

ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
PETITION OF SOUTHERN)
ILLINOIS POWER COOPERATIVE)
FOR AN ADJUSTED STANDARD) AS 21-6
FROM 35 ILL. ADMIN. CODE) (Adjusted Standard)
PART 845 OR, IN THE)
ALTERNATIVE, A FINDING OF)
INAPPLICABILITY)

DAY THREE -- JUNE 12, 2025

(Pages 479 - 551)

Proceedings held on June 12, 2025, commencing at
9:00 a.m., at the Market Street Hall, 310 North Market
Street, Marion, Illinois, before Carol Webb, Hearing
Officer.

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

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LYNN DUNAWAY

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1 PROCEEDINGS

2 (June 12, 2025; 9:00 a.m.)

3 HEARING OFFICER WEBB: We are back on the
4 record. This is day three for our hearing for AS 21-6,
5 and we are beginning with the Agency's first witness.
6 Would you call your witness, please?

7 MR. NEIBERGALL: The Agency would call Lynn
8 Dunaway.

9 HEARING OFFICER WEBB: And would the court
10 reporter please swear in the witness?

11 (Witness sworn.)

12 LYNN DUNAWAY, produced, sworn and examined on
13 behalf of the Agency, testified as follows:

14 DIRECT EXAMINATION

15 BY MR. NEIBERGALL:

16 Q. Good morning, Mr. Dunaway.

17 A. Good morning.

18 Q. We just had a brief discussion about your
19 responses to the Board's questions that were presented to
20 the Agency last week. The understanding is that you have
21 a written version of those responses to questions 1
22 through 13 to the Agency; is that correct?

23 A. That's correct.

24 MR. NEIBERGALL: At this time the Agency

1 would like to move that written response into the record
2 as if read, and obviously the opposing counsel's going to
3 have time to review that as well after direct
4 examination.

5 HEARING OFFICER WEBB: This is fine.
6 We'll -- We will admit this as read -- as if read into
7 the record and we will give the Petitioner additional
8 time to review this before their cross examination. Is
9 this meant to be an exhibit?

10 MR. NEIBERGALL: It wasn't meant to be an
11 exhibit, but it can be if it needs to be.

12 HEARING OFFICER WEBB: Yeah, let's go
13 ahead --

14 MR. NEIBERGALL: Sure.

15 HEARING OFFICER WEBB: -- if that's okay
16 with you.

17 MS. JOSHI: Yes. I mean, we haven't had an
18 opportunity to review it yet, but --

19 HEARING OFFICER WEBB: Would you like to
20 hold on -- we don't have to introduce it until you have
21 an opportunity --

22 MS. JOSHI: Sure. I assume we will have no
23 objection, but if you'd like to mark it as an exhibit, if
24 we could just wait to enter it into the record until

1 after?

2 HEARING OFFICER WEBB: Yes, yes. I will
3 consider this EPA Exhibit No. 1.

4 MR. NEIBERGALL: Could we do --

5 HEARING OFFICER WEBB: Sure.

6 MR. NEIBERGALL: -- No. 56 for the sake of
7 our other wild ordering of these exhibits?

8 HEARING OFFICER WEBB: Do you have any
9 exhibit stickers?

10 MR. NEIBERGALL: I do not.

11 HEARING OFFICER WEBB: Okay. We'll deal
12 with that later.

13 MR. NEIBERGALL: Thank you.

14 HEARING OFFICER WEBB: So let's go ahead and
15 begin.

16 Q. (By Mr. Neibergall) Mr. Dunaway, could you
17 please describe your education and experience?

18 A. My name is Lynn Dunaway, L-Y-N-N,
19 D-U-N-A-W-A-Y. I have a bachelor of science in geology.
20 I worked for the -- I graduated with my degree in 1982.
21 After graduation I worked for a few years in the oil
22 field, and after that I got a job with Illinois EPA in
23 the Division of Public Water Supply in the groundwater
24 section, which was -- subsequently became part of the

1 Bureau of Water, working in the groundwater section. I
2 worked there from February of 1988 through December
3 of 1923 -- 2023 -- sorry -- and at which point I retired,
4 but I have come back as what's generally referred to as a
5 contract employee since that time, still doing the same
6 types of things but on a narrower basis, more focused on
7 certain projects such as the adjusted standards. Prior
8 to my retirement I worked in the hydrogeology compliance
9 unit, so I provided review with input regarding geology
10 and hydrogeologic aspects of permits for the Bureau of
11 Water and their -- for their industrial unit, municipal
12 unit, mine unit. I also worked on rules development over
13 the years, reviewed groundwater data from various sites
14 and did -- was involved with enforcement and compliance
15 measures for a number of the rules that fall under the
16 purview of Division of Public Water Supply, because
17 they're related specifically to wells and the operation
18 of various types of units around those wells. I think
19 that in a broad spectrum summarizes what I did for the
20 Agency.

21 Q. Thank you. As far as the subject of this
22 hearing, CCR, coal combustion residuals, and coal ash as
23 it formerly was known, can you describe your experience
24 with the Agency specifically for those issues?

1 A. Yes. I was involved with the development of
2 Part 845, which is the CCR regulation, and after
3 development also assisted with the compliance of the Act,
4 Section 22.59 of the Act, which deals with CCR, because
5 the fees are in that portion, so I assisted our fiscal
6 department with names and addresses of owners and
7 operators who should be sent invoices. And once Part 845
8 was adopted, I assisted with getting the information that
9 came in for operating permits, getting it organized,
10 providing consultation with other geologists in the unit
11 who were reviewing the hydrogeologic aspects of those
12 permits.

13 Q. In the course of the development of
14 Part 845, which you said you were involved in, did you
15 review and consider Part 257, which is the federal CCR
16 rule, in its development?

17 A. Yes.

18 Q. Can you describe how that rule was relevant
19 to the rule that was developed in Illinois?

20 A. Section 22.59 of the Act requires that
21 Part 845 when it was developed be at least as protective
22 and comprehensive as Part 257.

23 Q. So the definitions and various provisions of
24 Part 257 are relevant to the Agency's implementation of

1 Part 845.

2 A. Yes, they are.

3 Q. Okay. I want to turn now to some of the
4 matters that we've heard about from testimony and other
5 witnesses from SIPC, the first of which I want to talk
6 about is pond 6 as the Agency understands it, and I'd
7 like you to describe your understanding of the origins of
8 pond 6. That's my question.

9 A. Okay. The origins of pond 6 are summarized
10 in Board question 9, but essentially, to at least
11 paraphrase that, SIPC was granted a permit to construct a
12 berm. The purpose of that berm was to contain stormwater
13 runoff. The berm created a semicircle, which on each end
14 were the berms respectively of the fly ash extension and
15 pond 3, and then the natural topographic slope that
16 existed at the time that that berm was constructed formed
17 the remaining closure of that surface impoundment that
18 was created.

19 Q. When was that permit that you just
20 described -- what time period was that?

21 A. I believe it was issued approximately 1982.

22 Q. And I believe that the berm or the dike that
23 you mentioned -- you said get that permit approved.
24 What -- Had it already been constructed by SIPC?

1 A. According to the permit documents I saw,
2 they said it were -- it was almost complete before the
3 permit was issued.

4 Q. And so you said that the -- I believe you
5 said containing runoff was the purpose of that berm or
6 dike?

7 A. Yes.

8 Q. What was it containing runoff from?

9 A. A sludge -- Based on the information I see,
10 a sludge and fly ash pond.

11 Q. Are there any regulatory definitions that
12 are relevant to your identification of pond 6?

13 A. Yes, the definition of a surface
14 impoundment.

15 Q. Where would that be found in the regulations
16 that would have been applicable before 22.59, Part 845?

17 A. Those definitions I believe can be found in
18 35 Illinois Administrative Code 810.

19 Q. Do you have a copy of that regulation? Did
20 you bring it?

21 A. No.

22 Q. And I believe the definition you mentioned
23 was the definition for surface impoundment?

24 A. Yes.

1 Q. Which page of this document is that on?

2 A. Let me find it.

3 HEARING OFFICER WEBB: 8.

4 A. Page 8.

5 Q. And what information in that definition
6 leads you to believe that that's the appropriate
7 regulatory definition for pond 6 as it existed at the
8 time frame you've already testified to?

9 A. Because it's a diked area. Well, I --
10 "Surface impoundment means a natural topographic
11 depression, man-made excavation or diked area into which
12 flowing wastes, such as liquid wastes or wastes
13 containing free liquids, are placed. For the purposes of
14 this part and 35 Illinois Administrative Code 811 through
15 15, a surface impoundment is not a landfill. Other parts
16 of 35 Illinois Administrative Code: Chapter I may apply,
17 including the permitting requirements of 35 Illinois
18 Administrative Code 309." And specifically, this was a
19 bermed area, it was a man-made or a diked area -- a dike
20 and a berm are the same thing -- and it was designed to
21 contain liquid wastes, which are the runoff, and they are
22 also -- since they are runoff, they are flowing wastes.

23 Q. And how do you compare that definition of
24 surface impoundment to any other relevant definitions in

1 this 810?

2 A. Well, we'd want to compare that to the
3 definition of a landfill, which is on page 4. "Landfill
4 means a unit or a part of a facility on which waste is
5 placed and accumulated over time for disposal and that is
6 not a land application unit, a surface impoundment or an
7 underground injection well. For the purposes of this
8 part and 35 Illinois Administrative Code 811 through 815,
9 landfills include waste piles, as defined in this
10 section."

11 Q. Can we go to waste piles, then?

12 A. So --

13 Q. It's the last page.

14 A. Okay. Waste piles are defined on page 9.
15 "Waste pile means an area on which non-containerized
16 masses of solid, non-flowing waste are placed for
17 disposal. For the purposes of this part and 35 Illinois
18 Administrative Code 811 through 815, a waste pile is a
19 landfill unless the operator can demonstrate that the
20 wastes are not accumulated over time for disposal. At a
21 minimum, the demonstration must include photographs,
22 records or other observable or discernible information,
23 maintained on a yearly basis, that show that within the
24 preceding year the waste has been removed for utilization

1 or disposal elsewhere."

2 Q. So after reading those definitions out, the
3 two terms that I find significant are -- waste pile you
4 just read was non-flowing waste; is that correct?

5 A. Correct.

6 Q. And how do you compare that to the
7 definition of surface impoundment that you read at the
8 start?

9 A. Well, surface impoundments do contain
10 flowing waste.

11 Q. And so your assessment that pond 6 at this
12 time was a surface impoundment is based on the runoff,
13 therefore being flowing?

14 A. Yes.

15 Q. At this time, which I believe you testified
16 was around 1980-ish, had SIPC filed any sort of initial
17 facility report to claim that this area was a landfill?

18 A. Based on the information I've seen from the
19 documents filed in this case, they had not at that time.

20 Q. And then you said the definition of surface
21 impoundment is mutually exclusive with landfill?

22 A. Land -- yes.

23 Q. When did SIPC file anything about it being a
24 landfill?

1 A. I believe it was nineteen eighty -- no, not
2 eighty -- 1991 or 2.

3 Q. And that was the initial facility report
4 we've heard a little bit about in other testimony?

5 A. Yes.

6 Q. And so for at least ten years, this area was
7 being operated as a surface impoundment; is that your
8 understanding?

9 A. Yes.

10 Q. And, you know, how does one file an initial
11 facility report claiming something's a landfill when it
12 had been operated for a surface impoundment for ten
13 years?

14 A. I don't really know the process of filing an
15 initial facility report.

16 Q. The definitions you just read existed,
17 though?

18 A. They did.

19 Q. And so whoever filed that would have
20 presumably consulted the definitions?

21 A. Yes, they should have.

22 MS. JOSHI: Objection. Calls for
23 speculation.

24 HEARING OFFICER WEBB: Sustained.

1 MR. NEIBERGALL: Sure.

2 Q. (By Mr. Neibergall) Okay. Tell me about --
3 You mentioned it in your education experience, but tell
4 me a little bit more about the development of 22.59, when
5 that came to be, and then Part 845.

6 A. I think 22.59 was proposed as a public act.
7 It didn't become 22.59 as a proposal, but I think it may
8 have been proposed in late 2018 and maybe adopted in
9 2019. I'm not sure of exact dates.

10 Q. Okay. So would July of 2019 for when it was
11 enacted sound close?

12 A. Yes.

13 Q. Okay. And then Part 845 I believe was --
14 there was a mandate in 22.59 for the Agency to propose
15 these regulations, which became Part 845, within eight
16 months; is that correct?

17 A. Correct.

18 Q. And so the Agency proposed Part 845 in March
19 of 2020? Does that sound right?

20 A. Yes.

21 Q. And then the Board had a year to adopt those
22 regulations; is that your understanding?

23 A. Correct.

24 Q. So when did Part 845 become effective?

1 A. I believe it was April 21st of 2021.

2 Q. So at that time, in 2019, 22.59, did it add
3 any definitions to the Act?

4 A. Yes.

5 Q. What did it add that's relevant to what
6 we're talking about?

7 A. It added a definition for CCR surface
8 impoundment.

9 Q. Do you remember what the citation is for
10 that?

11 A. I think it's 3.143.

12 Q. Did it also add a definition for CCR?

13 A. It did.

14 Q. And where would that --

15 A. I don't remember.

16 Q. 3.142 sound correct?

17 A. That sounds probably correct.

18 Q. So what is your understanding of what
19 happens to state law when the General Assembly passes a
20 new law?

21 A. The --

22 MS. JOSHI: Objection. I mean, it is
23 calling for a legal conclusion. If the witness believes
24 he's an expert in the law at issue here, I'm fine with

1 him answering, but I don't believe he's presented as a
2 legal expert.

3 HEARING OFFICER WEBB: We can probably jump
4 ahead to the actual rulemaking process.

5 MR. NEIBERGALL: Sure. I just think it's --
6 I think it's relevant that -- yeah, we can jump ahead to
7 the rulemaking.

8 Q. (By Mr. Neibergall) So in 2021, you said,
9 April, the Board adopted Part 845?

10 A. Yes.

11 Q. And in that Board rulemaking, Part 845
12 contains definitions as well?

13 A. Yes.

14 Q. And those contain the same two definitions
15 you just mentioned were in the statute?

16 A. Yes.

17 Q. And so the term "CCR surface impoundment"
18 was now state law and state regs.

19 A. Correct.

20 Q. And so what would be the appropriate
21 characterization of pond 6 as of the effective date of
22 the regulations?

23 A. Well, based on the information that's been
24 provided, it was a surface impoundment into which CCR is

1 being placed, so it is an accumulation of CCR and
2 liquids, so it's a CCR surface impoundment.

3 Q. Thank you. I want to talk about a different
4 topic. I want to move to testimony we've heard about
5 dewatering.

6 A. Yes.

7 Q. I believe most of the testimony I heard
8 about dewatering related to the former fly ash holding
9 units, which would be the initial fly ash pond, the
10 replacement fly ash pond and the fly ash extension? Is
11 that your understanding?

12 A. Yes.

13 Q. There was probably also some testimony I
14 heard about dewatering in other ponds, and we can get
15 into that in a minute. What is your -- Can you describe
16 your interpretation of the testimony we've heard of
17 dewatering and whether that's sufficient?

18 A. Based on my reading of the definitions
19 available in Part 257, the dewatering that has been
20 described is not adequate.

21 Q. Do you have those definitions in front of
22 you?

23 A. I do not.

24 Q. So I've handed you a selection of pages from

1 the Federal Register dated Wednesday, May 8th, 2024. The
2 actual page numbers would be FR 89 38950, and then the
3 second page is 39100, the third page is 39110 and the
4 fourth page is 39111. Are these the definitions for
5 liquids and other terms that you were talking about just
6 now?

7 A. Yes.

8 Q. Can you explain which of these definitions
9 is relevant and then why?

10 A. Well, there are several definitions that are
11 relevant. First we should probably start with
12 infiltration.

13 Q. Is this on page 2 of the four-page document
14 I'm showing you?

15 A. It's on page 39100 in the right-hand column,
16 about halfway down.

17 Q. Everybody take a moment to get there and
18 then let us know when you're ready. I think we're good.

19 A. Okay.

20 Q. Infiltration, you were saying?

21 A. Yes. "Infiltration means the migration or
22 movement of liquid, such as surface water or groundwater,
23 into or through a CCR unit from any direction, including
24 from the surface, laterally, or through the bottom of the

1 unit." The next important definition is liquids, which
2 is -- skip one definition. It's the next one down.

3 "Liquid means any fluid, such as water, that has no
4 independent shape but has a definite volume and does not
5 expand indefinitely and that is only slightly
6 compressible. This encompasses all the various types of
7 liquids that may be present in a CCR unit, including
8 water that was sluiced into an impoundment along with
9 CCR, precipitation, surface water, groundwater and any
10 other form of water that has migrated into the
11 impoundment, which may be found as free water or standing
12 ponded above CCR or porewater intermingled with CCR."

13 Q. I just wanted to clarify that last sentence.
14 "Which may be found as free water or standing water
15 ponded above CCR or porewater intermingled with CCR"; is
16 that correct?

17 A. Yes.

18 Q. What other definitions on this page are
19 relevant?

20 A. Okay. Then move to the center column,
21 probably about two-thirds of the way down, "Contains both
22 CCR and liquids."

23 Q. And what does that say?

24 A. That term "means that both CCR and liquids

1 are present in a CCR surface impoundment, except where
2 the owner or operator demonstrates that the standard in
3 2.57" -- sorry -- "257.102(d)(2)(i) has been met." And
4 if you look at -- for that standard, that is on page --
5 the one labeled 39111.

6 Q. 110?

7 A. Hold on.

8 Q. Does it start on 110?

9 A. Section (d) does, yes.

10 Q. Okay.

11 A. Starts on 110. "The closure performance
12 standard when leaving CCR in place."

13 Q. And then the next page that you were getting
14 into?

15 A. Then the next page, it goes on to explain
16 that -- (d)(2)(i). So (d)(2) says "Draining and
17 stabilization of CCR units. The owner/operator of any
18 CCR unit must meet the requirements of
19 paragraph (d)(2)(i) through (ii) of this section prior to
20 installing the final cover system required under
21 paragraph (d)(3) of this section." (i) says "Free
22 liquids must be eliminated by removing liquid wastes or
23 solidifying the remaining wastes and waste residues.
24 Remaining wastes must be stabilized sufficient to support

1 the final cover system." And then (d)(3) says, "Final
2 cover system. If a CCR unit is closed by leaving CCR in
3 place, the owner or operator must install a final cover
4 system that is designed to minimize infiltration and
5 erosion and at a minimum meets requirements of
6 paragraph (d)(3)(i) of this section or the requirements
7 of the alternative final cover system specified in
8 paragraph (d)(3)(ii)."

9 Q. So can -- you read a lot of definitions
10 there.

11 A. Yes.

12 Q. Can you break down what these definitions
13 mean to you in terms of sufficient dewatering?

14 A. Well, what these definitions mean, read
15 together and considered together, is that until there is
16 a cover system placed over a CCR surface impoundment that
17 is capable of minimizing infiltration and erosion, then
18 the CCR surface impoundment contains free liquids -- no,
19 not free liquids -- contains liquids, and if there is
20 CCR, it contains liquids and CCR.

21 Q. When you say a cover system that's capable,
22 do you mean one that would be like in 845, that we have
23 requirements for those covers?

24 A. We do have requirements for those covers.

1 Q. Does stacking CCR on top of an area -- is
2 that sufficient as a cover for purposes of 845 or 257?

3 A. It's not sufficient for either.

4 Q. And then you talked about -- just if you
5 could break down, I guess, the types of water that need
6 to be dewatered from a unit. Would it be, like, stuff
7 that was sent there intentionally and then also, like,
8 incidental type of water, like rain?

9 A. Yes. We heard testimony that there were
10 excavations on top of these areas described as strips.
11 There's also in which people describe that at certain
12 times water was sluiced to those areas, so that would be
13 a liquid being put on there. Also, they're open to
14 precipitation all the time, so those are two means by
15 which water would be entering those.

16 Q. And as far as specific testimony, I think we
17 heard about the initial fly ash, which was supposed to be
18 abandoned and closed back in the '70s, still having an
19 area cut out that was receiving water --

20 A. Yes.

21 Q. -- in the, like, 2000s; is that right?

22 A. Yes, it was.

23 Q. And the other -- other than fly ash holding
24 units, I believe the south fly ash pad, they said it was

1 dewatered at some point to make the pad? Do you remember
2 that?

3 A. Yes, I remember that.

4 Q. You're saying testimony about insufficient
5 dewatering would apply to that?

6 A. Correct.

7 Q. Okay. And then (d)(3), I believe it was
8 cleaned out down to the clay, allegedly, in testimony; is
9 that right?

10 A. Yes.

11 Q. And they dewatered that?

12 A. Yes.

13 Q. And so the same testimony here applies to
14 that.

15 A. Yes.

16 Q. Anything else on dewatering that you failed
17 to mention you want to mention?

18 A. Not that I can think of.

19 Q. Okay. Let's move to de minimis and, you
20 know, people's opinions about it or USEPA's preamble or
21 other guidance that we've received on the word
22 de minimis. I want to talk about -- are you aware of any
23 other guidance that hasn't been mentioned so far in this
24 hearing that's relevant to the term de minimis?

1 A. Yes, and that is partially covered in one of
2 the Board questions. I'll find it here in a minute. It
3 is 11b, and essentially, in the May 2024 updates to
4 Part 257, USEPA rendered an opinion that -- or made
5 statements saying that based on their experience, as
6 little as 1,000 tons of CCR has been documented to exceed
7 groundwater protection standards.

8 Q. Would it be relevant to look at those pages
9 that you're referencing in that Board answer?

10 A. Yes.

11 Q. Okay. So this is that same Federal Register
12 document I mentioned earlier. It's just different pages.
13 The first page is 38950, the second page is 38979, and
14 the third page is 39000. So if you could explain where
15 we should be looking and why it matters.

16 A. Okay. On page marked 38979, the right-hand
17 column, about two-thirds of the way down, there's a
18 paragraph that starts "EPA," and it says, "EPA conducted
19 a sensitivity analysis to determine whether there is a
20 unit size below which adverse impacts to groundwater
21 quality are unlikely and monitoring is not warranted.
22 This analysis found exceedances of groundwater protection
23 standards are possible for placements below 1,000 tons.
24 Thus, such placements can be meaningfully -- can

1 meaningfully contribute to groundwater contamination at
2 these facilities." Also, on page marked 39000, 39000,
3 kind of the center of the page, a sentence that says
4 "80 CFR 21352. In any event, as discussed in
5 Unit III.A.4, recent EPA modeling demonstrates that far
6 lower quantities of CCR," in parens, "1,000 tons, can
7 pose significant risks to human health and the
8 environment."

9 Q. What's the significance of this guidance
10 from the Federal Register?

11 A. Well, it shows that accumulations of CCR as
12 small as 1,000 tons may cause -- may exceed groundwater
13 protection standards, which causes risk to human health.

14 Q. Okay. Thank you. Are there any other
15 materials or cases or anything that's relevant to this
16 issue?

17 A. Yes. There's a Board opinion for the Duck
18 Creek Power Station that the gypsum recycle basin
19 contained a de minimis amount of CCR and should not be
20 regulated under Part 845.

21 Q. Does February 2022 sound correct for that
22 opinion?

23 A. Probably, yes.

24 Q. And Adjusted Standard 21-4, does that sound

1 right?

2 A. Probably, yes.

3 Q. Anything else about that case that's
4 relevant?

5 A. The amount of CCR that was found in that
6 impoundment using bathymetric survey was approximately
7 50 cubic yards.

8 Q. And you said that the Board found that
9 Part 845 was inapplicable because of that.

10 A. Yes, because that was a de minimis amount.

11 MR. NEIBERGALL: I'd like to have the Board
12 take official notice for its Rules 101.630 of that case
13 number, Adjusted Standard 21-4.

14 MS. BROWN: Can you repeat that? I didn't
15 catch it.

16 MR. NEIBERGALL: Sure. It's -- and I can
17 give you a copy if you want. It's Adjusted Standard
18 21-4.

19 HEARING OFFICER WEBB: Yes, the Board can
20 take official notice of its own order from February 17th,
21 2022, in Adjusted Standard 21-4.

22 MR. NEIBERGALL: Thank you.

23 Q. (By Mr. Neibergall) Mr. Dunaway, I want to
24 move to environmental harm as a topic generally.

1 A. Okay.

2 Q. We've heard a lot of testimony about -- from
3 expert witnesses and others about the lack of
4 environmental harm. Let's talk first about the
5 groundwater monitoring at the site, if you could just
6 describe to me what it is and whether it's sufficient.

7 A. The groundwater monitoring at the site is
8 not sufficient. The -- In order to be sufficient, the --
9 under Part 845, the monitoring wells should be placed at
10 the edge of the waste boundary. The monitoring wells
11 that are present there are not at the edge of the waste
12 boundary, so therefore, under 845, the groundwater
13 monitoring is adequate -- is inadequate such that you
14 don't know the true concentrations of constituents that
15 may be migrating out of the units there. And actually,
16 under Part 620, which I also deal with, in order to
17 demonstrate compliance with Part 620 in the event that
18 845 were to be ruled inapplicable, groundwater monitoring
19 wells are supposed to be as close to the unit as
20 practicable but not to exceed 25 feet, and I don't
21 believe any of the monitoring wells present currently
22 meet that standard either.

23 Q. Did you hear any testimony from SIPC's
24 witnesses that was based upon and relying on the existing

1 groundwater monitoring network?

2 A. Yes. I believe both Mr. Bittner and
3 Miss Lewis' testimony relied on the current groundwater
4 monitoring system.

5 Q. Do you believe that that is flawed to rely
6 on the current system?

7 A. I think it is flawed to rely on a system
8 that's not adequate, plus I would also add that
9 Miss Lewis acknowledged that three constituents which are
10 a -- which are required to be monitored for CCR are not
11 included in her analysis for the S-series wells.

12 Q. Does the Agency's recommendation and amended
13 recommendation further explain the reasoning behind
14 that -- your argument that the groundwater is --
15 groundwater monitoring is inadequate? And I can repeat
16 the question.

17 A. Yeah, will you repeat that, please?

18 Q. So you helped draft the Agency's
19 recommendation?

20 A. Yes.

21 Q. And the Agency's amended recommendation.

22 A. Yes.

23 Q. And in those documents, there's much more
24 detail about why the groundwater monitoring is

1 insufficient; is that correct?

2 A. Yes.

3 Q. Okay.

4 A. Yeah, the details were provided on the
5 locations of the wells and how they were inadequate.

6 Q. Okay. And why that results in some of the
7 testimony provided by SIPC not being reliable.

8 A. Yes.

9 Q. Okay. I also want to talk about just the
10 practices generally of handling CCR material at SIPC's
11 facility.

12 A. Okay.

13 Q. Is there any concern from an environmental
14 harm standpoint about piling CCR material in a giant
15 mountain on top of a CCR surface impoundment?

16 A. Yes. Well, in fact, the -- based on any of
17 the permit information I've seen, none of the surface
18 impoundments at the facility are lined. None of the CCR
19 surface impoundments at the facility are lined. They
20 have not been covered, as we discussed earlier, so
21 therefore there's nothing to prevent precipitation from
22 percolating through the CCR into the geologic materials
23 below.

24 Q. I believe I remember it was Mr. Gallenbach

1 testified that one of the units had a clay liner? Did
2 you -- Do you recall that testimony?

3 A. I'm not aware of any of the units being
4 lined.

5 Q. So when you said they're unlined, you mean
6 lined by the sufficient definition in 845 or 257.

7 A. Correct. They're -- They do not have -- To
8 my knowledge, based on the documents I've seen, none of
9 the CCR surface impoundments had an engineered liner,
10 which would entail placement of clay, compaction,
11 measurements of its hydraulic conductivity, and that
12 process proceeding in an organized manner until it
13 reached the desired thickness with the desired hydraulic
14 conductivities being tested and confirmed.

15 Q. And I think you partially said this, but I
16 want to confirm. When you leave CCR in place in a bunch
17 of unlined impoundments, what are the effects of that?
18 What happens?

19 A. Well, precipitation, if there are any low
20 spots, it will pond there and continue to infiltrate, but
21 as it -- even if it's -- has a slope, it will --
22 precipitation will infiltrate and it will move into the
23 geologic materials below the impoundment and then migrate
24 with groundwater.

1 MR. NEIBERGALL: No further questions at
2 this time.

3 HEARING OFFICER WEBB: Thank you. We will
4 take about a 20-minute recess for Petitioner to review
5 this witness' answers to the Board's questions and
6 prepare their cross exam. Thank you.

7 MR. NEIBERGALL: Thank you.

8 (Brief recess taken.)

9 HEARING OFFICER WEBB: All right. We are
10 back on the record, and I believe the Agency has a couple
11 of exhibits they would like to introduce.

12 MR. NEIBERGALL: Yes. If we could introduce
13 as Agency Exhibit 56 the Agency's answers to the Board's
14 pre-hearing questions; as Agency Exhibit 57 the Federal
15 Reg liquids and other definitions from May 8th, 2024; and
16 as Exhibit 58 the federal CCRMU de minimis guidance
17 document from May 8th, 2024, about the 1,000 tons that we
18 discussed.

19 HEARING OFFICER WEBB: Is there any
20 objection?

21 MS. JOSHI: No objection.

22 HEARING OFFICER WEBB: Okay. Agency
23 Exhibits 56, 57 and 58 are admitted, and we are ready for
24 this witness' cross examination.

1 MS. JOSHI: Thank you.

2 CROSS EXAMINATION

3 BY MS. JOSHI:

4 Q. Good morning, Mr. Dunaway.

5 A. Good morning.

6 Q. For purposes of my question -- my questions
7 this morning, I will refer to 35 Illinois Administrative
8 Code Part 845 as Part 845. Are you okay with that,
9 Mr. Dunaway?

10 A. That's fine.

11 Q. Okay. And I'll refer to the federal CCR
12 regulations at 40 CFR Part 257 as Part 257 or the federal
13 CCR rule. Are you okay with that as well?

14 A. That's fine.

15 Q. Okay. Thanks. So first off, Mr. Dunaway,
16 do you agree that there is an exception to the
17 applicability of Part 845 for surface impoundments that
18 contain a de minimis amount of CCR?

19 A. Right, Part 845 does not regulate CCR
20 surface impoundments that contain a de minimis amount of
21 CCR.

22 Q. Do you agree that there's no definition
23 under Part 845 for the term de minimis?

24 A. Correct.

1 Q. Do you agree that there's no definition
2 under Part 845 for the term de minimis CCR surface
3 impoundment?

4 A. Correct.

5 Q. And you are familiar with the federal CCR
6 rules at Part 257?

7 A. Yes.

8 Q. Do you agree that there's no regulatory
9 definition under the federal CCR regulations for the term
10 de minimis?

11 A. Yes.

12 Q. And do you agree that there is no definition
13 under the federal CCR rule for the term de minimis CCR
14 surface impoundment?

15 A. Yes.

16 Q. Earlier you talked a little bit and I
17 believe referred to an exhibit that's been marked as
18 Agency Exhibit 57 that includes a portion of the preamble
19 and regulatory provisions from the 2024 CCR rules
20 promulgated by USEPA; is that right?

21 A. Would that be the 39000, like, the one
22 that's --

23 Q. No, I'm looking at what's been marked as
24 IEPA Exhibit 57, the one with the definitions.

1 A. Definitions. Okay. Thank you.

2 Q. Sorry. Yes. Okay.

3 A. Okay.

4 Q. So do you agree that this is part of the
5 preamble and rulemaking that promulgated amendments to
6 Part 257 in 2024?

7 A. Could you repeat that?

8 Q. Sure. Why don't you just tell me, what is
9 it that you have before you here in IEPA Exhibit 57?

10 A. Exhibit 57 is the definitions that are part
11 of Part 257.

12 Q. And are these definitions that were
13 promulgated in 2024?

14 A. Yes.

15 Q. So as part of this 2024 rule, you discussed
16 the definition of liquids; is that right?

17 A. Correct.

18 Q. And so did USEPA add a definition of the
19 term liquids as part of this 2024 rulemaking?

20 A. I believe they added a definition as
21 clarification. I believe that's in the preamble
22 somewhere. I couldn't tell you where --

23 Q. Sure.

24 A. -- but I believe it was added as a

1 clarification.

2 Q. So when they promulgated the CCR rule in
3 2015, they didn't have a definition -- like, a regulatory
4 definition for the term liquids; is that right?

5 A. I don't believe they did.

6 Q. But in the 2024 rule they promulgated a
7 definition for the term liquids; is that right?

8 A. Correct.

9 Q. And you just said they did that to add
10 clarity, right?

11 A. Yes.

12 Q. But in 2024, USEPA did not include a
13 definition for the term de minimis; is that right?

14 A. Correct.

15 Q. So now I'd like to refer to the other
16 document that's been marked as IEPA Exhibit 58.

17 A. Okay.

18 Q. So you referred to 1,000-ton value as part
19 of your direct examination; is that right?

20 A. Yes.

21 Q. Okay. And you took that 1,000-ton value
22 from this document?

23 A. Yes.

24 Q. Are there any requirements related to this

1 1,000-ton value in this federal CCR rules related to CCR
2 surface impoundments?

3 A. Yes.

4 Q. Can you show me where or tell me where?

5 A. Well, it comes from -- it's -- in text says
6 that this is related to CCRMUs. However, the definition
7 of CCRMU includes inactive CCR surface impoundments, so
8 if you go back to the -- I don't remember the exhibit
9 number, but the definitions, near the top of the middle
10 column it says, "CCR management unit means any area of
11 land on which any non-containerized accumulation of CCR
12 is received, is placed or is otherwise managed, that is
13 not a regulated CCR unit. This includes inactive CCR
14 landfills and CCR units that closed prior to October 19,
15 2015, but it does not include roadbed and associated
16 embankments in which CCR is used unless a facility or a
17 permitting authority determines that the roadbed is
18 causing or contributing to a statistically significant
19 above groundwater protection standards."

20 Q. Okay. Can you show me where in that
21 definition it mentions CCR surface impoundments?

22 A. CCR units.

23 Q. Okay. And is that referring to CCR units
24 that closed prior to October 19th, 2015?

1 A. Yes.

2 Q. Okay. Going back to Exhibit 58, I'd like to
3 refer you to page 38979, and on this page you referred to
4 some language I believe in the third column that
5 started -- that starts with "EPA conducted a sensitivity
6 analysis."

7 A. Correct.

8 Q. Well, first of all, I'd like to refer you to
9 the section that that language falls under. Does that
10 language fall under a subsection labeled with Roman iv?

11 A. Yes.

12 Q. And what does Roman iv say?

13 A. It says "CCRMU Fill Soil Risk."

14 Q. Do you consider the units that SIPC refers
15 to as the de minimis units in this matter -- any of them
16 to be CCR filled?

17 A. No. They were CCR surface impoundments.

18 Q. And then in that last paragraph that you
19 referred to that starts with "EPA conducted" --

20 A. Okay.

21 Q. -- I would say -- I believe it's the
22 third -- fourth sentence down. There's a sentence that
23 starts "Extrapolation beyond available model runs"? Do
24 you see that?

1 A. Yes.

2 Q. The model runs that are being referred to
3 there, did those model runs include modeling of CCR
4 surface impoundments?

5 A. I don't know.

6 Q. I'd like to move on to page 39000, the next
7 page of this exhibit. So I believe you read from a
8 sentence in the second column on this page. Is that
9 right?

10 A. Yes.

11 Q. Okay. And is it, like, the -- was it from
12 the second full paragraph within the second column?

13 A. Yes.

14 Q. Okay. So that sentence reads, "In any
15 event, as discussed in Unit III.A.4, recent EPA modeling
16 demonstrates." Do you see that language?

17 A. Yes.

18 Q. Okay. Again, the modeling that's being
19 referred to here, are you aware of whether it included
20 CCR surface impoundments?

21 A. No.

22 Q. And in this paragraph generally, is it your
23 understanding that EPA is referring to CCR surface
24 impoundments or CCR fill?

1 A. They're referring to CCRMUs.

2 Q. And if you -- okay. That's fine. Thank
3 you. And just confirm, did you say you believe that it's
4 appropriate to look at Part 257 to determine the
5 interpretation of Part 845?

6 A. 845 was -- has to be as protective and
7 comprehensive; therefore, we do have to rely on 257 in
8 order to make interpretations in 845 for some things.

9 Q. And to your knowledge, did USEPA evaluate
10 any surface impoundments in setting the 1,000-ton value
11 that you mentioned related to CCR management units?

12 A. I don't know.

13 Q. Do you agree that a de minimis amount of CCR
14 necessarily includes some CCR?

15 A. Yes.

16 Q. And what threshold, if any, is the Agency
17 using to determine whether CCR in an impoundment
18 qualifies as de minimis?

19 A. We don't have a threshold that I'm aware of.

20 Q. Mr. Neibergall has made reference to the
21 definition of CCR surface impoundment under Part 845
22 previously. Are you familiar with this definition?

23 A. Yes.

24 Q. And are you familiar with the same

1 definition of CCR surface impoundment under the federal
2 rules?

3 A. Yes.

4 Q. And do you agree that the definitions are
5 similar?

6 A. Yes.

7 Q. So do you agree that the definition of CCR
8 surface impoundment is, quote, "a natural topographic
9 depression, man-made excavation or diked area which is
10 designed to hold an accumulation of CCR and liquids, and
11 the surface impoundment treats, stores or disposes of
12 CCR"?

13 A. That sounds correct.

14 Q. Do you agree that the language in the
15 definition noting that the unit must be, quote, "designed
16 to hold an accumulation of CCR," and the language stating
17 that the surface impoundment must treat, store or dispose
18 of CCR necessarily indicates some threshold amount of CCR
19 must be present?

20 A. No.

21 Q. Okay. I'd like to refer you to SIPC's
22 Exhibit -- well, hold on. Before we move on to that, do
23 you believe that the term "designed to hold an
24 accumulation of CCR" and "treats, stores or disposes of

1 CCR" necessarily means that some amount of CCR must be
2 present?

3 MR. NEIBERGALL: I'm going to object to
4 asked and answered.

5 HEARING OFFICER WEBB: He -- That does sound
6 like the same question you just asked.

7 MS. JOSHI: It was slightly different.

8 HEARING OFFICER WEBB: Oh, okay. I'm sorry.

9 MS. JOSHI: I would ask that he answer if he
10 doesn't mind, and if it's the same answer, I'll move on.

11 THE WITNESS: Can you repeat it, please?

12 HEARING OFFICER WEBB: Yeah. Sorry.

13 Q. (By Ms. Joshi) Would you agree that the
14 term "designed to hold an accumulation of CCR" and
15 "treats, stores or disposes of CCR" necessarily means
16 that some amount of CCR must be present?

17 A. In order to meet the definition, it does.

18 Q. Okay. So now I'd like to show you SIPC's
19 Exhibit 17 in this matter, which is -- contains excerpts
20 from the 2015 CCR rule, and in particular, could you turn
21 to page 21357 of this document?

22 A. Okay. I'm on the page.

23 Q. Okay. I'd like to refer you to the middle
24 column on this page.

1 A. Okay.

2 Q. Do you see that there's some language
3 highlighted there?

4 A. Yes.

5 Q. Okay. Would you mind reading that language?

6 A. "EPA has therefore revised the definition to
7 provide that a CCR surface impoundment as defined in this
8 rule must meet three criteria: 1, the unit is a natural
9 topographic depression, man-made excavation or diked
10 area; 2, the unit is designed to hold an accumulation of
11 CCR and liquid; and 3, the unit treats, stores, or
12 disposes of CCR. These criteria correspond to the units
13 that are the source of the significant risks covered by
14 this rule and are consistent with the proposed rule. EPA
15 agrees with commenters that relying solely on criterion
16 from the proposed rule that the unit be designed to
17 accumulate CCR could inadvertently capture units that
18 present significantly lower risks, such as a process
19 water or cooling water ponds, because although they will
20 accumulate any trace amounts of CCR that are present,
21 they will not contain the significant quantities that
22 give rise to the risks modeled in the EPA's assessment.
23 By contrast, units that are designed to hold an
24 accumulation of CCR and which treat, store -- which" --

1 sorry, let me read that over -- "and in which treatment,
2 storage or disposal occurs will contain substantial
3 amounts of CCR and consequently are a potentially
4 significant source of contaminants."

5 Q. Thank you, and I apologize for making you
6 read that super-long excerpt. I'd like to turn to the
7 very last sentence of that excerpt.

8 A. Okay.

9 Q. Do you agree that this -- that in this
10 language USEPA is saying that a unit that is designed to
11 hold an accumulation of CCR and in which treatment,
12 storage or disposal occurs will contain substantial
13 amounts of CCR?

14 A. Will you repeat the question, please?

15 Q. Sure. Do you agree that this last
16 sentence -- or rather do you agree that in this last
17 sentence USEPA is saying that a unit that is designed to
18 hold an accumulation of CCR and in which treatment,
19 storage or disposal occurs will contain substantial
20 amounts of CCR?

21 A. That is what it says.

22 Q. Does IEPA have a position on what it
23 considers to be substantial amounts of CCR?

24 A. We don't have a definition of substantial

1 amounts of CCR.

2 Q. Looking at the second-to-last sentence, do
3 you agree that USEPA is stating that units that are not
4 CCR surface impoundments will not contain the significant
5 quantities that gives rise to the risks modeled in EPA's
6 assessment?

7 A. Are we still in the highlighted area?

8 Q. We're in the highlighted area in the
9 second-to-last sentence, yes.

10 A. Oh, second-to-last. All right. Now, will
11 you repeat that, please?

12 Q. Yes, of course. Do you agree that in the
13 second-to-last sentence, USEPA is stating that the types
14 of units that are not CCR surface impoundments will not
15 contain the significant quantities that give rise to the
16 risks modeled in EPA's assessment?

17 A. That's not exactly what it says.

18 Q. Sure. I was paraphrasing. Do you disagree
19 with my paraphrasing?

20 A. I'm not sure your paraphrase captures all
21 the nuance of what USEPA put in there.

22 Q. Okay. Let me just read the full sentence,
23 then. Do you agree that this says that "EPA agrees with
24 commentators that relying solely on the criteria from the

1 proposed rule that the unit be designed to accumulate CCR
2 could inadvertently capture units that present
3 significantly lower risks, such as process water or
4 cooling water ponds, because although they will
5 accumulate any trace amounts of CCR that are present,
6 they will not contain the significant quantities that
7 give rise to the risks modeled in EPA's assessment"?

8 A. That's what it says.

9 Q. All right. Does IEPA have a position on
10 what it considers to be a significant amount of CCR?

11 A. We do not have a definition for a
12 significant amount of CCR.

13 Q. Not definition. I'm just asking if you have
14 a position.

15 A. EPA positions are made by management. I'm
16 not a manager, so I can't firmly state that there is or
17 is not a position.

18 Q. And to your knowledge, since you're here as
19 IEPA's only witness today, are you aware of whether IEPA
20 has presented a position as part of this matter as to
21 what it would consider a substantial amount of CCR?

22 A. I don't believe either our recommendation or
23 our amended recommendation contain any statements saying
24 what would be a significant amount.

1 Q. And do they contain any statements regarding
2 what might be a substantial amount in their opinion?

3 A. I'm not aware of any statement that says
4 that -- what a substantial amount would be.

5 Q. I'd like to ask you about the south fly ash
6 pond for a moment, okay?

7 A. Okay.

8 Q. Are you familiar with this unit?

9 A. Yes.

10 Q. Does IEPA consider the unit to be a CCR
11 surface impoundment?

12 A. Yes.

13 Q. I'd like to ask you a hypothetical about the
14 unit, all right? So assume that the south fly ash pond
15 was built with the intended purpose of being a
16 replacement for pond A-1 and that pond A-1 did directly
17 receive CCR sluiced with water, okay?

18 A. Okay.

19 Q. Upon being built, assume the south fly ash
20 pond was not used for that originally intended purpose,
21 okay?

22 A. Okay.

23 Q. Instead, the only purpose it was used for
24 was to receive decanted water from Emery Pond.

1 A. Okay.

2 Q. And are you familiar with Emery Pond?

3 A. I am.

4 Q. Now, assume over the course of its operation
5 the south fly ash pond received less than a handful of
6 CCR through that decanted water from Emery Pond, okay?

7 A. Okay.

8 Q. Would IEPA consider the south fly ash pond
9 to be a CCR surface impoundment regulated under Part 845?

10 A. Okay. So in your hypothetical -- be sure I
11 have -- recall your facts -- was the -- was it designed
12 to replace pond A-1?

13 Q. Originally it was designed to replace
14 pond A-1.

15 A. Okay.

16 Q. But it was not used for that purpose.

17 A. But it did receive -- and how much is a
18 handful?

19 Q. Like, the amount --

20 A. A real handful?

21 Q. -- that I could fit in my hand, yeah.

22 A. In my opinion, a true handful would be a
23 de minimis amount.

24 Q. And in that case, would you consider the

1 unit to be a CCR surface impoundment regulated under 845?

2 A. It would not meet the definition because it
3 contains a de minimis amount.

4 Q. All right. What if the south fly ash pond
5 received a cubic yard of CCR from Emery Pond? In that
6 case, would IEPA consider the pond to be a CCR surface
7 impoundment regulated under Part 845?

8 A. Well, considering we did not believe a CCR
9 surface impoundment that contained approximately 50 yards
10 to be a CCR surface impoundment, I don't believe we
11 would.

12 Q. What if the south fly ash pond received and
13 contained 100 yards -- or let's say -- sorry. First of
14 all, for correction, were you talking in terms of yards
15 or cubic yards right now when you said 50?

16 A. Cubic yards.

17 Q. Okay. So what if the south fly ash pond had
18 100 cubic yards of CCR materials in it? Would IEPA
19 consider the south fly ash pond to be a CCR surface
20 impoundment regulated under Part 845?

21 A. I don't know.

22 Q. Is there anyone at IEPA that would know?

23 A. Someone would have to make that decision.

24 Q. So you do agree that it would involve some

1 level of reviewing information and making a judgment.

2 A. Yes.

3 Q. What if it was between 50 cubic yards and
4 100 cubic yards? Would IEPA consider the south fly ash
5 pond to be a CCR surface impoundment?

6 A. I don't know the answer to that.

7 Q. Mr. Dunaway, are you a toxicologist?

8 A. No.

9 Q. And I know you had a very long career at
10 IEPA. During your career, did you conduct risk analyses
11 as part of your job?

12 A. No.

13 Q. And your educational background is in
14 geology; is that right?

15 A. Correct.

16 Q. So I want to switch gears a little bit,
17 Mr. Dunaway. In response to Board question number 7 --

18 A. Okay.

19 Q. -- is it IEPA's contention that 100 percent
20 of the "other" material identified with PLM analysis in
21 Mr. Hagen's report, SIPC Exhibit 29, is CCR?

22 A. Yes.

23 Q. Is it IEPA's contention that 100 percent of
24 the sediment located in the units SIPC refers to as the

1 de minimis units consist of CCR?

2 A. Can you repeat that, please?

3 Q. Is it IEPA's contention that 100 percent of
4 the sediment located in the units SIPC refers to as the
5 de minimis units consist of CCR?

6 A. No. A sample showed some of it was coal.

7 Q. And does IEPA consider anything other than
8 coal within those units to be CCR?

9 A. I've not seen anything else identified in
10 there.

11 Q. Okay. Do you have definitive proof that it
12 is 100 percent CCR?

13 A. I have the analysis that were provided by
14 SIPC.

15 Q. Okay. Based on that analysis, again, do you
16 believe you have definitive proof that all of the
17 sediments within the CCR surface impoundments are
18 100 percent CCR?

19 A. The existence of anything else in there was
20 not provided to me.

21 Q. Okay. So are you familiar with the -- So
22 are you saying it's a possibility that all of it is CCR?

23 A. There could have been material that was not
24 assessed and the information was not provided.

1 Q. I'm sorry. You -- What do you mean,
2 there's -- there could have been material that was --

3 A. Well, you asked if there was the possibility
4 that there could be something else in there. I saw the
5 data that was provided. I don't know if all the data was
6 provided.

7 Q. You're familiar with the "other" category
8 from that report?

9 A. Yes.

10 Q. Do you agree that there could be sources for
11 the "other" category other than CCR?

12 A. There could be.

13 Q. Okay. Are you familiar with the concept of
14 a reasonable degree of scientific certainty?

15 A. I heard testimony about it yesterday.

16 Q. Have you ever used that as part of your
17 professional experience as a scientist?

18 A. I believe I've employed the concept, though
19 I've never called it by that name.

20 Q. Do you feel like you have an understanding
21 of the concept based on Mr. Hagen's testimony?

22 A. Yes.

23 Q. Have you determined with a reasonable degree
24 of scientific certainty that all of the "other" category

1 presented in the report is scrubber sludge?

2 A. I've determined that scrubber sludge could
3 contain all of those elements; therefore, without any
4 proof that there's another source, I would assume it's
5 scrubber sludge since scrubber sludge was put into those
6 units.

7 Q. Do you agree that the pond SIPC refers to as
8 the de minimis units would have received sediment
9 materials other than just CCR?

10 A. At least some of them.

11 Q. Do you agree that ponds -- the ponds
12 received stormwater runoff from the land surrounding
13 them?

14 A. Yes.

15 Q. Do you agree that the ponds could have
16 received naturally-occurring minerals and sediment
17 through that stormwater runoff?

18 A. It could have received some, yes.

19 Q. And I believe we already discussed this, but
20 do you agree that certain of the ponds also received coal
21 pile runoff?

22 A. Yes.

23 Q. Do you agree that at power plants like the
24 Marion Station you need to engage in landscaping

1 activities?

2 A. Can you repeat that, please?

3 Q. Yeah. Do you agree that at power plants
4 like Marion Station, the owner/operator has to engage in
5 landscaping activities?

6 A. I'm sure they mow the grass, yes.

7 Q. So like mowing; is that right?

8 A. Yes.

9 Q. Are you familiar with what phragmites are?

10 A. Yes.

11 Q. Is it possible that organic materials like
12 grass and phragmites could end up in the ponds?

13 A. Yes.

14 Q. Mr. Dunaway, are you familiar with the
15 concept of a lines of evidence analysis?

16 A. I've seen it used.

17 Q. Do you agree that it's a commonly used sort
18 of scientific process?

19 A. I've seen it used multiple times, yes.

20 Q. Do you agree that scientific judgment is
21 used when there -- to determine when there are sufficient
22 lines of evidence to form a conclusion to a reasonable
23 degree of scientific certainty?

24 A. Yeah, judgment is employed.

1 Q. Do you agree that once a conclusion has been
2 formed by the person applying their judgment to a
3 reasonable degree of scientific certainty, it's
4 appropriate to stop collecting additional lines of data?

5 A. Repeat that, please.

6 Q. Sure. Do you agree that once a conclusion
7 has been formed by that person using their judgment to a
8 reasonable degree of scientific certainty, it's
9 appropriate to stop collecting additional lines of data?

10 A. Well, it would be appropriate unless flaws
11 in those lines of data are pointed out; then they should
12 collect additional data.

13 Q. Okay. But you just agreed that it requires
14 someone to use their judgment, right?

15 A. Yes.

16 Q. Okay. Now assume that someone using their
17 judgment has used those lines of evidence to form what
18 they believe is a conclusion to a reasonable degree of
19 scientific certainty. At that point, is it appropriate
20 to stop collecting additional lines of data?

21 A. I believe the person doing that will stop
22 collecting lines of data because they formed an opinion.

23 Q. Going back to that "other" category you were
24 talking about, do you agree that the definition of

1 "other" included organics?

2 A. I believe those were mentioned in there.

3 Q. Can scrubber sludge include organics?

4 A. I don't know. Scrubber sludge at this
5 station was also mixed with fly ash, which was reported
6 to have some amount of organics in it.

7 Q. But in the PLM analysis, fly ash is a
8 separate category, correct? There was a category for fly
9 ash?

10 A. Yes.

11 Q. Mr. Dunaway, you worked for the Bureau of
12 Water throughout your career; is that right?

13 A. Correct.

14 Q. Did you ever work for the Bureau of Land?

15 A. No.

16 Q. Based on your knowledge and understanding,
17 can landfills have berms?

18 A. Based on my knowledge and understanding,
19 yes.

20 Q. And based on your knowledge and
21 understanding, do you agree that landfills require
22 stormwater runoff management practices?

23 A. Yes.

24 Q. I believe that on direct examination, when

1 you were discussing the area that SIPC is referring to as
2 the former landfill, you mentioned the possibility of
3 flowing water from runoff; is that right?

4 A. Correct.

5 Q. Was there any other flowing water that you
6 mentioned?

7 A. In the strips and in the what was referred
8 to as depression on top of that area --

9 Q. So --

10 A. -- CCR was sluiced there sometimes.

11 Q. Oh, sorry. I apologize.

12 A. No, that's all right.

13 Q. But I believe initially you were talking
14 about the early '80s, right?

15 A. Yes.

16 Q. Okay. And in your response to the Board's
17 comments, you referenced IEPA Exhibit CC; is that right?

18 A. Correct.

19 Q. And with respect to that figure, were you
20 referring to the possibility of pulling water from
21 runoff?

22 A. That exhibit is the -- that's the permit, so
23 it's -- primarily I use that for the design, look at the
24 design of the area on 6, but it does mention in there

1 that it's supposed to contain stormwater runoff, which is
2 flowing, of course.

3 Q. Okay. Mr. Dunaway, to your knowledge, were
4 initial facility reports for landfills required prior to
5 the early '90s?

6 A. I don't know.

7 Q. To your knowledge, when was Part 810
8 promulgated?

9 A. I think it was early '90s, but I'm not sure.

10 Q. And to your knowledge, when was Part 815
11 promulgated?

12 A. Again, I don't know, but I think it was
13 early '90s.

14 Q. And Part 257, that wasn't promulgated until
15 2015; is that correct?

16 A. Correct.

17 Q. And there were certain amendments to that
18 federal CCR rule in 2024; is that correct?

19 A. Yes.

20 Q. Can landfills have infiltration?

21 A. Yes.

22 Q. If there's precipitation that infiltrates a
23 landfill, does that make the landfill a surface
24 impoundment?

1 A. Well, I'm not -- I don't work for the Bureau
2 of Land, but to the best of my knowledge, infiltration
3 into the landfill would not make it a surface
4 impoundment.

5 Q. I believe in your direct you briefly touched
6 on the groundwater monitoring that Miss Lewis' risk
7 assessment used as one portion of its evaluation?

8 A. Yes.

9 Q. Are you aware that Miss Lewis' risk
10 assessment related not just to the de minimis units but
11 to the entirety of the facility?

12 A. Yes.

13 Q. Are you aware of the fact that she used
14 modeled results as well as actual groundwater monitoring
15 data for her risk analysis?

16 A. Yes.

17 Q. Do you agree that limestone is present in
18 the regional geology of southern Illinois?

19 A. The regional geology, yes.

20 Q. And do you agree that limestone is often
21 used at coal-fired power plants, for example, for roadway
22 coverage?

23 A. I suspect it is.

24 Q. Okay. Just a few last questions, then,

1 Mr. Dunaway.

2 A. Okay.

3 Q. Are you familiar with SIPC's alternative
4 relief for an adjusted standard in this proceeding?

5 A. Yes.

6 Q. The IEPA's recommendation suggests that SIPC
7 be required to submit operating permit applications for
8 the units at issue in this proceeding within six months
9 of the issuance of a final order in this proceeding; is
10 that correct?

11 A. Yes.

12 Q. In response to Board question 12b -- I'll
13 let you get there.

14 A. Okay.

15 Q. So in 12b the Board asks, "Is it possible
16 for the Agency to estimate the time period that would be
17 required to establish an adequate or enhanced groundwater
18 well monitoring network and collect sufficient data to
19 evaluate the impact of the units covered by the adjusted
20 standard on groundwater?" Do you see that question?

21 A. Yes.

22 Q. Okay. And can you just summarize -- well,
23 first of all, are -- do you -- are you the person who was
24 responsible for responding to all of the questions

1 here --

2 A. Yes.

3 Q. -- in this document? Okay. So can you just
4 explain the Agency's response to that question or
5 summarize the Agency's response to that question?

6 A. Well, the response to this question, I
7 estimated based on, you know, previous experience working
8 with various companies how long it would take to install
9 a monitoring well system, and also read a statement that
10 collection of background should include seasonal
11 variation, so it should not -- in order to collect those
12 samples should not be done in less than 12 months, but
13 certainly 24 months or 2 years is an adequate time to do
14 it.

15 Q. Okay. And to your knowledge, is the
16 groundwater monitoring program that's supposed to be
17 submitted with an applicant's permit application supposed
18 to include information regarding statistical analysis and
19 background information related to the site?

20 A. The initial operating permit has to have
21 plans for a groundwater monitoring system and it has to
22 describe the statistics that will be used.

23 Q. Do you believe it's possible to determine
24 how to conduct a statistical analysis without having the

1 background data to figure out how to conduct the
2 statistical analysis?

3 A. For an initial operating permit, I would
4 expect what an applicant would do would be quote the
5 section of Part 845 that says what a statistical method
6 has to include -- I don't remember the exact subsection,
7 but -- and say -- and commit to that as their plan for
8 doing statistics.

9 Q. Okay. But would -- if the information's not
10 in the operating permit application, would IEPA be able
11 to approve the plan or have information that's needed to
12 determine whether the statistical analysis is sufficient
13 and the groundwater monitoring program is sufficient if
14 the -- you know, if the 12 months -- 12 to 24 months of
15 monitoring you mentioned in here hasn't been conducted
16 yet?

17 A. You don't have to have done the statistics
18 in order to have a plan for doing the statistics.

19 Q. Okay. And what about the collection of
20 background and downgradient monitoring?

21 A. You have to have a plan for doing that in
22 the initial operating permit.

23 Q. Okay. So are you saying that it was -- it's
24 appropriate for an applicant to submit an operating

1 permit application without the eight rounds of
2 groundwater monitoring sampling from upgradient and
3 downgradient wells that would occur over a, you know, 12-
4 to 24-month time period for seasonal -- to account for
5 seasonal variability as you just mentioned?

6 A. Yes. The idea would be to have an initial
7 operating permit that describes how the system's going to
8 be constructed, the monitoring system, how the statistics
9 will be done, and then that would then be reviewed, maybe
10 commented on, and then a permit would be approved.

11 Q. Okay. So is it the IEPA's position, then,
12 that an operating permit application can be submitted
13 without a groundwater monitoring program that includes an
14 analysis of that eight rounds of groundwater monitoring
15 sampling, you know, over a 12- to 24-month period?

16 A. To the best of my knowledge, an application
17 can be submitted without the monitoring data included in
18 it.

19 Q. And is it IEPA's position that an
20 application can be submitted without the statistical --
21 sorry. Let me figure out how to phrase this question.
22 Is it IEPA's contention or position that an operating
23 permit application can be submitted without conducting a
24 statistical analysis of background?

1 A. Well, since you don't have to collect the
2 samples in order to submit the application, you don't
3 have to have done the statistical analysis. You only
4 have to have a plan for how it will be done.

5 Q. Okay. Thanks. Are you aware that in the
6 adjusted standard SIPC is requesting as an alternative to
7 a finding of inapplicability in this proceeding that SIPC
8 is asking for 12 months for the de minimis units 3/3A,
9 south fly ash pond, former pond B-3 and pond 4 to submit
10 their operating permit applications?

11 A. Yes.

12 Q. And as you said, the Agency has recommended
13 six months; is that right?

14 A. Yes.

15 Q. Okay. So do you agree that there is a
16 six-month difference between what the Agency has
17 recommended and what SIPC has requested?

18 A. Yes.

19 Q. And the Agency's recommendation suggests
20 that SIPC be afforded 16 months to submit a closure
21 construction permit application for the de minimis units;
22 is that right?

23 A. Correct.

24 Q. And are you aware that in the adjusted

1 standard SIPC is requesting as an alternative to a
2 finding of inapplicability in this proceeding that SIPC
3 agrees to the same time frame to submit a closure
4 construction application for units 3/3A, the south fly
5 ash pond and former pond B-3?

6 A. The same time frame?

7 Q. Of 16 months.

8 A. Oh, I think I remember that.

9 Q. Assuming that's the case, do you agree that
10 we're on the same page there in terms of what we're
11 requesting in the adjusted -- alternative request for
12 adjusted standard and what the Agency's proposing?

13 A. For the submission of the construction
14 permit, yes.

15 Q. And are you aware that the adjusted standard
16 SIPC is requesting as an alternative to a finding of
17 inapplicability in this proceeding proposes a time frame
18 of 18 months to submit a closure construction permit
19 application for what SIPC terms the former landfill area
20 and for pond 6?

21 A. I think that's the case.

22 Q. Okay. And do you agree that that results in
23 a two-month difference between the timeline the Agency's
24 proposing for the former landfill area closure

1 construction permit application submittal versus the
2 timeline SIPC is proposing in its alternative request for
3 an adjusted standard?

4 A. That is two months' difference, yes.

5 Q. And again, do you agree that that results in
6 a two-month difference between the timeline the Agency's
7 proposing for submittal of the closure construction
8 permit application for pond 6 as described by SIPC and
9 versus the timeline SIPC is proposing for that same
10 submittal?

11 A. Yes, that would be two months also.

12 MS. JOSHI: I have no further questions.
13 Thank you very much for your time.

14 MR. NEIBERGALL: Redirect?

15 REDIRECT EXAMINATION

16 BY MR. NEIBERGALL:

17 Q. Mr. Dunaway, if we could just go back to
18 Exhibit 57. You don't need to pull it out, but this is
19 the one -- the 2024 federal definitions that related to
20 liquids. You mentioned that the 22.59 requirement to be
21 as protective and comprehensive as the federal rules is
22 why we consider those definitions; is that correct?

23 A. Yes.

24 Q. Okay. If you could pull up Exhibit 58,

1 which was the other federal definitions, and go to the
2 page that you discussed on cross examination, which was
3 38979. It's the second page of Exhibit 58.

4 A. Okay.

5 Q. I wanted to call your attention -- I think
6 that opposing counsel said that the section you were
7 talking about fell under iv, "CCRMU Fill Soil Risk."
8 When I read down below that in v, "Uncertainty and
9 Sensitivity Analyses" is actually the section that this
10 is under; is that correct?

11 A. That's correct.

12 Q. Okay. So we're not necessarily only talking
13 about CCR fill. We're in a different section of this
14 document.

15 A. That's correct.

16 Q. All right. And the guidance -- you know, I
17 termed it as guidance because you don't consider this
18 1,000 ton as some sort of a rule in Illinois. It's just
19 something we're considering as guidance; is that right?

20 A. That's correct.

21 Q. Okay. I want to talk about the 100 percent
22 "other" issue that was raised on cross examination.

23 A. Okay.

24 Q. Does SIPC have definitive proof or provide

1 definitive proof that the sediment was not CCR?

2 A. No.

3 Q. The words "substantial" and "significant"
4 that were raised in relation to amounts of CCR, are those
5 in the definition of CCR surface impoundment?

6 A. No.

7 Q. And I'm going to show you what's been marked
8 as SIPC's Exhibit 34, the page 9. If anybody needs the
9 whole document, we can get it back out. If you could
10 read that last sentence of the top paragraph, please.

11 A. It says, "Ultimately, a critical determinant
12 of whether a unit is subject to the rule is whether it
13 meets the criteria in the regulatory definition, rather
14 than whether it was included as an example in the final
15 rule preamble."

16 Q. The definition being referenced is the
17 definition for CCR surface impoundment?

18 A. Yes.

19 Q. Which matches the state definition of a CCR
20 surface impoundment?

21 A. Correct.

22 MR. NEIBERGALL: No further questions.

23 RECROSS EXAMINATION

24 BY MS. JOSHI:

1 Q. I apologize. I did have the wrong section
2 there, but can I refer you back to Exhibit 58?

3 A. Which --

4 Q. That's the page 38979.

5 A. Okay.

6 Q. Okay. There, under Roman iv, where it says
7 "Uncertainty and Sensitivity Analysis," do you see that?

8 A. Yes.

9 Q. Okay. Do you see the first sentence that
10 says, "EPA reviewed the models used" --

11 A. Yes.

12 Q. -- "as well as the data assumptions input
13 into the models"?

14 A. Yes.

15 Q. Okay. Are you aware of whether the models
16 referenced there included CCR surface impoundments?

17 A. I'm not.

18 MS. JOSHI: No further questions. Thank
19 you.

20 MR. NEIBERGALL: So we would rest with this
21 witness.

22 HEARING OFFICER WEBB: Okay. I will first
23 ask if the Board -- oh, wait, do you want to -- we didn't
24 move the exhibits, did we?

1 MR. NEIBERGALL: We -- I think we moved the
2 three in, but we'll move the rest in after that.

3 HEARING OFFICER WEBB: Okay. Does the Board
4 have any questions?

5 MS. BROWN: Not at this time.

6 HEARING OFFICER WEBB: Okay.

7 MR. NEIBERGALL: So at this time Agency
8 would rest, and we would ask to move in all of our
9 exhibits from our recommendation and the three that we
10 added today into evidence.

11 HEARING OFFICER WEBB: Well, the exhibits
12 that are attached to your recommendation don't need to
13 be -- are already part of the record.

14 MR. NEIBERGALL: Perfect.

15 HEARING OFFICER WEBB: So the three that we
16 added today are now admitted. So is there anything
17 further?

18 MR. NEIBERGALL: Nothing further from the
19 Agency.

20 HEARING OFFICER WEBB: Okay. Is anybody
21 going to make a closing argument at hearing or are you --

22 MS. JOSHI: We're fine waiving and saving it
23 for our briefing if IEPA is.

24 MR. NEIBERGALL: Agreed.

1 HEARING OFFICER WEBB: Okay. Great. Then I
2 will just make some -- okay. So I'm just going to make
3 some concluding remarks and we'll be on our way.

4 I will remind you that exhibits must be filed
5 electronically pursuant to Section 101.627 of the Board's
6 rules, procedural rules. The transcript should be
7 available on June 27th and will be posted on the Board's
8 website. The written public comment deadline is
9 June 30th, 2025. Public comment must be filed in
10 accordance with Section 101.628 of the Board's procedural
11 rules. The parties agree that they shall both file their
12 post-hearing briefs by August 29th of 2025, and both
13 parties shall file their response briefs by October 17,
14 2025.

15 At this time I will conclude the proceedings. We
16 stand adjourned, and I thank you all for your
17 participation.

18 (Hearing adjourned at 11:01 a.m.)
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24

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

3
4 I, KAREN WAUGH, a Certified Shorthand Reporter
5 in and for the State of Illinois, DO HEREBY CERTIFY that
6 I was present at the Market Street Hall, Marion,
7 Illinois, on June 12, 2025, and did record the aforesaid
8 proceedings; that same was taken down in shorthand by me
9 and afterwards transcribed, and that the above and
10 foregoing is a true and correct transcript of said
11 proceedings.

12 IN WITNESS WHEREOF I have hereunto set my hand
13 this 27th day of June, 2025.

14
15 Karen E. Waugh

16 /s/Karen E. Waugh, CSR, RPR, CRR, RMR

17 Illinois CSR #084--003688
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[003688 - 39000]

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[applying - believe]

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