the way
16 these questions are phrased, they're asking for the
17 petitioner to expand on the answer that was given. I
18 don't feel like any of the questions that have been asked
19 have been fully answered or answered in the way that
20 we've been asked -- or that we'd like to ask them today.

21 HEARING OFFICER TIPSORD: Okay. Any other
22 comments, response? Would you like to reply?

23 MS. ZEMAN: If I may. My name is Christine
24 Zeman. With respect to the last part about those that

1 may have been asked before in part and now sought to be
2 clarified, that opportunity was had on November 3. If we
3 did not answer a question adequately at that time, then
4 it would be up to Prairie Rivers at that point when all
5 of our witnesses here, when we had Burns & McDonnell
6 people here from Kansas City to clarify the answer then
7 if in fact they did not believe that we answered it
8 sufficiently at that time.

9 The primary point we wanted to make is that we
10 believe that at the conclusion of the hearing you made it
11 very clear that the questions that were to be filed were
12 to be based upon the additional information that was
13 submitted or it was repetitious or they had basically
14 waived their opportunity, and we see very few of those,
15 and the only ones that are -- that do appear to be based
16 on the new information are the very end regarding a 2005
17 Burns & McDonnell report, and those questions indeed do
18 pertain to an entirely different project rather than the
19 site-specific rule. So we believe that we're justified
20 in doing that. We're not trying to be obstructionists.
21 To the extent that you -- the Board believes that it is
22 appropriate to answer some, we certainly would ask,
23 however, that we be allowed to do so in writing after
24 this hearing.

1 HEARING OFFICER TIPSORD: Anyone else? I
2 would agree that at the close of the last hearing it
3 seemed that it was pretty clear that today's hearing was
4 either supposed to be about questions regarding the
5 additional information or the DCEO action. However, at
6 the bottom -- the bottom line and at the heart of the
7 matter, it is a rulemaking proceeding and information
8 gathering is what we're here to do, and if Prairie Rivers
9 feels there's additional information to be gotten, I'm
10 disinclined to strike all the questions as a whole. What
11 I will do is allow the petitioner to reserve the right to
12 answer any of the questions in writing that they feel
13 they can't clarify here. I will also allow you to ask
14 for clarification from Prairie Rivers Network about what
15 they're looking for in the questions and take objections
16 on a question-by-question basis.

17 MS. ZEMAN: And is the latter part of that
18 for us to ask here what exactly they're looking for?

19 HEARING OFFICER TIPSORD: Let's get it on
20 the record.

21 MS. ZEMAN: Very good.

22 HEARING OFFICER TIPSORD: Let's get it on
23 the record.

24 MS. ZEMAN: Very good.

1 HEARING OFFICER TIPSORD: Okay. Now, the
2 second part was also a motion to strike any additional
3 witnesses. Ms. Barkley, you had indicated you might have
4 a witness? Do you plan to present a witness today?

5 MS. BARKLEY: No.

6 HEARING OFFICER TIPSORD: All right. So we
7 don't -- that's been mooted by you're not planning to
8 present a witness.

9 MS. BARKLEY: We'll submit written comments,
10 but not knowing what we're coming into and what would be
11 left in terms of the additional questions and subject
12 matter to be dealt with today, we decided to hold off.

13 HEARING OFFICER TIPSORD: And are you okay
14 with mooting that objection?

15 MS. ZEMAN: Yes.

16 HEARING OFFICER TIPSORD: Okay. With that,
17 then, we'll have Ms. Barkley read the question into the
18 record and then there will be a chance to answer. Again,
19 anyone may ask a follow-up. I ask you to raise your hand
20 and let the court reporter know who you are before you
21 ask your question. Please speak one at a time. If
22 you're speaking over each other, the court reporter will
23 not be able to get your questions on the record, and any
24 question asked by a board member or staff are intended to

1 help build a complete record for the Board's decision and
2 not express any preconceived notions or bias. And with
3 that, let's go ahead and at least swear in your witnesses
4 again, if that's okay with you.

5 MS. ZEMAN: Yes, yes. Do you want for the
6 record who all will be potentially answering the
7 questions?

8 HEARING OFFICER TIPSORD: Yes, please.

9 MS. ZEMAN: Just for the record, I would
10 like to note that with me from Hodge Dwyer Zeman is
11 Katherine Hodge and Lauren Lurkins to my left. To the
12 far left is Jeff Slead with the District, with the
13 Sanitary District, and then to my right is Bill Murray,
14 Dave Farris, Doug Brown, and -- with CWLP. On the very
15 end is Gregg Humphrey with the Sanitary District, and
16 then behind me are also representatives either of CWLP or
17 the District, and I'm not sure whether any would be
18 prepared as witnesses today, so for now, probably --
19 Mr. Nika, do you think you may be answering any
20 questions?

21 MR. NIKA: I don't believe so, no.

22 MS. ZEMAN: Then probably just the CWLP
23 witnesses at the table here can be sworn.

24 HEARING OFFICER TIPSORD: All right. With

1 that, can we have them sworn?

2 (Witnesses sworn.)

3 HEARING OFFICER TIPSORD: Anything else,
4 Ms. Zeman?

5 MS. ZEMAN: No. Thank you.

6 HEARING OFFICER TIPSORD: Ms. Barkley, if
7 you want to go ahead and start with question number 1.

8 MS. BARKLEY: Okay. I'd like to ask the
9 question and then I'll clarify the points of the
10 question. Number 1, we've learned from the final
11 environmental impact statement, Section 2.2.6.1, for the
12 proposed dam and reservoir also known as Hunter Lake that
13 nearly 3.3 million gallons per day of water are lost from
14 CWLP's unlined ash ponds due to evaporation and seepage
15 into the ground. Assuming that the seeped water would
16 drain towards groundwater and Sugar Creek and contribute
17 to increased boron as well as other pollutant
18 concentrations and loading, why haven't these ponds been
19 lined? Is the water currently seeping from the ponds
20 causing violations of applicable groundwater standards,
21 and if only the flue gas desulfurization, FGDS,
22 wastewater stream is diverted from the ponds, which, if
23 any, of the groundwater standards may be exceeded?

24 The reason we ask this question is we are

1 concerned that there is a loss of boron through the
2 groundwater which would allow a lower effluent
3 concentration, which would have some bearing on what is
4 being dealt with in this adjusted standard and would also
5 allow an artificial estimate of loading of boron and
6 other pollutants to Sugar Creek and Sangamon River.

7 MS. ZEMAN: Just for the record, because we
8 had filed our motion to strike, we actually had not
9 prepared to answer each question. May I take a moment to
10 confer with my client, please?

11 HEARING OFFICER TIPSORD: Absolutely.

12 (Discussion held off the record.)

13 MS. ZEMAN: We're concerned that the
14 question does not have any bearing on this proceeding,
15 nor on the issue for the location here. To the extent
16 that there are issues about the cost of the -- I mean,
17 arguably, lining of the ponds is a cost issue. We might
18 be able to take a look at that in the post-hearing
19 submittal, and similarly with groundwater. There's
20 nothing in the record about that, so we would have to
21 reserve any kind of comment until our post-hearing
22 submittal.

23 HEARING OFFICER TIPSORD: Okay.

24 MS. BARKLEY: Okay. I'd like to make just

1 one more statement expanding on why we think this is
2 important. I think both in the Sargent & Lundy report
3 and the Burns & McDonnell report it was noted that there
4 is potential for leaching, and I can't say off the top of
5 my head whether there was evidence that there was, but
6 there -- it was put forward that the life of these ponds
7 is limited, and we're concerned that if the ground is
8 saturated and if this is a route of loading these
9 pollutants in the Sangamon River and that's not figured
10 into the calculations and the models that are predicting
11 what needs to be done to consider what is already being
12 contributed to the river or could be in the future, that
13 that gives an artificial assessment of what's being
14 proposed for the adjusted dam and the ability for the
15 District to meet what's being -- the 11 milligrams per
16 liter, 4.5 and 2.

17 MS. ZEMAN: Thank you for the additional
18 clarification. May I just --

19 HEARING OFFICER TIPSORD: Sure, absolutely.

20 MS. ZEMAN: -- speak with Mr. Farris?

21 (Discussion held off the record.)

22 MS. ZEMAN: We will respond in writing.

23 Thank you.

24 HEARING OFFICER TIPSORD: Thank you. Go

1 ahead, Ms. Barkley.

2 MS. BARKLEY: Number 2, several other
3 coal-fired electric generating stations in Illinois
4 currently sell their coal combustion waste to be used as
5 a beneficial by-product. We'd like to know what fraction
6 of the ash currently being produced by Dallman units 31,
7 32 and 33 and what fraction already in the ash ponds is
8 potentially sellable for construction or other uses, and
9 we wonder if CWLP has explored this option.

10 MS. ZEMAN: Mr. Brown, do you want to take a
11 crack at that, please?

12 MR. BROWN: This is Doug Brown with City
13 Water, Light and Power. 85 percent of our ash from 33 is
14 fly ash, and it's used for fill material on construction
15 projects if they're available. 85 percent of the ash
16 from units 31 and 32 is bottom ash and is used by asphalt
17 companies.

18 MS. BARKLEY: So you're saying that 30
19 percent of the total ash, fly ash and bottom ash
20 combined, from Dallman units 31, 32 and 33 is being
21 sluiced right now to the ponds, the remaining 15 percent
22 and the remaining 15 percent?

23 MR. BROWN: All of it's sluiced. It's
24 recovered at the ponds.

1 MS. BARKLEY: Oh, it's recovered at the
2 ponds. Okay.

3 MR. BROWN: Yeah. There's no means for us
4 to be able to recover that at the Dallman facility
5 itself.

6 MS. BARKLEY: And could you repeat 31 and
7 32, the 85 percent of the bottom ash, what that's used
8 for?

9 MR. BROWN: That's used by asphalt
10 companies.

11 MS. BARKLEY: Asphalt. Okay.

12 MR. MURRAY: Let me clarify that. My name
13 is William Murray. We also sell some of it to a roofing
14 shingle company.

15 MS. BARKLEY: And is there a reason why the
16 remaining 15 percent from each of those waste streams is
17 not used?

18 MR. BROWN: So for example, then for the 33,
19 15 percent of it's bottom ash, which is not usable, and
20 then on 31, 32, 15 percent is fly ash, which is not
21 usable.

22 MS. BARKLEY: Can you explain why it's
23 usable in one instance and not in the other?

24 MR. BROWN: It doesn't meet the requirements

1 by the vendors.

2 MS. BARKLEY: Okay. Thank you.

3 CHAIRMAN GIRARD: Could I ask a question,
4 then? If there was a market for your fly ash, would you
5 sell all of it or give it away?

6 MR. MURRAY: Let me answer that question two
7 ways. First, are you referring to ash that's generated
8 now? Because the ash ponds contain ash that's been
9 generated over a number of years, so --

10 CHAIRMAN GIRARD: Well, it's just a very
11 general question. I mean, is there any incentive for you
12 not to sell it?

13 MR. MURRAY: We have explored that, but
14 there are limited markets in this area for that.

15 CHAIRMAN GIRARD: So you're -- it's not a
16 desire on your part; it's the limits of the market.
17 That's what you're saying.

18 MR. MURRAY: For us to get rid of all ash
19 that's on site, yes.

20 CHAIRMAN GIRARD: Thank you.

21 MS. BARKLEY: I just have one follow-up for
22 the Dallman unit 4. Will that ash also be able to be
23 recovered and sold to the same markets? Actually, that's
24 dry ash.

1 MR. BROWN: Dallman 4, yeah, it's -- the fly
2 ash is dry ash, but there's also other components there
3 that probably would not make it sellable to control
4 mercury, so that would probably have to be landfilled
5 somehow. We have not gotten into that, though, yet.

6 MS. BARKLEY: Okay. Question number 3, does
7 a pipeline currently exist linking Springfield Metro
8 Sanitary District to CWLP power production facilities?
9 The reason I'm asking this again is because we were given
10 a different answer at a separate meeting with folks from
11 the Sanitary District, and so I --

12 MS. ZEMAN: A different answer than what?

13 MS. BARKLEY: I think last time we asked
14 this question at the 11 -- November 3 hearing, we asked
15 if pipeline existed and we were told no, pipeline does
16 not exist linking Springfield Metro Sanitary District and
17 CWLP, and so wondering if -- whether it's in use or not,
18 does a pipeline already exist linking the two areas?

19 MS. ZEMAN: Who wants to take a crack at
20 that answer? It does require clarification of the
21 question, actually.

22 MR. BROWN: The -- Well, in reference to the
23 last time that we answered the answer, I guess, the
24 pipeline does not exist to the 8th Street facility. It

1 exists to Sugar Creek.

2 MR. HUMPHREY: Sugar Creek.

3 MR. BROWN: Sorry.

4 MS. BARKLEY: So there is a pipeline linking
5 CWLP to Sugar Creek.

6 MR. BROWN: Right.

7 MR. FARRIS: This is Dave Farris from CWLP.
8 I guess it depends on your -- what you're referring to as
9 a pipeline. There are existing sewers that leaves CWLP's
10 property, obviously. What we are contemplating here and
11 before the Board is a pipeline dedicated for this stream,
12 not an existing sewer.

13 MS. BARKLEY: A stream.

14 MS. ZEMAN: And for the record, just so that
15 it is clear, because you commented that you thought you
16 had received different information from the District, I
17 don't know -- Gregg Humphrey could -- you haven't been
18 sworn. Do you want to swear Mr. Humphrey in, please, so
19 that he can clarify if there was any misunderstanding or
20 confirm what has been testified to by Mr. Brown and
21 Mr. Farris?

22 (Witness sworn.)

23 MR. HUMPHREY: Okay. I guess my first thing
24 would be is there's currently not a pipeline constructed

1 from City Water, Light and Power to connect to our Spring
2 Creek facility, which is located on 8th Street. There
3 are existing sanitary sewers that run through the City
4 Water, Light and Power property that connect to our Sugar
5 Creek plant, but the intention of the discharge from the
6 power plants is to go to the Spring Creek plant, not the
7 Sugar Creek plant.

8 MS. BARKLEY: Okay. I understand that.
9 I -- And perhaps I remembered it wrong, but I remember a
10 discussion about the pipeline linking the -- one of the
11 facilities, which I thought it was Spring Creek, to CWLP
12 that could be used in any direction, but -- and my
13 recollection is it was proposed for one direction, could
14 be used in the other, but perhaps that was for the Sugar
15 Creek facility.

16 MR. HUMPHREY: No, it could not be used to
17 go in both directions. The system we have only can
18 transport waste to the Sugar Creek plant from the City
19 Water, Light and Power power plant property.

20 MS. BARKLEY: Okay. So the only link for
21 wastewater between CWLP and Spring Creek is the sewer
22 system right now.

23 MR. HUMPHREY: No. There is not a link
24 between the City Water, Light and Power property. It

1 would have to be constructed.

2 MS. BARKLEY: But right now there are
3 sewers.

4 MR. HUMPHREY: There are sewers that go to
5 Sugar Creek.

6 MS. BARKLEY: Sugar Creek. Okay.

7 MR. HUMPHREY: The Sugar Creek plant is a
8 completely separate watershed area plant which is located
9 on Interstate 72 east of Interstate 55.

10 MS. BARKLEY: Okay. Number 4 -- and this is
11 follow-up to question number 1 -- please provide data
12 characterizing the quality of the groundwater beneath and
13 adjacent to the ash ponds, and again, we're concerned
14 that there's an additional source of loading to Sugar
15 Creek and Sangamon, and if 3.3 million gallons per day
16 are being lost from the ash ponds, of course some of
17 that's going to be evaporation, and I haven't seen any
18 data that says how much is lost in evaporation, how much
19 is lost towards leachate into the groundwater, but I
20 guess we're concerned this hasn't been taken into account
21 and looking at the protection of water quality standards
22 and aquatic life in the Sangamon/Sugar Creek systems.

23 HEARING OFFICER TIPSORD: If I may,
24 Ms. Barkley, is your question, then, that you're worried

1 that the groundwater will -- boron is seeping into the
2 groundwater, which will add to contamination into the
3 Sangamon River, from the groundwater to the river?

4 MS. BARKLEY: Yes, because I think anything
5 that goes into the groundwater because of the
6 interconnectedness between the Sangamon and surrounding
7 water tables that you would have water movement and
8 pollutant movement from the groundwater into the Sangamon
9 River, and our concern is that that just hasn't been --
10 that that part of the model hasn't been considered.

11 HEARING OFFICER TIPSORD: Okay. Can I have
12 you -- I'm going to have you sworn in just because your
13 description of the water table and stuff I think becomes
14 a fact, so I think I would be more comfortable if we have
15 you sworn in.

16 MS. BARKLEY: Sure.

17 (Witness sworn.)

18 HEARING OFFICER TIPSORD: Thank you,
19 Ms. Barkley.

20 MS. ZEMAN: I'm not sure we agree with her
21 assertions of fact, but in any respect, we will answer in
22 the post-hearing comments.

23 MS. BARKLEY: Can you answer if that has
24 been considered, if you've looked at --

1 MS. ZEMAN: We will answer that in the
2 post-hearing comments. Thank you.

3 MS. BARKLEY: Okay. And number 5, what does
4 CWLP propose to do with the brine concentrator-spray
5 dryer equipment already purchased for over 7 million
6 dollars?

7 MR. BROWN: We --

8 MS. ZEMAN: Mr. Brown, if you would.

9 MR. BROWN: This is Doug Brown. We plan to
10 either sell it or scrap it in the end.

11 MS. BARKLEY: It hasn't ever been used,
12 right?

13 MR. BROWN: No.

14 MS. BARKLEY: So it could be sold through --

15 MR. BROWN: It could be sold. It would -- I
16 mean, it would be a company that would use it for -- that
17 would be a brine concentrator for maybe a -- like, a
18 desalination plant. It would -- You know, it's not going
19 to be used by -- in the same manner we were going to use
20 it in, so --

21 MS. BARKLEY: And is the vendor open to -- I
22 don't know how these business dealings go. Is it
23 possible to through them find another potential buyer?

24 MR. BROWN: The vendor, I guess it's their

1 choice whether they want to sell a brand-new unit and --
2 or try to resell ours.

3 MS. BARKLEY: My concern is it's just a lot
4 of money to have scrapped, especially when we're looking
5 at the economic analysis of all of the other options. If
6 you have a pool of money and you're looking at spending
7 all these different things, this is already 7 million
8 that's gone.

9 MR. BROWN: It is --

10 MS. ZEMAN: And for the record, I think
11 Mr. Brown did make a comment on that specific point the
12 last time around, which is that is what makes the fact
13 that it was ineffective that much more egregious to CWLP,
14 because it did acquire equipment believing that it could
15 address the boron through that manner and it could not
16 function in that way, as we have already pointed out, at
17 a very significant cost, and I'm confident I can speak on
18 behalf of CWLP that if there is a way to recover some
19 money from that expenditure, it will certainly do so.

20 MS. BARKLEY: Okay. Number 6, what does the
21 applicant consider economically reasonable for the
22 treatment of boron?

23 MS. ZEMAN: Generally, I believe we've
24 answered that in the petition materials and the prefiled

1 testimony. Any information that we provide would likely
2 be basically a repetition of the information provided in
3 terms of the -- what we have looked at and what is
4 effective, what isn't effective, and we can put that
5 together again in our post-hearing comments.

6 HEARING OFFICER TIPSORD: And if I may,
7 since the Board's required to determine what is
8 economically reasonable, would I be correct in assuming
9 the petitioners feel that what they're requesting is --
10 would meet the legal standard of what the Board has?

11 MS. ZEMAN: Definitely. We believe we have
12 already established that and demonstrated that.

13 HEARING OFFICER TIPSORD: Wouldn't you like
14 one of your witnesses to answer that, or would you prefer
15 to be sworn in?

16 MS. ZEMAN: Certainly, certainly.
17 Mr. Murray?

18 MR. MURRAY: I believe that our opinion that
19 this is economically reasonable is evidenced by the fact
20 that this is the course of action that we're trying to
21 pursue as the most economically and technically feasible
22 method available.

23 HEARING OFFICER TIPSORD: Thank you. I'm
24 happy to swear you in, Chris, but --

1 MS. ZEMAN: No, that's okay. Thank you for
2 the clarification. I appreciate it.

3 MS. BARKLEY: Number 7 is a question that
4 perhaps Bob Mosher might be more able to answer, and this
5 is a follow-up to some of the information that was
6 provided by -- on behalf of IEPA after the November 3
7 hearing.

8 HEARING OFFICER TIPSORD: Would you like to
9 wait? I believe they're going to contact Mr. Mosher and
10 he will be stepping in.

11 MS. BARKLEY: Sure.

12 MS. ZEMAN: Just to go on the record, they
13 didn't know whether this would be limited to economic
14 issues or other issues and asked to be called if it did
15 go on, and Ms. Hodge has just stepped out to call them
16 in.

17 HEARING OFFICER TIPSORD: We can come back
18 to that, then, when he joins us.

19 MS. BARKLEY: Okay.

20 HEARING OFFICER TIPSORD: Makes more sense.

21 MS. BARKLEY: And then I think actually
22 number 8, it might be -- well, I don't know. The next
23 question is having to do with the MBI index,
24 macroinvertebrates.

1 MS. ZEMAN: And just for the record, these
2 issues are related to the testimony of Jeff Bushur with
3 Hanson Services, who is not present here today.

4 MS. BARKLEY: Okay.

5 MS. ZEMAN: So if it goes beyond what
6 Mr. Mosher can answer, we will have to address that in
7 the post-hearing comments.

8 MS. BARKLEY: Okay. I'll wait on that one
9 as well. Number 9, I'll strike -- well, I'll read it and
10 then I'll -- I will strike, because I went back and
11 reviewed the information and found it to be sufficient,
12 but there is one -- the second question I'd like to have
13 answered. From the petition, quote, the FGDS blowdown is
14 a means to remove chlorides and other contaminants that
15 would otherwise build up in the system and cause a
16 corrosive environment in the stainless steel towers.
17 I'll strike the following line, which was, please
18 characterize with all available data the FGDS waste
19 stream prior to treatment or dilution in terms of
20 pollutants and concentrations. The following question is
21 what I'd like answered. What must be added to or removed
22 from this waste stream to avoid corrosion within towers,
23 pipelines and holding tanks?

24 MS. ZEMAN: I am not sure that the

1 information about the stainless steel towers is actually
2 relevant to the proceeding, but to the extent -- Dave or
3 Doug, do you want to address just that last question?
4 Or, Gregg, are you in a --

5 MR. FARRIS: I guess -- This is Dave Farris.
6 If I could ask for clarification in the question. It
7 says, what must be added or removed from this waste
8 stream to avoid corrosion within which towers, pipelines
9 and holding tanks? The ones on our property or --

10 MS. BARKLEY: Well, it would be the
11 pipelines linking the two facilities, the holding tanks
12 that are -- will be used in times of drought. I'm not
13 sure otherwise how it will be used, but anything that the
14 FGDS waste streams are going to be transported in or held
15 in. I just wonder if this needs to be taken into
16 consideration between Springfield Metro Sanitary District
17 and -- I'm sure it has, but I guess I'd like to get on
18 the record what other -- what else we can anticipate in
19 the waste stream in terms of Bioxide and what other
20 constituents will either be added to the FGDS waste
21 stream or removed from to address the corrosive nature of
22 it. I just didn't see that in the petition or the
23 analysis of what will be sent from CWLP to the Spring
24 Creek facility.

1 MS. ZEMAN: I'm confident it has been
2 considered, but perhaps the best witness to address that
3 is William Brown, who you may remember was here the last
4 time, with Crawford, Murphy & Tilly, who actually is on
5 behalf of the Sanitary District, and if you would, we
6 will provide an answer to that in our post-hearing
7 comments through Mr. Brown.

8 MS. BARKLEY: Okay.

9 MS. ZEMAN: Gregg -- excuse me. Gregg, is
10 that acceptable?

11 MR. HUMPHREY: That's acceptable.

12 MS. ZEMAN: Thank you.

13 MS. BARKLEY: Number 10, from other similar
14 facilities we expect the FGDS waste stream will likely
15 contain boron, sulfates, total dissolved solids, total
16 suspended solids, nitrate, ammonia, selenium, iron,
17 cadmium, mercury, manganese, as well as other pollutants.
18 If this waste stream is piped to the Springfield Metro
19 Sanitary District, what treatment besides dilution can we
20 expect from the Springfield Metro Sanitary District
21 Spring Creek treatment process for the pollutants present
22 in the FDGS waste stream? And I know we've asked this
23 before. I think the answer is primarily dilution, but I
24 guess I wanted to go past that and see, besides the use

1 of the ClariCone to pull some of the solids out and
2 dilution, is there anything else in the Spring Creek
3 plant or the proposed expanded Spring Creek plant that
4 will be useful in pulling out any additional pollutants?

5 MS. ZEMAN: May we have a moment?

6 HEARING OFFICER TIPSORD: Sure.

7 (Discussion held off the record.)

8 MS. ZEMAN: At this point in time, we will
9 get an answer to you, again, through Bill Brown with CM&T
10 in the post-hearing comments.

11 MS. BARKLEY: Okay. We're on question 11.
12 How will the Springfield Metro Sanitary District Spring
13 Creek facility be able to meet the proposed adjusted
14 standard of 11 milligrams per liter for boron during
15 times when enough water may not be available for
16 dilution; for example, severe droughts or even with
17 future reductions in wintertime base usage as plumbing
18 fixtures and appliances are replaced with equipment
19 meeting the federal water conservation standards which
20 mandate 40 to 70 percent reductions? And this does go
21 into the next question.

22 MS. ZEMAN: Part of this answer we believe
23 we've already answered through the testimony, the prior
24 testimony, in terms of what would happen in the time of a

1 drought, and then the last part, we would have to rely on
2 people that are not here at the hearing today, so we can
3 attempt to get that to you in the post-hearing comments
4 or refer to the record that already exists.

5 MS. BARKLEY: I think part of the answer
6 from the testimony on November 3 was -- leads into the
7 next question, which said there's a holding tank --
8 250,000-gallon holding tank which provides holding for 22
9 hours, and a follow-up question to that is we wonder if
10 you could characterize drought conditions for the last 25
11 years, which would catch the drought of 1988-89 -- I
12 think that was the year -- the more significant drought
13 for the Springfield area, and explain how the holding
14 capacity of 22 hours proposed would be sufficient to meet
15 the NPDES permit limits and water quality standards.

16 MS. ZEMAN: I would object to the request
17 that we characterize drought conditions for the last 25
18 years. I'm not sure that that is our burden to do in
19 terms of response to a question, but we are willing to
20 have Mr. Brown address the question without looking at
21 drought conditions for 25 years, because we actually
22 don't think that that may be relevant to the concern that
23 you've expressed. Mr. Brown?

24 MR. BROWN: This is Doug Brown. In

1 relations to the holding tank of 22 hours, and in
2 addition to that, the system can be cycled through or
3 cycled up as the water's kept being reused in the
4 process, and it's anticipated we get basically two days'
5 worth of storage time. Discussions with low flow
6 conditions would be a controlled release to match the
7 lower flows and the higher flows throughout the day.

8 MS. BARKLEY: So I guess I'd like to ask,
9 then, if you continue to cycle and reuse that water, will
10 you be concentrating the contaminants, then, in that
11 water?

12 MR. BROWN: Anything that's recycled in the
13 scrubber, everything gets concentrated up.

14 MS. BARKLEY: So I guess short of
15 characterizing for the last 25 years, I guess we'd like
16 to know if you've looked at the range of drought
17 conditions and predicted drought conditions and feel that
18 the twenty-two hours' holding time or even recycling
19 through two days' worth of storage is sufficient under
20 either, you know, lower flow or drought conditions to
21 meet the NPDES permit limits and water quality standards.

22 MS. ZEMAN: I can answer we do, but of
23 course I don't want to be testifying, so I don't know --
24 Mr. Brown, Mr. Farris or perhaps even Gregg Humphrey, do

1 you want to simply answer that for the record? Or unless
2 you want to prefer to post-hearing. Very good. As
3 Mr. Murray has reminded me, this is based on the 7Q10 low
4 flow conditions, but the calculations were prepared by
5 Hanson, so we will take another stab at that in the
6 post-hearing comments because Hanson is not present
7 today.

8 MS. BARKLEY: Okay. Do you want me to
9 continue with these or go to IEPA's --

10 HEARING OFFICER TIPSORD: Well, I don't --
11 the IEPA attorney has just stepped in, so let's go ahead
12 and ask the next question and then we'll --

13 MS. BARKLEY: Okay.

14 HEARING OFFICER TIPSORD: I would prefer not
15 to have Mr. Mosher questioned without his counsel
16 present.

17 MS. BARKLEY: Number 13, in reference to the
18 final product of the brine concentrator-spray dryer, the
19 petition states, quote, the by-product would be
20 considered a special waste according to chemical analysis
21 of the projected waste by-product.

22 HEARING OFFICER TIPSORD: Slow down.

23 MS. BARKLEY: Sorry. End of quote. Please
24 describe the nature of this special waste quantitatively

1 in terms of the contaminant concentrations and the
2 thresholds exceeded that place it in the special waste
3 class. For each of the contaminants responsible, what
4 options exist for either removing them upstream or
5 downstream of the brine concentrator, and has the
6 applicant investigated disposal options for the
7 by-product, including beneficial reuse as a wetting agent
8 for dry ash -- dry fly ash disposal operations?

9 MS. ZEMAN: Just for the record, I do
10 believe that we have already answered this generally with
11 respect to the material being characterized as a special
12 waste as well as the investigation of disposal options
13 for the by-product, but to answer your question here
14 today, perhaps, Mr. Brown, if you would address her
15 question, please.

16 MR. BROWN: Special waste -- The material as
17 a by-product of the brine concentrator is not known until
18 you actually build it, produce it, that you can actually
19 give a characterization of it, so at this point you
20 cannot do that. The waste companies that we dealt with,
21 though, based upon what -- the type of material that was
22 expected to be as far as the difficulty in handling it
23 classified it as a special waste.

24 MS. ZEMAN: Could you explain again, since

1 we're all present, about the difficulty in handling the
2 material?

3 MR. BROWN: The material -- I'm trying to
4 search for the right term. It basically absorbs moisture
5 out of the air. Hydrosopic, maybe? Is that the term?
6 Therefore, it's very difficult to dispose of. It's a --
7 It turns into a muddy-like substance. It would be very
8 difficult for them to landfill. I do believe, though,
9 that as far as all the options to dispose of upstream,
10 downstream of the brine concentrator systems, any
11 possible disposing of that could be blowdown in general
12 was covered in the TSD and the technical documents. It
13 would just be pretty cumbersome to go redo all those
14 right now. The by-product disposal operations for fly
15 ash as a wetting agent, I believe it was in the last
16 testimony, Burns & McDonnell, Don Schilling stated that
17 we didn't have enough fly ash on site to do that for --
18 it use that as a wetting agent. We would still have
19 quite a bit of the contaminant left.

20 MS. ZEMAN: Thank you.

21 MS. BARKLEY: Can you tell us what the
22 vendor, Aquatech, recommended be done or how those -- how
23 the concentrated salt should be handled?

24 MR. BROWN: They didn't.

1 MS. BARKLEY: Are you aware of other
2 facilities using this equipment and what they're doing
3 with the waste product?

4 MR. BROWN: There is no other facility right
5 now that's in commercial operation. That's what we
6 discussed the last testimony.

7 MR. FARRIS: For this type of application.

8 MR. BROWN: For this type of application.

9 MS. BARKLEY: And when you say for this type
10 of application, are you saying for the -- I know we've
11 distinguished that this waste stream is different because
12 it's Illinois coal and it's high boron content and the --
13 it was said this equipment wasn't applicable because of
14 that high boron concentration, but when you say for this
15 application, because I -- there is some disagreement as
16 to whether there are other facilities that are using this
17 equipment, and I wonder where --

18 MR. BROWN: For the treatment of FGD
19 blowdown.

20 MS. BARKLEY: Yes, and I just wonder, when
21 you say for this application, are you saying application
22 of that type of equipment to FDGS waste streams?

23 MR. BROWN: It's for the use of brine
24 concentrator-spray dryer on the treatment of FGD

1 blowdown.

2 MS. ZEMAN: May I object here? Because we
3 believe we did make the record very, very clear the last
4 time that this equipment or this technology is not being
5 used in this application anywhere commercially for the
6 FGDS blowdown. I don't believe the record yet
7 establishes the point that she is making, that there is
8 some disagreement on that, and if there is, then I
9 believe it is PRN's burden to establish that.

10 MS. BARKLEY: And --

11 HEARING OFFICER TIPSORD: And I would say I
12 just -- Ms. Barkley, I assumed when you made that
13 statement that it was your disagreement and that you
14 would be presenting information in post-hearing comments.

15 MS. BARKLEY: That's right. So I -- yeah, I
16 will. I'll support that in the written record, but I
17 wanted --

18 HEARING OFFICER TIPSORD: With that, I think
19 your objection's been addressed, but I note your point,
20 but I had -- I also just assumed that she meant they
21 would be providing that information.

22 MS. BARKLEY: And that's why I clarified, so
23 that we can follow up with that in terms of what your
24 position is when you say in this application, so the

1 application of the FGDS blowdown of the brine
2 concentrator-spray dryer equipment. Okay.

3 HEARING OFFICER TIPSORD: With that, if you
4 would like to go back to Mr. Mosher's questions we
5 reserved, 7 and 8.

6 MS. BARKLEY: Okay. So I have --

7 HEARING OFFICER TIPSORD: First we need to
8 have Mr. Mosher sworn in.

9 (Witness sworn.)

10 HEARING OFFICER TIPSORD: And I would note
11 before Ms. Barkley answers, we have -- we are allowing --
12 if you need to address this as part of post-hearing
13 comments, the Agency can certainly reserve the right to
14 do that.

15 MS. BARKLEY: Okay. I have two, maybe three
16 questions that would be directed to the Agency. The
17 first one is, what evidence is there that the aquatic
18 life on the Sangamon River downstream of Sugar Creek is
19 unimpaired by boron concentrations despite compliance
20 with the adjusted standard of 2 milligrams per liter, and
21 this question is in response to the Agency's explanation
22 of (d) listing the segment for impairment by boron, and
23 the reason that we think this is relevant is because we
24 maintain that there is an opportunity to compare the

1 adjusted standard and its potential impact on aquatic
2 life in the Sugar Creek stretch and its usefulness in
3 predicting or at least informing what the result of this
4 proposed adjusted standard would be.

5 MR. MOSHER: I think you need to go back to
6 how the Agency biologists make these assessments.
7 Illinois EPA provided the Board with a rundown of the
8 current status of the Sugar Creek and the Sangamon River
9 as far as impairment relating to the 303(d) list of
10 impaired waters, and --

11 HEARING OFFICER TIPSORD: Excuse me,
12 Mr. Mosher. For the record, I just want to note that
13 that was filed as public comment number 2.

14 MR. MOSHER: Is that right, Joey?

15 MS. LOGAN-WILKEY: I don't have it in front
16 of me. I'm not sure. If you need to reserve the right
17 to address the question after the hearing through
18 comment, I think that would be appropriate at this point,
19 Bob.

20 MR. MOSHER: Okay. We can do that, and what
21 may be good is if we also have our Agency biologists who
22 make these assessments write up an explanation for the
23 Board for its understanding of all this, but what I
24 wanted to say, though, is how that 303(d) list of

1 impaired waters is put together. The biologists go out
2 to the river or the stream. They look at the biology,
3 the macroinvertebrates and the fish, and if those groups
4 of aquatic life aren't what they should be, aren't as
5 healthy as they should be, then they say there's
6 impairment here for the biota. Once they say that, they
7 then are required to look for what is causing that
8 impairment. They use water quality standards to make
9 that judgment, including an adjusted standard that the
10 Board adopted years ago for those waters. They also --
11 where there are no water quality standards for substances
12 such as phosphorous or total suspended solids, they will
13 use some sort of rule of thumb based on an 85th
14 percentile of state-wide monitoring results.

15 So they look to standards, in the case of boron,
16 to make the decision, is that -- is this particular
17 substance, boron, causing impairment; if it meets the
18 standard, no; if it doesn't meet the standard, possibly,
19 is how they do it. So there isn't a -- any kind of a
20 good way to go out to the river, look at the condition of
21 the biota, and other than what I just said, say, oh, yes,
22 this is -- this impairment is due to boron or silver or
23 anything else. There just isn't a way to do that, so I
24 don't think that that's a pathway that's very useful to

1 try to say, oh, here's what the boron site-specific
2 standard should be in this case. Rather, I think
3 laboratory toxicity testing has to be the way that we do
4 that, and that's traditionally the way we do standard
5 setting, and I -- when the Agency looks at a
6 site-specific petition such as this one, that's what we
7 look to, what is the laboratory data saying the aquatic
8 life sensitivity is to boron. Should this be allowed or
9 should not be allowed is based on that information,
10 laboratory information.

11 MS. BARKLEY: So is it standard procedure,
12 then, to either not list a pollutant or (d) list a
13 pollutant if an adjusted standard is applied? I mean,
14 that -- does that hold the same weight as a general use
15 water quality standard in terms of assessment of
16 impairment?

17 MR. MOSHER: We believe it does hold the
18 same weight, because when the Board grants an adjusted
19 standard or a site-specific standard, they have
20 traditionally looked at laboratory toxicity information
21 and what that tells us is acceptable, so when -- I think
22 your point is that in our draft 303(d) list, boron was
23 listed as a cause of impairment. Now I'm saying it
24 shouldn't have been because the Board had an adjusted

1 standard in place for the Sangamon River, and we said in
2 our recent submission to the Board that was a mistake.
3 We shouldn't have listed boron as a cause of impairment
4 because the river always meets the adjusted standard set
5 years ago by the Board. It was just a mistake.

6 MS. BARKLEY: Okay. That helps clarify
7 that. Question number 8 -- and I will drop the request
8 for a graph -- but the question is, what changes in the
9 macroinvertebrate index have been observed in Sugar Creek
10 since the creation of the ash ponds, and how does the
11 MBI, the macroinvertebrate index, macroinvertebrate biota
12 index, relate to the measured boron concentrations in
13 Sugar Creek?

14 MR. MOSHER: I'm going to have to say we'll
15 answer that later when we can get the biologists to --
16 you're essentially asking to look way back in the
17 records, you know, before any ash pond was there, so
18 we'll ask them to do that and we'll prepare a response.

19 MS. BARKLEY: Okay. We have seen what was
20 provided with the technical support document in terms of
21 the south fork of the Sangamon River and the downstream
22 Sangamon River sites and the comparisons between the MBI
23 index upstream and downstream, but this is
24 specifically -- what we are interested in specifically is

1 Sugar Creek because of the potential predictive value.

2 MS. ZEMAN: Because of the what?

3 MS. BARKLEY: Potential predictive value of
4 the response in the biota to the adjusted standard on
5 Sugar Creek and its applicability to this proposed
6 standard. And then the other question I thought might be
7 for the Agency is -- and also for the petitioners, number
8 20, have you conducted a study of -- and this is right in
9 line with this -- have you conducted a study of chemical,
10 biological and physical conditions of the segments
11 assigned in the 1994 boron site-specific rule since that
12 went into effect? And we'd be interested in information
13 regarding macroinvertebrates, mussels, fish, macrophytes
14 and water quality data past the boron data already
15 provided.

16 MR. MOSHER: I can say we will go back and
17 ask our biologists, but I think my response to your first
18 question for me will hold true, but we'll get their
19 opinions and provide a response.

20 MS. BARKLEY: Okay. Then going back to
21 question number 14, the Sangamon is known to be a
22 commercially and recreationally important river for
23 catfish, one of the species known as sensitive to boron.
24 Can you please explain how the proposed adjusted

1 standards for boron will be protective of catfish
2 residing in the segments for which the adjusted standards
3 would be applied?

4 MS. ZEMAN: For the record, I'd like to
5 point out that we believe this was answered the last
6 time, but because this concerns an issue that is in the
7 expertise of Jeff Bushur with Hanson Professional
8 Services, who is not present now, we will take another
9 stab at it in our post-hearing comments. Mr. Mosher, is
10 there anything you wanted to add in that respect on this?

11 MR. MOSHER: I'm sorry. I thought I was off
12 the thing. Could you repeat the question? I was
13 taking --

14 MS. ZEMAN: Would you like a copy of this in
15 front of you? Do you not have the questions?

16 MR. MOSHER: Not in front of me, I don't
17 have them.

18 MS. ZEMAN: We have an extra copy. Let me
19 get a copy for you so that you can read along with her in
20 black and white while it's being read.

21 MR. MOSHER: Okay. Thanks.

22 MS. ZEMAN: It's number 14.

23 MR. MOSHER: Okay. Again, our approach to
24 potential toxic substances, which includes almost every

1 substance, is to look at laboratory toxicity studies, and
2 those studies are done with different kinds of organisms
3 in mind. Now, there may not be any catfish laboratory
4 toxicity studies out there, but there are certainly fish
5 studies, and again, the Agency's position is that you
6 have to trust the laboratory data in these cases, that
7 that's what's really going to tell you what sensitivities
8 to boron are, so when we came out in favor of this
9 site-specific standard, we were basing that on responses
10 of fish and other organisms to exposures to boron.

11 MS. BARKLEY: And I think one of the
12 reports -- and I'm sorry, I don't have the authors, but
13 it's in the technical support document, one of their
14 reports that was referenced as part of this petition --
15 it was stated that there was a lowest observed effect
16 concentration between 1 and 25 milligrams boron per liter
17 of water that was observed for channel catfish at their
18 embryo and larval stage.

19 MR. MOSHER: We can go back and look at that
20 study and give you our opinion of what the conclusion of
21 it is and how we interpret that conclusion.

22 HEARING OFFICER TIPSORD: And, Ms. Barkley,
23 I'm going to have to have -- you're going to have to let
24 us know who that -- which report you're referring to.

1 MS. BARKLEY: Absolutely. I can do that.

2 MR. MURRAY: Madam Hearing Officer, I
3 believe she was referring to the Birge and Black report.

4 MS. BARKLEY: Yes, that's it.

5 HEARING OFFICER TIPSORD: Thank you very
6 much.

7 MS. ZEMAN: And just for the record, did
8 you -- do you recall that in the technical support
9 document there is a Table 5-1 that references the report
10 and comments upon each report where the information was
11 deemed to be an outlier or where the information
12 suggested that there could be impacts different from our
13 proposal here?

14 HEARING OFFICER TIPSORD: Could you specify
15 what page that's on?

16 MS. ZEMAN: Yes. It is Table 5-1 on
17 page 5-7 of the technical support document of Hanson,
18 August 2008, which is Exhibit 1 of the petition.

19 HEARING OFFICER TIPSORD: Thank you.

20 MS. ZEMAN: And I only make that notation
21 for the record that it does include some asterisks and
22 additional information beyond just the results of the
23 data.

24 MS. BARKLEY: Number 15, please identify the

1 location and length segments of the river proposed for
2 the adjusted standard that have been surveyed for aquatic
3 plants and describe the nature of the area where
4 macrophyte surveys were conducted, and I do note that it
5 has been told to us that three ambient water quality
6 monitoring network stations were the ones surveyed. I
7 believe they're E-26, E-25 and E-24. E-24, E-25, E-26.
8 But I guess my point in this question is I'd like for it
9 to be pointed out how much area was covered in that
10 macrophyte survey and how that relates to the entire
11 length of the river segments proposed for the adjusted
12 standard, because to just give a station number
13 doesn't -- especially for a macrophyte survey, did not
14 tell us how many linear feet or square feet have been
15 covered in the macrophyte survey. It's not very telling
16 to just give a station number and say, we did a
17 macrophyte survey there, so I guess I'd like to see how
18 much area was covered so we can get an idea of how
19 representative that might be of the proposed length of
20 the standard.

21 MS. ZEMAN: If I may, is that a question
22 more for Illinois EPA since it's -- your question
23 specifically identifies in number 16 that that study was
24 done by Illinois EPA?

1 MS. BARKLEY: I -- Maybe I'm wrong here, but
2 I thought that the macrophyte survey was done on behalf
3 of -- I'm sorry, I can't remember. Hanson?

4 MS. ZEMAN: We -- If that's the case, we
5 will get back with you, again, in our post-hearing
6 comments when we have Mr. Bushur from Hanson available to
7 assist in the answer of the question.

8 MS. BARKLEY: Because I don't believe the
9 IEPA would do a macrophyte survey at those sites unless
10 it was part of their intensive --

11 MS. ZEMAN: Unless what?

12 MS. BARKLEY: Unless it was part of their
13 intensive basin survey, so it was my understanding that
14 it was done on behalf of the work leading into this
15 petition, that those macrophyte surveys were conducted.

16 MS. ZEMAN: So what you want is the specific
17 extent of the station or waters that were looked at.

18 MS. BARKLEY: Uh-huh.

19 MS. ZEMAN: Thank you.

20 MS. BARKLEY: And number 16 -- and it was
21 noted in the motion to strike or clarify that there was
22 additional information that should have answered this
23 question, and I'm sorry if I didn't see that, but the
24 question is, besides the survey conducted at Illinois

1 EPA's ambient water quality monitoring network stations,
2 including E-24, E-25, E-26, was any additional
3 information reviewed in terms of the presence,
4 identification and density of plants within the
5 site-specific rule segment?

6 MS. ZEMAN: We will have Mr. Bushur address
7 that in post-hearing comments.

8 MS. BARKLEY: Number 17 is, can you please
9 describe what types of habitat are available for fish
10 residing in the affected segments of the Sangamon River?
11 Please provide data in support of the response.

12 MS. ZEMAN: Again, that will need to be
13 addressed by Mr. Bushur.

14 MS. BARKLEY: And I'll clarify. I think the
15 importance behind identifying those types of habitat is
16 if there are macrophytes within the river that currently
17 provide a habitat for fish and that is a dominant -- if
18 that is a dominant habitat type and limited habitat is --
19 limited other types of habitat are available for fish,
20 that could be damaging to a fish population. If
21 macrophytes are what provide them breeding grounds,
22 protection, potentially food source, we'd like to see
23 what other habitats exist in case the boron does have a
24 negative impact on those macrophyte stands.

1 MS. ZEMAN: Thank you.

2 MS. BARKLEY: Number 18, has a wetland
3 survey been completed for segments within and adjacent to
4 Spring Creek and the Sangamon River for which the
5 adjusted standard is proposed? Have any wetlands been
6 identified in these segments? And again, in the motion
7 to strike and clarify it was mentioned that this was a
8 Hunter Lake question, and it's not at all related. We're
9 simply concerned that, again, wetland plants might be
10 sensitive or some wetland plants are sensitive to boron
11 and this concentration might negatively impact wetlands
12 if they exist.

13 MS. ZEMAN: We will need the input of Hanson
14 engineers on that, so we will get back to you in the
15 post-hearing comments.

16 MS. BARKLEY: Number 19, I'm going to change
17 the wording of this. I -- The original question was,
18 please explain how the petitioner has determined no
19 current irrigation or potential for irrigation in the
20 fields adjacent to the affected segments of the Sangamon
21 River, and I note that there were several agencies,
22 Illinois State Water Survey, Illinois State Geological
23 Survey, Illinois Environmental Protection Agency,
24 Illinois Department of Natural Resources, Illinois

1 Department of Agriculture, U.S. Army Corps of Engineers,
2 Soil and Water Conservation District and several
3 University of Illinois extension units that were asked
4 about -- well, the technical support document says that
5 they were asked about current uses of the river, so I
6 guess my question is, were these agencies specifically
7 asked about existing irrigation as a use or the potential
8 for future irrigation?

9 MS. ZEMAN: So now your question is whether
10 it is existing irrigation of the waters or potential for
11 irrigation?

12 MS. BARKLEY: Uh-huh. The technical support
13 document made it seem as if they were asked about uses,
14 and I'm interested in specifically whether irrigation was
15 considered knowing that boron concentrations could affect
16 that.

17 MS. ZEMAN: We -- And just for the record,
18 the -- this information was gathered by Hanson engineers,
19 both Deb Ramsey and Jeff Bushur, and the question
20 regarding irrigation uses actually was clarified in
21 response to a question that Mr. Mosher had in our
22 discussions with EPA before the filing, and we clarified
23 all of the agencies and -- to make it more specific.
24 With respect to the specific question of whether each

1 agency was asked about the potential for irrigation, I
2 will need to get back with you in the post-hearing
3 comments because that is a question that only Deb Ramsey
4 or Jeff Bushur can answer.

5 MS. BARKLEY: Okay. Question 20 we've
6 already asked.

7 HEARING OFFICER TIPSORD: We've asked and
8 answered.

9 MS. BARKLEY: 21, please explain why this
10 petition seeks an adjusted standard to 302.208 rather
11 than the adjusted standard sought and approved in 1994 to
12 304.105.

13 HEARING OFFICER TIPSORD: And if I may,
14 Ms. Barkley, I want to clarify. You use the term
15 "adjusted standard" often throughout here. You are
16 talking about the site-specific rulemaking, correct?

17 MS. BARKLEY: Yes, yes, yes.

18 HEARING OFFICER TIPSORD: All right. And I
19 know that it seems the same term, but they are legally
20 different before the Board, so just to be clear, you are
21 asking why they're looking for a site-specific rule --

22 MS. BARKLEY: Okay. Yes.

23 HEARING OFFICER TIPSORD: -- versus what the
24 current adjusted standard is, correct?

1 MS. BARKLEY: Yes, and I'll -- can I clarify
2 just briefly? 302.208 is the general water quality --
3 general use water quality standard for boron, which sets
4 it at 1 milligram per liter. 304.105 is, there shall be
5 no violations of the water quality standard. The exact
6 language is, no effluent shall alone or in combination
7 with other sources cause a violation of any applicable
8 water quality standard. So the adjusted standard
9 approved in 1994 allows for exceedances of the general
10 use water quality standard for Outfalls 003 and 004 in
11 the CWLP permit -- NPDES permits for boron specifically,
12 and I'm wondering why the same type of site-specific rule
13 isn't being sought right now.

14 MS. ZEMAN: As that is a legal question, may
15 I submit the first response, and then if you want
16 something more factual?

17 HEARING OFFICER TIPSORD: If you're going to
18 give me a response now, I'm going to swear you in too.

19 MS. ZEMAN: That'd be fine.

20 HEARING OFFICER TIPSORD: Okay.

21 MS. ZEMAN: That'd be fine.

22 (Witness sworn.)

23 MS. ZEMAN: I'm going to refer you to
24 another matter to help determine the answer to this.

1 We -- Our office was involved in a matter called "A
2 Site-Specific Rule for the City of Effingham Treatment
3 Plant Fluoride Discharge." In that, a -- it was proposed
4 to have --

5 HEARING OFFICER TIPSORD: Excuse me. Can
6 you give us the rulemaking number?

7 MS. ZEMAN: Yes. It's R03-11.

8 HEARING OFFICER TIPSORD: Thank you.

9 MS. ZEMAN: And I will give you a copy of
10 this so that you can take a look at it.

11 MS. BARKLEY: That'd be great.

12 MS. ZEMAN: At that particular time, a
13 request was made consistent with past practice before the
14 Board to seek an adjusted standard for effluent, and in
15 discussions with the Illinois EPA before the filing and
16 during that proceeding, the Illinois EPA submitted an
17 extensive basically brief on why the standard should
18 actually be revised for the water quality standard as
19 opposed to the effluent limitation, and I did not bring
20 the petition -- or excuse me -- the legal brief of the
21 Illinois EPA with me, but certainly if you access the
22 Pollution Control Board Web site once you have this,
23 you'll be able to see their rationale.

24 MS. BARKLEY: Okay.

1 MS. ZEMAN: In the decision of the Board,
2 the Board specifically concurs with the Agency that
3 granting relief from the -- and it gives the specific
4 standard -- the effluent limit instead of a water quality
5 standard could lead to inconsistencies with federal law.
6 Accordingly, the Board switched the proposal essentially
7 to a water quality standard rather than a new effluent
8 limit. So basically, it's -- it was a legal change. In
9 1994 it was standard to do what CWLP did. Since Blue
10 Beacon -- that's how this matter has come to be known --
11 since the Blue Beacon matter and the brief of the
12 Illinois EPA, these things have changed from seeking
13 effluent limitation changes to water quality standard
14 changes. And just for the record, I'll just hand her
15 the -- if you would hand her the copy of the opinion, I'd
16 appreciate it.

17 MS. BARKLEY: Thank you.

18 HEARING OFFICER TIPSORD: Thank you,
19 Ms. Zeman.

20 MS. BARKLEY: Okay. You indicated that was
21 a legal response. Would there be another one in the
22 written record or is that --

23 MS. ZEMAN: Very good. We will supplement
24 that response. Or you want to do it today? Very good.

1 Mr. Murray will also address it.

2 MR. MURRAY: Thank you. Prior to the time
3 that we retained Hodge, Dwyer and Zeman to represent the
4 petitioners, we had had many meetings with Mr. Mosher and
5 his colleagues since 2003, and as this whole process
6 developed and we brought the proposal regarding using the
7 Sanitary District to the Agency, they explained to us
8 exactly what Ms. Zeman has run through about how the lay
9 of the land has changed in these matters, and they -- we
10 were told that we'd have to seek a site-specific
11 standard, so with that knowledge, we proceeded to pursue
12 that type of relief.

13 MS. BARKLEY: Okay. And this document
14 that -- the legal brief that IEPA provided is on the
15 Pollution Control Board Web site so we can see this?

16 MS. ZEMAN: Correct.

17 HEARING OFFICER TIPSORD: And quite
18 honestly, if the Board's decision -- I mean, the Board's
19 decision is -- has been handed to you, Ms. Barkley, so, I
20 mean, that --

21 MS. BARKLEY: That's it. Okay.

22 HEARING OFFICER TIPSORD: The entire case is
23 available on COOL on the Web site, so --

24 MS. BARKLEY: Okay. Number 22, at the time

1 the pollution control technologies such as the SCRs, the
2 selective catalytic reduction --

3 MR. FARRIS: Reduction.

4 MS. BARKLEY: -- were selected for
5 installation on the Dallman units, was CWLP provided with
6 information regarding the concentration of boron that
7 would be in the FGDS waste stream? Also at this time,
8 was CWLP aware of effluent concentrations of boron both
9 entering and discharged from the ash ponds?

10 MR. FARRIS: I guess I need some
11 clarification to your question. We have a lot of air
12 pollution control technology. Is your question relating
13 to when the SCRs were installed or --

14 MS. BARKLEY: Well, in looking into this,
15 there are a couple of things that I noted; one, that the
16 FGDS system has been on the unit 33 for 19 years, so
17 that's -- had information coming from that or what's in
18 that waste stream. The SCRs, I don't remember what year
19 they were added.

20 MR. FARRIS: 2003.

21 MS. BARKLEY: 2003? But in one of the Burns
22 & McDonnell reports where you lay out -- actually, it was
23 in the phase II compliance report, the musts and the
24 wants, and looking through that report, there wasn't

1 anything in there about -- in terms of -- the report
2 talked about compliant with air quality standards and
3 what's needed in terms of space and logistical layout and
4 pieces of equipment and the cost, but I just wonder why
5 water and the other permitting requirements for CWLP
6 weren't considered as part of this. It seems like this
7 waste stream high in boron and how it would need to be
8 dealt with in terms of meeting water quality standards
9 should have been anticipated, or I guess my question
10 would be, why wasn't it anticipated at that point?

11 MR. FARRIS: Well, now I really don't
12 understand your question, but I'll try. When -- If we're
13 talking about when the SCRs were installed and the
14 question was when the SCRs --

15 MR. MURRAY: The part she just referred to
16 had nothing to do with SCRs.

17 MR. FARRIS: So what do you want me to do?

18 MR. MURRAY: Well, I'm just trying to figure
19 out what question you're answering.

20 MS. BARKLEY: I'll just take this way back.
21 CWLP has air permits and water permits, and I'm just
22 wondering why we're in this position today, why this
23 couldn't have been anticipated knowing that you were
24 using Illinois coal high in boron, knowing that there

1 were changes in technology that would affect the waste
2 stream that was being created. Why are we now dealing
3 with dilution as the answer to pollution instead of
4 looking at this eight years ago and anticipating that
5 boron was going to be a problem and that you couldn't
6 meet water quality standards?

7 MR. FARRIS: Well, we installed the SCRs to
8 control emissions of oxides and nitrogen in our air
9 emissions, and, no, we didn't -- we were not provided
10 with information regarding what effect installation of
11 the SCRs might have on our boron concentration of our
12 FGDS blowdown.

13 MS. BARKLEY: No information was provided,
14 but it wasn't -- did anyone ask?

15 MR. FARRIS: This -- SCRs are a new
16 technology, and I don't think all the unintended
17 consequences of installing a new air pollution control
18 technology for removal of NOx existed because SCRs
19 weren't in use in the United States. The second question
20 you had, were we aware of effluent concentrations of
21 boron both entering and discharged from our ash ponds at
22 the time of the SCR installations, as you know, we
23 received an adjusted standard in 1994 and a boron
24 limitation was -- or effluent limit was put in our

1 renewal in 1991, so we would have data and submitted in
2 our reports to the Agency on our discharge from the ash
3 ponds, but at the time the SCRs were installed at
4 Dallman, we did not have numbers concerning all the
5 various discharges into the ash pond. We were monitoring
6 discharge into Sugar Creek.

7 MS. BARKLEY: Okay. So the answer to the
8 first question on whether CWLP was provided with
9 information regarding the concentration of boron is no,
10 but at the time was CWLP aware of effluent concentrations
11 of boron, yes, from the DMR?

12 MR. FARRIS: Discharging, but not entering
13 into the ash pond.

14 MS. BARKLEY: Is there any -- Not that that
15 would be reflected in the discharge monitoring reports to
16 the Agency, but internally did CWLP monitor the influent
17 concentrations? Influent, I mean what was coming into
18 the ash ponds.

19 MR. FARRIS: The various components, no, not
20 to my knowledge, at the time of the SCR installation.

21 MS. BARKLEY: Okay. Number -- You've
22 already answered question number 23. Do I need to read
23 it into the record?

24 HEARING OFFICER TIPSORD: No, that's fine.

1 MS. BARKLEY: Okay. Question 24, I think
2 this has been partially answered both by testimony at the
3 November 3 hearing and the technical support document.
4 The question is, please explain what space is required
5 for CWLP to convert each facility, Dallman units 31, 32
6 and 33, from wet to dry fly ash and bottom ash disposal.
7 Please describe each component, the space required and
8 the configuration needed to accomplish handling and
9 removal of dry ash. I believe the technical support
10 document talks about -- and this was mentioned at the
11 last hearing -- how the boiler -- the bottom of the
12 boiler is different and that requires more space. Are
13 there other considerations in terms of transportation,
14 offloading, onloading? Can you talk a little -- Can you
15 expand a little bit more on what space would be needed at
16 each of the facilities? And I know you lump them into
17 Dallman 31, 32, and then Dallman 33 based on the --

18 MR. BROWN: I think -- I believe -- This is
19 Doug Brown. I believe one of the reports referred to one
20 of the items for unit 33 bottom ash that there was
21 room on the north coal pile because we had relocated our
22 coal handling equipment to the opposite side of the plant
23 for the new plant, which is -- that's no longer valid.
24 We are using that land now for conveying coal around the

1 grounds from the existing facility to the new plant.

2 MS. BARKLEY: Okay. So the -- unit 33 was
3 the one where there was space, but it sounds like it's no
4 longer available --

5 MR. BROWN: Right.

6 MS. BARKLEY: -- and it's going to be cost
7 prohibitive.

8 MR. BROWN: Right.

9 MS. BARKLEY: Has any other space opened up
10 at that site?

11 MR. BROWN: No. Space has been shrinking
12 ever -- with this lease on the new plant, with all the
13 environmental controls that we've put in over the years
14 have taken up almost -- not every available piece of
15 land, but it's pretty close.

16 MS. BARKLEY: The Burns & McDonnell phase II
17 compliance study report also went through space options,
18 and maybe these are outdated by now, but there was talk
19 of using Dallman coal yard, using the Curran site,
20 industrial park with rail sidings. Is there additional
21 ag property near the facility that could be purchased?

22 MR. BROWN: That was used more for coal
23 handling, the transport in of western coal.

24 MS. BARKLEY: Right. When -- And I think

1 the report was looking at the ability to bring in Powder
2 River Basin coal to replace Illinois coal.

3 MR. BROWN: Right.

4 MS. BARKLEY: But in looking at that, it
5 seemed like there were other -- at least at that time
6 there were space options, and I wonder if those have been
7 considered as part of the potential alternative to
8 convert from wet to dry ash disposal.

9 MR. BROWN: To do those kind of conversions,
10 you need to have access right next to the grounds. I
11 mean, you have to be right there next to the buildings,
12 and there's really no space available.

13 MS. BARKLEY: Okay. And number 25, what are
14 the plans for the land currently occupied by the Lakeside
15 units that are soon to be retired?

16 MR. MURRAY: They may not be retired
17 until -- what's our deadline? The end of 2011?

18 MR. FARRIS: Under which constraint?
19 Somewhere around there.

20 MR. MURRAY: There's -- The obligation or
21 the requirement to retire Lakeside depends upon various
22 different air pollution control programs that the State
23 has.

24 MR. BROWN: With that -- this is Doug

1 Brown -- our current pumping facilities for the water
2 supply is housed on Lakeside, so no matter if the
3 Lakeside units are shut down, those -- that area for the
4 pump house will still be in operation, at least for the
5 time being.

6 MS. BARKLEY: And what -- can you just
7 generally say what percentage of the site that pump house
8 sits on?

9 MR. BROWN: The intake structure from the
10 lake that goes to the filter plant is also in the
11 basement of Lakeside, so basically, 85 to 90 percent of
12 the footprint will be utilized with intake structures.

13 MS. BARKLEY: So you're saying that when or
14 if Lakeside is decommissioned, there won't be space or
15 not much space available?

16 MR. BROWN: Not unless the pumping station,
17 the intake structures were all rebuilt new somewhere
18 else.

19 MS. BARKLEY: Is that considered at all?

20 MR. BROWN: It would be considered for the
21 water plant, but not for the electric utility. The water
22 plant would consider if they want to replace their
23 equipment or not.

24 MS. BARKLEY: Okay. Well, that leads into

1 26, which if there's any more information that you can
2 provide in written form to help explain this for someone
3 who's not intimately familiar with the site, that would
4 be helpful. The question is, to what extent do any
5 existing facilities associated with the filter plant,
6 pump house, intake structures, constrain the space
7 available for dry fly ash or bottom ash handling at units
8 31, 32 and 33? What would be the incremental cost of
9 relocating those facilities as part of the planned
10 renovation and replacement project?

11 MR. BROWN: Just as a general statement for
12 that, Lakeside is actually quite a distance away from
13 Dallman power station on plant grounds, and you'd have to
14 transport the material somehow out of the building over
15 to that area to do that.

16 MS. BARKLEY: When I was looking at the
17 space considerations for switching from Illinois coal to
18 Powder River Basin coal, you went -- there was a great
19 detail there about all the different ways you could do
20 it, and I guess that's what would be helpful to see here.
21 There was consideration of using sites that weren't
22 immediately adjacent to the facility, to the power plant
23 facilities; there was talk of switching from rail to
24 truck to, you know --

1 MR. BROWN: That's with the distribution of
2 coal, though, and that's a little bit -- that's handled a
3 little differently than trying to get material I guess
4 out of the basement of the boilers and --

5 MS. BARKLEY: I just wonder if the same
6 process could be used if you could look at, you know,
7 getting the coal combustion waste onto a truck that takes
8 it to a conveyor belt, which takes it to a railcar or --
9 the way that report was done looked at all the different
10 ways that you could move the pieces around and complete
11 the puzzle, and I don't feel like that's been done for
12 the dry -- potential alternative for switching to dry ash
13 handling. It seems like there are a number of
14 constraints that have been put forward, but I haven't
15 seen the same investigation of how to -- what potential
16 puzzling could be done, and considering that there is
17 potential for reduction in pollution with that
18 alternative and possibly the need for reducing or
19 eliminating the need for the site-specific standard, that
20 seems like something that should be done as far as this
21 petition.

22 MR. BROWN: I believe, though, that the
23 technical documents basically have stated that it's not
24 technically feasible or there's an economic impact, and

1 to go to a further -- to try to fully investigate out and
2 detail out all the options further than that, I just
3 don't see that, why it's needed.

4 MS. ZEMAN: I would just add to the extent
5 of Ms. Barkley's comment, that seems like more of an
6 argument than it does a question, and to the extent we
7 can add anything further to that, we will do so on
8 post-hearing comments.

9 HEARING OFFICER TIPSORD: Thank you.

10 MS. BARKLEY: Okay. I'm going to strike 27,
11 28, so my last question is question number 29, which is
12 from the Burns & McDonnell report of 2005, which is the
13 water study of new generation project. If both options 3
14 and 4 were implemented as described in this report, or
15 any other option eliminating discharge of sluice water to
16 Sugar Creek, what additional cost would be incurred to
17 decommission the ash ponds in a manner sufficient to
18 reduce boron levels in Sugar Creek below 1 milligram per
19 liter and to protect groundwater at that location? And
20 the reason we're asking this is it sounds like what's in
21 the ash ponds is buildup of ashes, that it's buildup of
22 ashes over time, and so we're interested in what work
23 would need to be done to clean those ponds out.

24 MS. ZEMAN: I believe our information

1 already provided in the record addresses why
2 decommissioning the ash ponds is not really at issue
3 here, but to the extent that we can address that further,
4 we will do so in post-hearing comments.

5 HEARING OFFICER TIPSORD: Thank you.

6 MS. BARKLEY: That's all the questions that
7 I have.

8 HEARING OFFICER TIPSORD: Okay. Any other
9 questions? Let's go off the record for a couple of
10 seconds.

11 (Discussion held off the record.)

12 HEARING OFFICER TIPSORD: Thank you all very
13 much. I want to particularly compliment the witnesses.
14 I really appreciate, especially when we have multiple
15 witnesses -- and I know the court reporter does -- your
16 quickly identifying yourselves before you answer your
17 questions. It makes it much easier for all of us, and
18 you did that very well in November and you did that again
19 here today, and I really want to thank you for that.
20 Also, I am constantly amazed at the courtesy with which
21 everyone can behave in these hearings, and I thank you.
22 I shouldn't say that. That's not exactly what I meant,
23 but, yes, I thank you all for your courtesy, your
24 kindness, and we will have a comment period that will

1 close 30 days after the date of the transcript, and once
2 the transcript's in, I will do a hearing officer order
3 setting that specific date. That's of course subject to
4 anyone -- if anyone does need to ask for more time, they
5 can file a motion with the hearing officer, and with
6 that, we're closed. Thank you all very much.

7 (Hearing adjourned.)

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1 STATE OF ILLINOIS)
2 COUNTY OF BOND) SS
3)

4 I, KAREN WAUGH, a Notary Public and Certified
5 Shorthand Reporter in and for the County of Bond, State
6 of Illinois, DO HEREBY CERTIFY that I was present at the
7 Illinois Pollution Control Board, Springfield, Illinois,
8 on December 16, 2008, and did record the aforesaid
9 Hearing; that same was taken down in shorthand by me and
10 afterwards transcribed, and that the above and foregoing
11 is a true and correct transcript of said Hearing.

12 IN WITNESS WHEREOF I have hereunto set my hand
13 and affixed my Notarial Seal this 29th day of December,
14 2008.

15
16
17
18
19
20
21
22
23
24

Notary Public--CSR

#084-003688

