

1 D-15156
2
3 STATE OF ILLINOIS)
) SS:
4 COUNTY OF KENDALL)
5 BEFORE THE PUBLIC HEARING OFFICER
6 In The Matter Of:
7 APPLICATION FOR LOCAL SITING APPROVAL
PROPOSED WILLOW RUN RECYCLING AND DISPOSAL FACILITY
8 KENDALL LAND AND CATTLE, L.L.C.
WASTE MANAGEMENT OF ILLINOIS, INC.
9 KENDALL COUNTY, ILLINOIS
10
11
12 REPORT OF PROCEEDINGS had and
13
14 testimony taken at the hearing of the above-entitled
15
16 matter before PATRICK M. KINNALLY, Hearing Officer,
17
18 taken by Kathleen M. Grove, CSR 84-002197, and
19
20 Janet L. Galasso, CSR 84-002176, on Wednesday,
21
22 October 1, 2008 at 6:00 p.m., at 6617 Chicago Road,
23
24 Plattville, Illinois.

1 ALSO PRESENT: (Cont'd.)
2 MUELLER & ANDERSON, P.C., by
MR. GEORGE MUELLER
3 609 Etna Road
Ottawa, Illinois 61350
4 Appeared on behalf of Kankakee Regional
Landfill, LLC;
5
LAW OFFICES OF DANIEL J. KRAMER, by
6 MR. DANIEL J. KRAMER
1107A S. Bridge Street
7 Yorkville, Illinois 60560
Appeared on behalf of Village of Minooka;
8
LAW OFFICES OF DANIEL J. KRAMER, by
9 MS. KELLY A. KRAMER
1107A S. Bridge Street
10 Yorkville, Illinois 60560
Appeared on behalf of Old Second National
11 Bank of Aurora Trust 8932.
12 ALSO PRESENT:
13 MS. ERIN SUTTON, Kendall County Deputy Clerk;
MR. ROBERT E. DAVIDSON, County Board Member;
14 MS. JESSIE HAFENRICHTER, County Board Member;
MS. KAY HATCHER, County Board Member;
15 MS. NANCY MARTIN, County Board Member;
MS. PAM PARR, County Board Member;
16 MR. JOHN P. PURCELL, County Board Member;
MS. ANNE VICKERY, County Board Member;
17 MR. JEFF WEHRLI, County Board Member;
MR. BILL WYKES, County Board Member.

1 PRESENT:
2 MR. PATRICK M. KINNALLY, Hearing Officer;
3 PEDERSON & HOUP, by
MR. DONALD J. MORAN
4 161 North Clark Street, Suite 3100
Chicago, Illinois 60601-3242
5 Appeared on behalf of Waste Management of
Illinois, Inc.;

6
7 JEEP & BLAZER, LLC, by
MR. MICHAEL S. BLAZER, and
MR. DEREK B. RIEMAN
8 24 North Hillside Avenue, Suite A
Hillside, Illinois 60162 and

9
10 KENDALL COUNTY STATE'S ATTORNEY, by
MR. BRIAN J. LABARDI
807 West John Street
11 Yorkville, Illinois 60560
Appeared on behalf of the County of
12 Kendall;

13 HINSHAW & CULBERTSON, LLP, by
MR. RICHARD S. PORTER
14 100 Park Avenue, P.O. Box 1389
Rockford, Illinois 61105
15 Appeared on behalf of the County of Grundy;

16 SCOTT M. BELT & ASSOCIATES, P.C., by
MR. SCOTT M. BELT
17 105 East Main Street, Suite 206
Morris, Illinois 60450
18 Appeared on behalf of City of Morris;

19 MR. DELBERT S. LYLE,
2100 Manchester Road, Suite 945
20 Wheaton, Illinois 60187
Appeared on behalf of Lyle Enterprises,
21 LLC;

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4 DALE HOEKSTRA

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1 a quorum, and Brian Labardi, I think, is here pinch

2 hitting for our State's Attorney, Eric Weis.

3 So I think where we left off last

4 time was we were -- Waste Management was going to

5 offer some testimony on rebuttal. I'd like to remind

6 the lawyers what rebuttal is. It's not an attempt to

7 rehash what we've already done already.

8 Is there any other housekeeping

9 matters or anything that, motions or anything?

10 MR. BLAZER: Mr. Kinnally, if I could just make

11 one quick announcement on an unrelated subject. A lot

12 of the people in the room tonight have an interest in

13 the Fox Moraine appeal with the Pollution Control

14 Board which had been scheduled for hearing at the

15 Yorkville Public Library next Monday, Tuesday, and

16 Wednesday.

17 We learned today that that hearing is

18 being postponed. An official notice will be published

19 by the Pollution Control Board very shortly, and it's

20 been rescheduled to December 15th. So just a public

21 service announcement.

22 HEARING OFFICER KINNALLY: Okay. We appreciate

23 all the public --

24 MR. BLAZER: Excuse me. December 16th.

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1 HEARING OFFICER KINNALLY: All right. Would

2 everybody take their places, please, so we can get

3 started.

4 BOARD MEMBER DAVIDSON: We need a quorum.

5 HEARING OFFICER KINNALLY: Who are we waiting

6 for?

7 BOARD MEMBER DAVIDSON: Jeff Wehrli.

8 HEARING OFFICER KINNALLY: He's here.

9 (Brief interruption.)

10 HEARING OFFICER KINNALLY: Okay. This is the

11 reconvened hearing of the Siting Application for Waste

12 Management and Kendall County Land and Cattle.

13 Would the County Board please

14 introduce themselves?

15 BOARD MEMBER DAVIDSON: Bob Davidson.

16 BOARD MEMBER MARTIN: Nancy Martin.

17 BOARD MEMBER HAFENRICHTER: Jessie

18 Hafenrichter.

19 BOARD MEMBER HATCHER: Kay Hatcher.

20 BOARD MEMBER WEHRLI: Jeff Wehrli.

21 BOARD MEMBER WYKES: Bill Wykes.

22 BOARD MEMBER PARR: Pam Parr.

23 BOARD MEMBER VICKERY: Anne Vickery.

24 HEARING OFFICER KINNALLY: All right. We have

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1 HEARING OFFICER KINNALLY: Okay. We appreciate

2 all the public service announcements we can have at

3 these types of proceedings. Thank you.

4 So, Mr. Moran, are you ready to roll

5 now?

6 MR. MORAN: Yes.

7 HEARING OFFICER KINNALLY: Do you want to call

8 your next witness?

9 MR. MORAN: Thank you, Mr. Hearing Officer. We

10 would call Dale Hoekstra.

11 HEARING OFFICER KINNALLY: Okay. Would you

12 state your name and raise your right hand, please.

13 THE WITNESS: Dale Hoekstra.

14 (Witness sworn.)

15 HEARING OFFICER KINNALLY: Okay. Thank you.

16 Go ahead, Mr. Moran.

17 MR. MORAN: Thank you, Mr. Hearing Officer. I

18 would at this time make a motion to present this

19 testimony as an offer of proof, and the reason that

20 I'm doing this is because Mr. Hoekstra's testimony is

21 going to relate to the south property that Waste

22 Management owns that may be used for borrow at this

23 facility.

24 There have been a number of questions

1 that have come up with respect to the use of that
2 property for soil borrow. We wanted to have
3 Mr. Hoekstra available to answer questions regarding
4 it.

5 However, we don't believe that it
6 relates to the specific Siting Application we have
7 here, and I don't want to be in a position where I've
8 somehow offered testimony and suggesting that this
9 witness has testimony relevant to the design of Willow
10 Run. But we're prepared to submit this as an offer of
11 proof.

12 HEARING OFFICER KINNALLY: Well, that's an
13 interesting proposition. Does anyone object to that?

14 MR. PORTER: Yes.

15 HEARING OFFICER KINNALLY: Okay. And who is
16 that?

17 MR. PORTER: Grundy County.

18 HEARING OFFICER KINNALLY: You have to speak
19 into the microphone, Mr. Porter.

20 MR. PORTER: It wasn't on.

21 HEARING OFFICER KINNALLY: Okay. Thank you.

22 MR. PORTER: As far as I know there's been no
23 objection yet to the testimony. I don't know how
24 there can be an offer of proof at this juncture.

1 HEARING OFFICER KINNALLY: Anyone else want to
2 be heard on that? Mr. Kramer?

3 MR. KRAMER: Dan Kramer on behalf of Village of
4 Minooka, and I don't -- well, maybe it just flipped on
5 now.

6 I would likewise join in the same
7 objection for the same reason.

8 HEARING OFFICER KINNALLY: Okay. And so what
9 is the nature of your objection? I've never -- I've
10 been a lawyer for a long time, and I have never seen
11 it done this way.

12 Usually an offer of proof comes in
13 when someone offers evidence and it is objected to and
14 then the judge or whoever is ruling on the nature of
15 the evidence sustains the objection and then the
16 person that wants to get the evidence into evidence
17 makes an offer of proof. That's -- but I'm willing to
18 be educated.

19 Anyone else?

20 MR. BLAZER: If I could make a suggestion,
21 Mr. Kinnally. I have a feeling that Mr. Moran
22 probably doesn't want to be accused in some subsequent
23 proceeding of having waived his position that you
24 ruled on with respect to the motion that was filed by

1 Grundy County and by Minooka.

2 Rather than an offer of proof, which
3 I agree with you is a little bit odd the way it's
4 being done here, simply an acknowledgement that what
5 he's going to do now would not constitute a waiver of
6 or be with prejudice to the -- the legal position he's
7 taken based on the case that he cited that this
8 southern property is not part of the facility and is
9 not properly the subject of this hearing.

10 HEARING OFFICER KINNALLY: Well, I'm going to
11 let you do it, and the objection -- did you want to be
12 heard, Mr. Belt?

13 MR. BELT: I would, Mr. Kinnally.

14 HEARING OFFICER KINNALLY: Sorry. I didn't
15 mean to exclude you.

16 MR. BELT: I would join in the objection of
17 Mr. Kramer and Mr. Porter for the same reasons. And I
18 think that, you, Mr. Kinnally, have hit the nail on
19 the head. Procedurally I believe there has to be an
20 objection before an offer of proof is appropriately
21 placed before the Board, so with that basis I would
22 join in on the objection.

23 HEARING OFFICER KINNALLY: Okay.

24 MR. KRAMER: Mr. Kinnally, the reasoning about

1 the technical evidentiary ruling, you were very
2 eloquently and stated it much better than I, and that
3 is my exact reasoning on that point.

4 The second part is, I don't believe
5 it's rebuttal. It's new evidence that should have
6 been included in the original application. So for
7 both of those reasons our objection stands.

8 MR. PORTER: One more comment, if I may.

9 HEARING OFFICER KINNALLY: Sure. The floor's
10 open.

11 MR. PORTER: I would join in Mr. Kramer's last
12 comment that it's not rebuttal. Furthermore, if we're
13 submitting something as an offer of proof, I guess
14 what Mr. Moran is saying is that he believes it to be
15 irrelevant to this proceeding, and if that's the case,
16 it shouldn't be heard by the decision-maker of the
17 County Board.

18 I mean, he's trying to have his cake
19 and eat it, too. He's either -- he's going to submit
20 this testimony that can be heard, at the same time
21 he's trying to preserve his issue that it's not
22 admissible. It's just absolutely bizarre. And if
23 we're going to do it that way, I would guess that the
24 County Board shouldn't be present to hear it.

1 MR. BLAZER: If I could say one more thing,
 2 Mr. Kinnally --
 3 HEARING OFFICER KINNALLY: First of all, I get
 4 to make that call, Mr. Porter, as to who hears it.
 5 Go ahead, Mr. Blazer.
 6 MR. BLAZER: You had already indicated what
 7 you're going to do, but I think it's important to
 8 point out on the record all of these attorneys are
 9 talking about what rules of procedure may apply and
 10 what rules of evidence may apply.
 11 The only rules of procedure that
 12 apply in this proceeding are those set forth in the
 13 County Siting Ordinance, and they don't say anything
 14 about offers of proof. We all know that the rules of
 15 procedure don't apply, the rules of evidence don't
 16 apply.
 17 And the bottom line is, in fairness
 18 to everyone here, a lot of questions have been asked
 19 by a lot of people, including the County Board
 20 members, about this borrow pit, and I think they
 21 clearly are interested in hearing what this person may
 22 have to say.
 23 HEARING OFFICER KINNALLY: Okay. Anyone else?
 24 MR. MUELLER: Mr. Kinnally, it's still not

1 rebuttal because there's been no evidence offered by
 2 any of the oppositions about the borrow pit, and
 3 ultimately what this is, is rebuttal. So I join in
 4 everyone else's objections.
 5 HEARING OFFICER KINNALLY: All right. Anybody
 6 else?
 7 All right. Here's what we're going
 8 to do. The County Board wants to, and myself, I
 9 think, and other people, there's been a lot of --
 10 wants to hear some testimony about these borrow areas.
 11 And although I think procedurally this is probably
 12 incorrect, I'm going to permit you to do this, but I
 13 don't want this to go on very long.
 14 There were plenty of questions with
 15 respect to this issue on cross-examination, and I
 16 think it's somewhat relevant. I think it's very
 17 tangential to the Application because it wasn't
 18 included in the Application.
 19 So I'm going to give you a limited
 20 scope here, and we'll see where we go with it. And I
 21 respect the objections by all the lawyers, but they're
 22 overruled. Go ahead.
 23 MR. MORAN: Thank you, Mr. Hearing Officer.
 24

1 DALE HOEKSTRA
 2 called as a witness herein, having been first duly
 3 sworn, was examined and testified as follows:
 4 DIRECT EXAMINATION
 5 BY MR. MORAN:
 6 Q. Mr. Hoekstra, will soil be required during
 7 the initial construction of Willow Run?
 8 A. Yes.
 9 Q. And where will that soil come from?
 10 A. It will come from the facility itself.
 11 Q. Will that soil be sufficient to complete
 12 the initial construction of Willow Run?
 13 A. Yes, it will.
 14 Q. Will there come a time when soil from
 15 off-site will be required?
 16 A. Yes.
 17 Q. And that will be during the operation of
 18 Willow Run?
 19 A. Yes, that's correct.
 20 Q. When?
 21 A. Approximately at the beginning of the
 22 development of Phase 3, which is estimated to be at
 23 the third year of disposal or acceptance of waste, and
 24 approximately the year 2013.

1 Q. And for what purposes will this soil be
 2 required?
 3 A. The soil will be required for a variety of
 4 uses; for subgrade construction, daily cover,
 5 intermediate cover, and final cover needs.
 6 Q. Now, is it typical in your experience in
 7 the construction of a landfill to need soil from
 8 off-site sources?
 9 A. Yes, it is.
 10 Q. And when that occurs, what typically are
 11 sources from which these soils can be obtained?
 12 A. They can come from a variety of sources.
 13 They can be roadway construction, highway
 14 construction, subdivision development,
 15 industrial/commercial development. Another source
 16 could be another identified borrow area by the company
 17 off-site. So there are a number of sources where the
 18 soil can come from.
 19 Q. Where do you anticipate obtaining the
 20 off-site soils needed for the construction of Willow
 21 Run?
 22 A. Well, they'll come from both these
 23 off-site sources that I just mentioned throughout the
 24 life of the facility, as well as the south borrow area

1 that the property is owned by Waste Management.
 2 Q. How much soil do you expect to receive
 3 from these off-site sources excluding the south
 4 property owned by Waste Management?
 5 A. It's difficult to estimate exact quantity
 6 that might come to the facility during its operating
 7 life, but certainly in my experience operating
 8 facilities for the company for over 30 years it's not
 9 unusual to see quantities as high as half a million to
 10 even close to a million cubic yards come into a site.
 11 Q. Do you have any examples recently of where
 12 the company has had to obtain off-site soils for
 13 construction or completion of construction activities
 14 of a landfill?
 15 A. Currently we've got a project in Joliet
 16 that is ongoing, and this particular project is
 17 adjacent to one of our facilities and is generating as
 18 much as 300,000 yards of topsoil material or
 19 vegetative supportive material, if you will, and
 20 recently as much as 700,000 yards of clay may be
 21 coming from this project.
 22 Q. And immediately before the closure of
 23 Settler's Hill, did you need to obtain soils from
 24 off-site sources?

1 A. Yes.
 2 Q. And what was your experience there?
 3 A. We were able to obtain close to 400,000
 4 yards of soil needed for the capping activities of the
 5 site.
 6 Q. Now, from what area of the property south
 7 of this facility do you anticipate obtaining some of
 8 the off-site soil necessary for Willow Run?
 9 A. It will come from two areas on the south
 10 property. A north borrow area which is north of the
 11 gas pipeline easement, and then another section to the
 12 south of the gas line easement.
 13 Q. And where will the initial soil that you
 14 obtain come from?
 15 A. Initially we'll begin closest to our
 16 facility, which is the north section of -- north of
 17 the gas pipeline.
 18 Q. How deep will you excavate in that borrow
 19 area?
 20 A. Well, there will always be at least five
 21 feet of soil left above the aquifer in any portion of
 22 the borrow area.
 23 Q. So any excavation in those areas would not
 24 be an excavation into any part of the aquifer?

1 A. No, that's correct.
 2 Q. Will it be necessary to dewater the
 3 aquifer as part of that effort?
 4 A. No, it won't.
 5 Q. Why not?
 6 A. We'll always have feet five above the
 7 aquifer, five foot of soil above the aquifer.
 8 Therefore, dewatering of the area will not be
 9 necessary.
 10 Q. How will that soil be transported to
 11 Willow Run?
 12 A. The soil would be transported from the
 13 borrow area via heavy equipment, off-road dirt trucks,
 14 utilizing roadways that Waste Management would build
 15 from the borrow area to its facility, along with
 16 Church Road as an access point.
 17 Q. And will the use of this south property be
 18 subject to local zoning and any other applicable local
 19 land use regulations?
 20 MR. KRAMER: I'm going to object that it calls
 21 for a legal conclusion.
 22 HEARING OFFICER KINNALLY: Oh, no, I think he
 23 can answer that. If he knows; if he doesn't know.
 24 That's overruled.

1 BY THE WITNESS:
 2 A. Yes, it will.
 3 MR. MORAN: Mr. Kinnally, if I could approach
 4 the witness?
 5 HEARING OFFICER KINNALLY: Surely.
 6 MR. MORAN: Thank you.
 7 BY MR. MORAN:
 8 Q. Mr. Hoekstra, let me show you what we've
 9 marked as Petitioner's Exhibit No. 11.
 10 Do you recognize Petitioner's Exhibit
 11 No. 11, Mr. Hoekstra?
 12 A. Yes, I do.
 13 Q. Can you tell us what it is?
 14 A. It is a letter dated August 15th, 2008,
 15 addressed to Mr. Jeff Vogen, manager of the Morris
 16 Municipal Airport, written by myself addressing the
 17 fact that I had made several attempts to connect with
 18 Mr. Vogen regarding our application for the Willow Run
 19 facility and the fact that I had sent him some -- or
 20 left with him some drawings of the new footprint for
 21 the Willow Run facility at his office.
 22 MR. MORAN: Thank you, Mr. Hoekstra. I have no
 23 further questions.
 24 HEARING OFFICER KINNALLY: Are you offering

1 this exhibit?
 2 MR. MORAN: Yes.
 3 HEARING OFFICER KINNALLY: Okay. Is there any
 4 objection to Petitioner's Exhibit No. 11?
 5 (No response.)
 6 HEARING OFFICER KINNALLY: No objection.
 7 Hearing none, that will be admitted.
 8 (Petitioner's Exhibit No. 11
 9 admitted.)
 10 HEARING OFFICER KINNALLY: Let's start with
 11 Mr. Dan Kramer.
 12 MR. KRAMER: Thank you, Mr. Kinnally.
 13 HEARING OFFICER KINNALLY: Yes, you're on.
 14 CROSS-EXAMINATION
 15 BY MR. KRAMER:
 16 Q. Mr. Hoekstra, between the time of your
 17 direct testimony about two weeks ago and your
 18 testimony tonight, has Waste Management created an
 19 operational plan for the south borrow area adjacent to
 20 the footprint?
 21 A. No, it has not.
 22 Q. In fact, you testified at the original
 23 hearing that there was no plan for that south
 24 barrier -- borrow area; isn't that correct?

1 A. We do not have a specific plan designed
 2 for that area, that is correct.
 3 Q. Now, you've indicated, I believe, that
 4 you've had situations where you've had as much as
 5 500,000 cubic yards or 750,000 cubic yards brought
 6 into an existing solid waste site for cover purposes?
 7 A. I think my testimony was that we've
 8 accepted approximately 500,000 cubic yards into one
 9 facility and there's an availability of another
 10 700,000 cubic yards at another facility from a job
 11 that's occurring adjacent to the site.
 12 Q. Thank you. Have you had any other sites
 13 where you had to bring in 3.1 million cubic yards of
 14 cover for soils?
 15 A. No.
 16 Q. With respect to this south borrow area,
 17 you would agree it's immediately adjacent and
 18 contiguous to the legal description that you filed in
 19 this Application?
 20 A. It is.
 21 Q. You certainly considered the testimony
 22 you've given tonight relevant and crucial to this
 23 Application or you wouldn't be here; is that true?
 24 MR. MORAN: Objection; he can't determine

1 relevance of his testimony.
 2 HEARING OFFICER KINNALLY: That's sustained.
 3 MR. KRAMER: May I ask in a different fashion,
 4 Mr. Hearing Officer?
 5 HEARING OFFICER KINNALLY: Sure.
 6 MR. KRAMER: Thank you.
 7 BY MR. KRAMER:
 8 Q. Mr. Hoekstra, you certainly consider your
 9 testimony tonight important in regard to this
 10 Application?
 11 MR. MORAN: Objection; asking for a legal
 12 conclusion.
 13 HEARING OFFICER KINNALLY: Well, I think he
 14 asked him if it's important. I don't know if that's a
 15 legal. I think he can answer that. Overruled. If he
 16 thinks it's important. Maybe he does; maybe he
 17 doesn't. I don't know.
 18 BY THE WITNESS:
 19 A. As you've heard Mr. Moran talk about it,
 20 my testimony is directly related to questions that
 21 have been raised by this County Board and others with
 22 regard to the borrow area.
 23 BY MR. KRAMER:
 24 Q. And, again, you wouldn't be giving this

1 testimony if you didn't think it was important to
 2 respond to those concerns?
 3 MR. MORAN: Objection; asked and answered.
 4 HEARING OFFICER KINNALLY: I think he did
 5 answer it, Mr. Kramer. I'm going to sustain that.
 6 MR. KRAMER: Thank you, Mr. Kinnally.
 7 BY MR. KRAMER:
 8 Q. Mr. Hoekstra, with respect to the off-site
 9 soil areas, you indicated that there is always going
 10 to be at least five feet of soil above the aquifer
 11 protecting it; is that correct?
 12 A. That's correct.
 13 Q. Have you done any studies on that south
 14 borrow area to determine the depth of soil above the
 15 aquifer?
 16 A. I have not.
 17 Q. Would you have made your conclusion that
 18 there's always going to be five feet based on the
 19 testimony about the approximate depth of soils that
 20 are on the footprint of the landfill being adjacent?
 21 A. I can't answer that question, and I
 22 believe that Miss Underwood will speak to those issues
 23 in her rebuttal testimony.
 24 Q. Thank you. But, again, you came up with

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1 the five-foot figure based on your testimony a few
2 moments ago, did you not?
3 A. That is correct.
4 MR. KRAMER: Thank you. I have no further
5 questions.
6 HEARING OFFICER KINNALLY: Well, thank you,
7 Mr. Kramer.
8 Ms. Kramer, do you have any
9 questions?
10 MS. KRAMER: Briefly.
11 CROSS-EXAMINATION
12 BY MS. KRAMER:
13 Q. Did anyone in your planning team test the
14 borrow area for the level at which the aquifer would
15 be present?
16 A. I don't know that answer.
17 Q. So you haven't reviewed any test in coming
18 to your conclusion with the five feet of soil?
19 A. No, I don't -- I have not, no.
20 Q. There's no landscape plans that have been
21 produced by the Applicant for the borrow area, are
22 there?
23 A. We have not submitted any plans, but as
24 you've heard testified to by Mr. David Yocca, the

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1 company would consider a landscape plan as required by
2 the County Board and the residents along Sherrill Road
3 for that portion of the borrow area.
4 Q. Would it be similar to the landscape plan
5 that's currently on the southern portion of the
6 subject site?
7 A. I can't answer that question since we
8 would need to hear from both the County Board and the
9 residents in that area.
10 Q. And have you reviewed the landscape plan
11 for the southern area as it exists today -- strike
12 that, if I could. Could I rephrase it?
13 HEARING OFFICER KINNALLY: Just withdraw your
14 question.
15 MS. KRAMER: Could I withdraw the question,
16 please?
17 HEARING OFFICER KINNALLY: That's okay. Ask
18 another question.
19 BY MS. KRAMER:
20 Q. Have you had an opportunity to review the
21 landscape plan for the existing subject site?
22 A. No, I haven't.
23 MS. KRAMER: I have no further questions.
24 HEARING OFFICER KINNALLY: All right.

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1 Mr. Mueller.
2 MR. MUELLER: Thank you.
3 CROSS-EXAMINATION
4 BY MR. MUELLER:
5 Q. Mr. Hoekstra, we're talking about over
6 3 million cubic yards of soil needed; correct?
7 A. That's correct.
8 Q. And I thought I recalled Mr. Nickodem
9 testifying that by getting all of that soil from the
10 borrow areas to the south of the site, there would be
11 no traffic impact because all of those trucks could
12 move on internal roadways that would be constructed
13 since this area is contiguous to the existing
14 facility.
15 Do you recall that testimony?
16 A. Not specifically, no.
17 Q. Well, if Mr. Nickodem testified that there
18 would be no traffic impact because there would be no
19 soil brought in from outside the contiguous borrow
20 areas, was he mistaken?
21 A. I think that if you consider the fact that
22 if all of the soil was brought from the adjacent
23 property to the south, there would certainly be no
24 impact on the traffic flow.

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1 Also, if you recall, our traffic
2 witness, Mr. Miller, also included additional trucks
3 for the movement of trucks in and out of the facility
4 for the leachate stone, gravel, as well as additional
5 movements for soils that may be coming into the site,
6 as well.
7 Q. And Mr. Nickodem indicated that the soil
8 borrow area would be created and exist exclusively to
9 service the soil needs of the facility. Is that still
10 true?
11 A. I'm not sure I understand your question.
12 Q. What part of it didn't you understand?
13 HEARING OFFICER KINNALLY: No, no, no. Just
14 ask another question, Mr. Mueller. He said he didn't
15 understand it. Just ask a different question, please.
16 BY MR. MUELLER:
17 Q. Is it true that the soil borrow area will
18 be created for the sole purpose of servicing the soil
19 needs of the facility?
20 A. If, in fact, the facility needs to acquire
21 soils from the south borrow area, the south borrow
22 area would be available exclusively for that use and
23 only for the facility use if, in fact, that is
24 required.

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1 Q. So you're now saying that there's a
2 possibility that this 3.3 million cubic yard soil
3 shortfall will be met by some means other than the
4 soil borrow area?
5 A. I think as you heard me testify,
6 Mr. Mueller, the -- there are other off-site sources
7 where soil can come from. It's my experience as an
8 operator of landfills throughout Northern Illinois
9 that there are many off-site sources available with
10 soil, such as roadway construction and subdivision
11 construction and other areas of construction. I've
12 seen that to be true in just about every facility I've
13 operated for this company.
14 Q. As you sit here now, Mr. Hoekstra, how
15 many yards do you anticipate bringing in from off-site
16 and how many yards do you anticipate getting from the
17 soil area?
18 A. I can't answer that question since I'm not
19 aware at this point in time of what types of off-site
20 sources might be available throughout the operating
21 life of the facility should it be approved.
22 Q. How many yards fit into a truck, by the
23 way?
24 A. Depends on what type of truck.

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1 Q. Well, the kind of truck that you'd be
2 using to bring soil in from off-site sources.
3 A. Typically they're semi-tractor trailers
4 that probably hold anywhere from 15 to 20 yards,
5 probably more around the 15-yard range.
6 Q. So if we were to do the entire 3
7 million-plus tons in trucks from off-site, if we
8 divided that by 20 what do we have -- or by 15, what
9 do we have, 200,000 truckloads?
10 A. We don't need 3 million tons.
11 Q. Does the Application say -- doesn't the
12 Application say you have a shortfall of three-plus
13 million yards?
14 A. It's million yards, not tons.
15 Q. And you said 15 yards per truck; right?
16 A. Approximately. It can vary from truck to
17 truck.
18 Q. So roughly 200,000 truck trips in and
19 200,000 truck trips out; correct?
20 A. I haven't done the math.
21 Q. And you haven't characterized any of the
22 soils in this proposed borrow area, have you?
23 A. I have not.
24 Q. You can't say at this point what the

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1 acreage of the borrow area would be in terms of the
2 disturbed area, can you?
3 A. We haven't determined the acreage size,
4 Mr. Mueller, because we don't know at this point in
5 time what types of -- what quantities of soil may be
6 available from off-site sources.
7 Q. Do you still plan to leave the borrow
8 areas after you take the 3 million or less yards from
9 there in lakes and rain gardens?
10 A. That is correct.
11 Q. And if you're above the water table, how's
12 water going to get in there for the purpose of forming
13 these lakes?
14 A. It's just natural rainwater, surface
15 water.
16 MR. MUELLER: That's all I have.
17 HEARING OFFICER KINNALLY: Okay. Mr. Belt?
18 MR. BELT: Thank you, Mr. Kinnally.
19 CROSS-EXAMINATION
20 BY MR. BELT:
21 Q. Mr. Hoekstra, if I understand your
22 testimony you have no estimation at all in terms of
23 total number of acres of this borrow area; is that
24 correct?

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1 A. It has not yet been designed or
2 determined, that's correct.
3 Q. And, likewise, you have no testimony
4 regarding any proposed dimensions, possible dimensions
5 in terms of the length, widths, et cetera?
6 A. No, that is correct.
7 Q. And as a follow-up on Mr. Mueller's
8 questioning, it is accurate that this borrow area will
9 hold open water?
10 A. Yes.
11 Q. And that is intended to be a permanent
12 improvement, if you will, to the land?
13 A. It will hold open water, which is just
14 rainwater, surface water, yes.
15 Q. Right. But that's intended to be
16 indefinite; is that correct?
17 A. That's correct.
18 Q. Would you agree with Mr. Vogen's testimony
19 that open water has the capacity to attract certain
20 species of birds?
21 A. I think it depends on what types of other
22 surrounding uses are in existence as to what types of
23 birds and what quantities of birds may or may not be
24 attracted to those ponds.

1 Q. So do you have an understanding as to
 2 whether or not open water attracts birds or not?
 3 A. No. I've seen many open water ponds,
 4 Mr. Belt, that don't have any birds in them at all.
 5 Q. Okay. Would that be similar -- strike
 6 that -- or I'll withdraw that.
 7 HEARING OFFICER KINNALLY: All right. That
 8 will be withdrawn.
 9 MR. BELT: Thank you. I have nothing further.
 10 HEARING OFFICER KINNALLY: Mr. Porter?
 11 MR. PORTER: Thank you, Mr. Kinnally.
 12 CROSS-EXAMINATION
 13 BY MR. PORTER:
 14 Q. You indicated that you, as you sit here
 15 today, do not know how many cubic yards of the
 16 3-million-cubic-yard deficit would be from off-site
 17 versus the borrow pit; correct?
 18 A. That is correct.
 19 Q. So you were not able to provide any
 20 estimate of that amount to your traffic experts Metro
 21 Transportation Group; correct?
 22 A. No, that's correct.
 23 Q. And so they have absolutely no idea as to
 24 how many truckloads would be coming on- and off-site

1 carrying soil materials; is that right?
 2 A. We haven't put an estimate together.
 3 Q. So that was not included in their analysis
 4 of the traffic conditions; isn't that correct?
 5 A. No, that is not correct. There is an
 6 additional amount of truck flow, Mr. Porter, that has
 7 been included in Mr. Miller's traffic flow analysis
 8 which is there for the purpose of additional truck
 9 movements for the leachate gravel material needed for
 10 the site, which will, of course, vary from cell -- or
 11 phase -- phase construction to phase construction, as
 12 well as some additional truck movements in and out of
 13 the facility. So there is an additional amount, if
 14 you will, that is available for this type of need if
 15 so needed.
 16 Q. But that number of trucks was based
 17 completely on conjecture since you don't know how much
 18 borrow -- excuse me, you don't know how much of the
 19 deficit is going to come from off-site; right?
 20 A. I don't know how much of the deficit is
 21 off-site; that's correct.
 22 Q. An analysis could have been done to
 23 determine that; isn't that right?
 24 A. I'm not sure how we can do an analysis on

1 how much could come off-site without understanding of
 2 what's available from off-site sources.
 3 Q. Well, you have to understand what's
 4 available at the borrow pit in order to know how much
 5 you're going to get from off-site first; correct?
 6 A. Not necessarily true. It's my experience
 7 that you can get some pretty good quantities of soil
 8 from off-site sources over the life of a facility.
 9 Q. All right. I guess I'm confused. I
 10 thought your plan was to get as much as you could from
 11 the borrow pit area and then use off-site. Is that
 12 not the case?
 13 A. No. It's the intent to actively look for
 14 additional sources of off-site -- off-site sources of
 15 soil that would be needed for the operation of the
 16 facility during the entire life of the facility's
 17 operation.
 18 Q. All right. So it's your intent to use
 19 off-site soils before using the borrow pit area?
 20 A. No, we would use it in conjunction with
 21 some of the borrow areas.
 22 As you go through the facility
 23 development, as I've already testified to, the initial
 24 phase construction is completed with all on-site soil

1 sources, and certainly as the facility operates, there
 2 are opportunities to bring soil materials in from
 3 off-site sources. As those become identified and
 4 available, we will accept those materials.
 5 MR. PORTER: I have nothing further. Thank
 6 you.
 7 HEARING OFFICER KINNALLY: Mr. Lyle?
 8 MR. LYLE: One question.
 9 CROSS-EXAMINATION
 10 BY MR. LYLE:
 11 Q. Mr. Hoekstra, to your knowledge, are there
 12 any plans for future expansion of the landfill on the
 13 borrow area?
 14 A. I can't -- I don't know.
 15 MR. LYLE: No further questions.
 16 HEARING OFFICER KINNALLY: Okay. Any
 17 participants? Come on up. State your name.
 18 MR. MILLIRON: Todd Milliron, 61 Cotswold
 19 Drive.
 20 CROSS-EXAMINATION
 21 BY MR. MILLIRON:
 22 Q. Mr. Hoekstra, do you know the approximate
 23 cost it would cost to transport 15 cubic yards of
 24 off-site soil from one of the identified donor areas

1 you've already identified?
 2 MR. MORAN: Objection; relevance.
 3 HEARING OFFICER KINNALLY: It's pretty close to
 4 being irrelevant, but I'm going to let him answer the
 5 question if he knows. I'm going to overrule the
 6 objection. Let's see where this goes.
 7 BY THE WITNESS:
 8 A. I can't answer the question because I
 9 don't know where those off-site sources are yet. We
 10 haven't identified those.
 11 BY MR. MILLIRON:
 12 Q. You identified you had one that was, I
 13 don't know, had 500,000 and 700,000 capacity of
 14 off-site soil. Could we use one of those?
 15 A. Sure.
 16 Q. Do you have an idea how many miles it is
 17 from that site to this site, roughly?
 18 A. In the example of the 500,000 cubic yards
 19 of material that was brought into the site, it was
 20 brought in over a period of time from a variety of
 21 sources, and I don't have any specifics as to what
 22 that cost is, but I can tell you that it's at no cost
 23 to the company. These materials usually come to the
 24 facility at no cost.

1 Q. Would there be a truck driver involved,
 2 diesel fuel involved in transporting --
 3 HEARING OFFICER KINNALLY: I think we know
 4 that. I mean, they're not going to run on something
 5 other than that.
 6 BY MR. MILLIRON:
 7 Q. Okay. So there is an expense to transport
 8 this soil to the site, would you agree with that?
 9 A. It's an expense that is usually related to
 10 the development where the material is coming from.
 11 Q. Okay. Would it be more cost effective to
 12 use the soil adjacent to the site facility than the
 13 one that had the off-site soil transported to?
 14 A. No, it wouldn't. It would actually be the
 15 reverse. It would be less expensive as far as an
 16 operating cost of the facility to use off-site sources
 17 for as much soil as you could throughout the life of
 18 the facility.
 19 Q. And how do you come to that conclusion?
 20 A. Because typically there is a quantity of
 21 soil that is over and above the amount that is needed
 22 for a development and the developer must find a
 23 location for this material, and it's not uncommon for
 24 us to get those phone calls and say, you know, we've

1 got -- Mr. Hoekstra, we've got 20,000 yards of
 2 material that we need to take off of this site, and
 3 we'd like to know if you'd be interested in accepting
 4 that material.
 5 Q. And so folks haul this to you for nothing?
 6 A. That is correct.
 7 Q. At their expense?
 8 A. That is correct.
 9 Q. Okay. How often does that happen?
 10 A. All the time.
 11 Q. All the time. Would that be enough to
 12 make up this deficit of 3.1 million cubic yards?
 13 A. I can't answer that question because I
 14 don't know what type of off-source soils would be
 15 available because we haven't begun to operate the
 16 site.
 17 Q. In the traffic study that you did, how
 18 many trucks were included each day for this possible
 19 soil transport?
 20 A. I don't have the -- I don't have the exact
 21 quantity. I know that Mr. Miller talked about
 22 additional truck movements, as I already testified to,
 23 for not only the gravel, but additional truck
 24 movements for this type of material, and I don't

1 recall what that was.
 2 Q. Over the life of 14 years, if this number
 3 was 200,000 trucks, would that work out?
 4 A. I don't know. I haven't done that
 5 calculation, Mr. Milliron.
 6 Q. Do you think this testimony you're
 7 providing as rebuttal is provided as a smoke screen to
 8 provide additional cover for this borrow area?
 9 MR. MORAN: Objection.
 10 HEARING OFFICER KINNALLY: Sustained.
 11 Sustained.
 12 MR. MILLIRON: Thank you.
 13 HEARING OFFICER KINNALLY: You're welcome.
 14 Any other participant?
 15 Any member from the County Board have
 16 any questions for Mr. Hoekstra?
 17 BOARD MEMBER DAVIDSON: Yes. Bob Davidson.
 18 EXAMINATION
 19 BY BOARD MEMBER DAVIDSON
 20 Q. I need you to explain something to me
 21 because you just spun me completely around on what I
 22 had pictured in my mind for the landfill.
 23 You stated that most of the dirt
 24 would be used from the landfill site itself, or a

<p style="text-align: right;">Page 2201</p> <p>1 majority of it; am I correct?</p> <p>2 A. The testimony, Mr. Davidson, is the</p> <p>3 initial development of the site, which when we talk</p> <p>4 about the initial development, we're speaking about</p> <p>5 the development of the entrance road for the receipt</p> <p>6 control building, the western sedimentation basin, the</p> <p>7 eastern sedimentation basin, the development of</p> <p>8 Phase 1, and other ancillary features that are</p> <p>9 required as part of the initial development of the</p> <p>10 site.</p> <p>11 Q. Thank you. Because when you made that</p> <p>12 statement, I'm sitting here going, wait a minute,</p> <p>13 somebody made testimony that the southeast corner is</p> <p>14 going to be raised six-plus feet to make the leachate</p> <p>15 flow, and I'm, wait a minute, this isn't balancing out</p> <p>16 in what you -- you know, your statement.</p> <p>17 A. I apologize for that confusion.</p> <p>18 BOARD MEMBER DAVIDSON: Thank you very much.</p> <p>19 BOARD MEMBER VICKERY: Hello, Mr. Hoekstra. My</p> <p>20 name is Anne Vickery, and I have a question I've been</p> <p>21 wanting to ask, but I couldn't ask it before because</p> <p>22 there was no one from Waste Management up here, but</p> <p>23 the question I'm actually going to direct to our</p> <p>24 county attorney, Mike Blazer.</p>	<p style="text-align: right;">Page 2203</p> <p>1 again if they want to expand. So you can't impose it</p> <p>2 on them. The best you can do is ask if they would</p> <p>3 agree --</p> <p>4 BOARD MEMBER VICKERY: Okay. I'm asking will</p> <p>5 they agree.</p> <p>6 MR. BLAZER: Mr. Kinnally, I suppose --</p> <p>7 HEARING OFFICER KINNALLY: Well, you know, I</p> <p>8 don't mean to interrupt, but Mr. Hoekstra is here as a</p> <p>9 witness, and if you want to ask him that question,</p> <p>10 Anne, you can do that. That's why he's here. I mean,</p> <p>11 you can ask him, see what he says. I don't know what</p> <p>12 he's going to say.</p> <p>13 EXAMINATION</p> <p>14 BY BOARD MEMBER VICKERY:</p> <p>15 Q. Did you hear my question, Mr. Hoekstra?</p> <p>16 A. Could you repeat it, please?</p> <p>17 Q. My question is in the current</p> <p>18 Application -- I'll just state it how I stated it</p> <p>19 before, is that Waste Management will not increase the</p> <p>20 landfill and move any further west, okay.</p> <p>21 A. Yes, that's correct.</p> <p>22 Q. So my question as to Waste Management, if,</p> <p>23 in fact, this landfill was ever sited, would you agree</p> <p>24 to never, ever increase the landfill or cross</p>
<p style="text-align: right;">Page 2202</p> <p>1 So maybe -- in the current</p> <p>2 Application, the siting footprint does not allow for</p> <p>3 the landfill to ever go west, any further west.</p> <p>4 MR. BLAZER: I can't remember which witness it</p> <p>5 was, Anne, but I believe we did obtain a stipulation</p> <p>6 that they would not expand beyond what's currently</p> <p>7 identified as the western edge of the waste footprint,</p> <p>8 which is immediately to the east of Walley Run, yes.</p> <p>9 BOARD MEMBER VICKERY: So my other question is</p> <p>10 can we ask for a stipulation that this landfill will</p> <p>11 never, ever go farther north or cross Whitewillow</p> <p>12 Road?</p> <p>13 MR. BLAZER: You couldn't impose it as a -- my</p> <p>14 opinion is that you could not impose that as a</p> <p>15 condition of siting if siting were to be approved.</p> <p>16 There are limitations on the types of conditions that</p> <p>17 you can impose. They have to relate to the nine</p> <p>18 criteria which, in turn, apply to the specific</p> <p>19 Application before you.</p> <p>20 A limitation on a future -- any</p> <p>21 potential future expansion would have to be the</p> <p>22 subject of a completely separate siting proceeding.</p> <p>23 An expansion under the law is considered a brand-new</p> <p>24 facility, so they'd have to go through this process</p>	<p style="text-align: right;">Page 2204</p> <p>1 Whitewillow Road to the north?</p> <p>2 A. I don't believe I'm in a capacity for the</p> <p>3 company to answer that question, and I would have to</p> <p>4 undertake that with those who I report directly to.</p> <p>5 Q. Well, will you?</p> <p>6 HEARING OFFICER KINNALLY: He just told you he</p> <p>7 doesn't know.</p> <p>8 BOARD MEMBER VICKERY: I know. Will he ask?</p> <p>9 MR. MORAN: Mr. Hearing Officer, if I could</p> <p>10 perhaps respond at least in some fashion. We have</p> <p>11 heard what Board Member Vickery has identified as a</p> <p>12 request to accede to a condition in the event Siting</p> <p>13 Approval were to be granted that there be no expansion</p> <p>14 to the north of the current location of the facility,</p> <p>15 and if that is the request, I would need to consult</p> <p>16 with my client in order to determine whether there</p> <p>17 could be that agreement, and I think from that</p> <p>18 standpoint it would be our and my request to consult</p> <p>19 and to determine whether that would be something that</p> <p>20 would be agreeable.</p> <p>21 HEARING OFFICER KINNALLY: Well, I think you</p> <p>22 better do that. That's the question she's asking. I</p> <p>23 think the question is a little more specific, though.</p> <p>24 I think the question, if I might</p>

1 speak for Ms. Vickery, is Waste Management, as a
2 condition on siting, agreed not to expand the
3 currently designed, or the current design of the
4 facility, and I don't think she's talking about west.
5 I think she's talking about north, west, south and
6 east. That's what I think she's saying. So that, I
7 think, is something you might want to talk to your
8 client about.

9 Am I wrong there?

10 BOARD MEMBER VICKERY: Well, that wasn't my
11 question.

12 HEARING OFFICER KINNALLY: Oh, okay.

13 BOARD MEMBER VICKERY: I don't know. I mean,
14 yeah, you can ask that, but --

15 HEARING OFFICER KINNALLY: So you're just
16 concerned about the north?

17 BOARD MEMBER VICKERY: Well, I'm concerned
18 about all of it, but you asked what my question was.

19 My question was currently to the north, so --

20 HEARING OFFICER KINNALLY: Okay, that's fine.

21 MR. MORAN: And we have heard that, and I will
22 certainly confer with my client on it.

23 HEARING OFFICER KINNALLY: All right.

24 BOARD MEMBER MARTIN: Are you done?

1 BOARD MEMBER VICKERY: I'm finished.

2 EXAMINATION

3 BY BOARD MEMBER MARTIN:

4 Q. Nancy Martin, Mr. Hoekstra. I'd like to
5 have a couple of questions I think you'll have no
6 problem answering.

7 When you talk about they would always
8 leave five foot of soil above the aquifer, is what
9 you're saying that would be what you would do no
10 matter how much soil is there or not there, there
11 would always be in the borrow area five feet above the
12 aquifer; is that correct?

13 A. That is correct.

14 Q. The other thing is what you're saying
15 about material brought in is somebody doing a
16 development, somebody building a road, whatever
17 they're doing, have excess material that they have to
18 get rid of. So you're actually doing them a favor as
19 well as they doing you a favor, and you said that that
20 happens quite often in other landfills that you've
21 managed?

22 A. That's correct.

23 BOARD MEMBER MARTIN: All right. Thank you.

24 BOARD MEMBER HAFENRICHTER: No questions.

1 EXAMINATION

2 BY BOARD MEMBER HATCHER

3 Q. Good evening. My name is Kay Hatcher.

4 A. Good evening.

5 Q. And I am intrigued when you start talking
6 about soil coming in from developers, an outside
7 source, how do you screen the soil that comes in to
8 ensure that it doesn't bring contaminants?

9 A. That's a very good question. And it's a
10 very common occurrence for us to get these types of
11 phone calls and notifications that there is soil
12 available from an off-site source, and, you know, we
13 go through a line of questions such as where is the
14 property located, what is the type of project that is
15 occurring on that property, what types of soil
16 materials are you proposing to bring to the facility,
17 over what time period. Those types of questions are
18 the first, where we start.

19 Beyond that, once we identify the
20 facility, we will go and visit the site to ensure that
21 the materials that are being proposed to be brought to
22 the facility are -- meet our requirements and our
23 needs.

24 Q. What period of time does that normally

1 employ between the time you're first contacted by a
2 developer and the time the soil arrives?

3 A. It can vary from job to job, if you will,
4 or development from development. Oftentimes we may
5 get calls early on in the stage of a bidding process
6 where a developer is doing a commercial/industrial
7 development and will call us because they understand
8 that there is an imbalance on the soil from that job,
9 and they will have identified through the bidding
10 process from the general contractor that there may be
11 a certain amount of quantity of soil available.

12 And that process may be, you know, a
13 couple of months to -- in advance of when they
14 actually move the materials. Sometimes it's little
15 bit shorter. But oftentimes it's very early on in the
16 stages of the project. So we have plenty of time to
17 investigate these sources.

18 Q. Is there any kind of certification or
19 official testing that gets filed with the State before
20 this soil is brought in?

21 A. By us, no. But certainly soils that we
22 would, you know, need for certain construction
23 portions of the site would have to meet the
24 requirements of our construction quality assurance

1 officer who would be on-site during those construction
2 phases.

3 Q. And should some contaminated soil arrive
4 and it gets placed within the development site, what
5 then do you do?

6 A. If contaminated soil were to show up
7 on-site, it's easily removed from the facility.
8 Certainly we -- we know exactly where this material is
9 placed. Oftentimes it would be placed on a stockpile.
10 We could remove those contaminants. You could test
11 for the location of where that contaminant might be
12 and remove that if necessary.

13 But, honestly, it's my experience
14 that these sources of soil typically come from new
15 development projects, you know, where you're going in
16 and you're developing what was previously a farm field
17 for industrial/commercial development, maybe cutting
18 in a new highway, that type of thing is where we see a
19 lot of these large quantities of soil come from.

20 Q. Should the soil that's contaminated arrive
21 and you were able to remediate the situation, is there
22 any kind of a form or filing that you would do to
23 alert the State of Illinois that this had happened?

24 A. Absolutely. We would immediately stop the

1 job from coming in. We would notify the Illinois EPA,
2 the County, according to our Host Agreement, and take
3 the necessary steps to remediate it in accordance with
4 the regulations.

5 Q. If this happens, does activity at the
6 landfill cease until the appropriate remediation
7 happens and the State has certified it clean?

8 A. Well, the activities at the landfill
9 wouldn't necessarily stop. The acceptance of that
10 particular material would come to a conclusion very
11 quickly, and the rest of the activities at the site
12 could continue. We just wouldn't accept material from
13 that particular job until we resolved the situation.

14 We would isolate any materials
15 brought on-site that were contaminated, remove them
16 according to the regulations, stop accepting materials
17 from that source, but other operations at the facility
18 could continue.

19 Q. How many times have you dealt with a
20 situation of this sort?

21 A. I have not had an experience where soils
22 have been brought into a site, clean soils have been
23 brought into a site and they turned out to be
24 contaminated.

1 Q. Ever?

2 A. No. We've gone through a very detailed
3 process on, as I previously stated, on the
4 identification of these materials and qualified them
5 prior to acceptance.

6 BOARD MEMBER HATCHER: Thank you.

7 EXAMINATION

8 BY BOARD MEMBER WEHRLI:

9 Q. Mr. Hoekstra, Jeff Wehrli.

10 You said you were planning on open
11 the borrow around Phase 3 approximately three years
12 from now.

13 Are you aware that the off-site
14 borrow, because it's not a part of this facility, will
15 need a site development plan through planning,
16 building, and zoning of Kendall County?

17 A. Yes.

18 Q. Okay. And you don't know how large of an
19 area that you will be opening, and you will not have
20 that knowledge when you apply for this?

21 A. I think at that time, Mr. Wehrli, once we
22 would receive approval for the facility from this
23 County Board, and, of course, subsequently from the
24 Illinois EPA, we would begin to develop that plan.

1 How that is shaped, what it looks
2 like, I don't have the answer for that yet. But we
3 would certainly have to make a determination then as
4 to what it could possibly look like.

5 Q. And what the end use would ultimately be?

6 A. That's correct.

7 Q. If there's a need to pump surface water,
8 or any type of water that comes out of that borrow,
9 where would you pump it, in what quantity, and at what
10 rate?

11 A. Well, we would pump it only as-needed, you
12 know, just as we do in excavations that occur for the
13 phase developments that we do on the site. It's a
14 very similar type of operation.

15 It's not uncommon for us to pump from
16 our excavations in the facility as we're developing
17 the phases, and the operation would be similar where
18 we would pump this material -- or this water, the
19 surface water, out of the borrow area and into the
20 surrounding drainage features around the area.

21 Q. But in the landfill facility, you have
22 sediment ponds that will collect the sediment and keep
23 it from getting into the -- this is a pretty critical
24 area down here. We're in a very fragile environment.

1 To add a six-inch pump or whatever it
2 might take to pump a borrow pit clear of a major storm
3 event is possibly very disruptive to the surrounding
4 area, and that's something that I'm sure that you
5 would work out ahead of -- well, you would need to
6 have worked out by the time you go to the County for
7 the permission.

8 A. It would be part of the plan that we would
9 file with the County. But certainly as we excavate
10 these areas for borrow, the sump area, if you will,
11 that would collect this surface water, rainwater,
12 would provide an area for that sediment to settle
13 prior to us pumping it out.

14 And if need be, if we needed to take
15 some additional time for that sediment to settle, we
16 could easily do that and just move slightly over to it
17 to another section in the borrow and operate in that
18 section until such time as we could go back after the
19 water had been pumped out, the sediment has settled
20 down to the bottom, and we could go from there.

21 Q. You mentioned pipelines down in the south
22 borrow area. Where -- approximately how far south
23 into that south area are they? Do they split the
24 property? Are they north-south, do you know?

1 A. From what I recall, they don't exactly
2 split the area in half. They run from the east to the
3 west on a straight line and then jog a little bit
4 north and then continue to the west, if I recall.

5 Q. And you plan on your beginning excavations
6 being north of that pipeline?

7 A. Yes, there is a section to the north of
8 that pipeline easement that we would begin our borrow
9 operations in.

10 Q. Okay. Have you tested the quality of the
11 clay in this borrow area? Are you --

12 A. I think that Ms. Underwood will be able to
13 speak to that when she gets on the witness stand.

14 BOARD MEMBER WEHRLI: Thank you. No other
15 questions.

16 BOARD MEMBER WYKES: No questions.

17 BOARD MEMBER PARR: No questions.

18 HEARING OFFICER KINNALLY: Mr. Blazer?

19 MR. BLAZER: No questions.

20 HEARING OFFICER KINNALLY: All right. I don't
21 have any questions.

22 Did you want to ask him anymore
23 questions?

24 MR. MORAN: I have nothing further.

1 HEARING OFFICER KINNALLY: All right. Thank
2 you, Mr. Hoekstra. You're excused.

3 (Witness excused.)

4 MR. KRAMER: Mr. Kinnally, again, just for the
5 record, Dan Kramer on behalf of Minooka.

6 So our objection on both grounds we
7 earlier stated will be made as to the entire testimony
8 and offer of proof.

9 HEARING OFFICER KINNALLY: I know you made the
10 objection. We understand it. I overruled it then.
11 If that's a motion to strike, I'll overruling -- I'm
12 denying it.

13 Okay. Who's next?

14 MR. MORAN: Ms. Underwood.

15 HEARING OFFICER KINNALLY: All right. Do you
16 want to raise your right hand as much as you can.

17 (Witness sworn.)

18 HEARING OFFICER KINNALLY: I say that because
19 Ms. Underwood has a shoulder injury, not to make fun
20 of her.

21 All right. Okay. Mr. Moran.

22 MR. MORAN: Thank you, Mr. Hearing Officer. If
23 I might approach?

24 HEARING OFFICER KINNALLY: You may.

1 MR. MORAN: Petitioner's Exhibit 14.

2 HEARING OFFICER KINNALLY: Okay.
3 (Petitioner's Exhibit No. 14
4 marked.)

5 JOAN UNDERWOOD
6 called as a witness herein, having been first duly
7 sworn, was examined and testified as follows:

8 DIRECT EXAMINATION
9 BY MR. MORAN:

10 Q. Ms. Underwood, there have been three
11 witnesses who have offered their comments on the work
12 that you've done during the course of these hearings?

13 A. Yes.

14 Q. And also on the methodology that you used?

15 A. Yes.

16 Q. Now, each of these witnesses, as I recall,
17 had a degree in geology; is that correct?

18 A. That's correct.

19 Q. None of them had degrees in hydrology?

20 A. That's correct.

21 Q. Or hydrogeology?

22 A. That's correct.

23 Q. None of them were certified as
24 professional hydrogeologists?

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1 A. That's correct.
2 Q. None of them were licensed hydrologists?
3 A. That's correct.
4 Q. Now, we didn't cover this in your direct
5 before but, in fact, you have degrees in both geology
6 and hydrogeology?
7 A. That's correct.
8 Q. You're a licensed geologist?
9 A. Yes, I am.
10 Q. You're certified as a professional
11 hydrogeologist?
12 A. Yes, I am.
13 Q. And you're a licensed hydrologist?
14 A. Yes, I am.
15 Q. Now, how much time did you spend in your
16 work on this project?
17 A. I spent approximately 7 to 800 hours
18 working on this project.
19 Q. And were there professionals working under
20 your supervision who also worked on the project?
21 A. Yes, there were.
22 Q. Could you describe those professionals for
23 us, please.
24 A. Yes. For the hydrogeologic and geologic

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1 portion of the project I had about seven people
2 working on that, seven main people working on that;
3 two of them were Ph.D.'s in glacial geology, four of
4 them had master's degrees in geology or geotechnical
5 engineer or surficial geology, and then one had a
6 bachelor's in geology. And they worked approximately
7 the same amount of time as I did over the life of the
8 project.
9 Q. And you've been working on this project
10 since November of 2007?
11 A. Or October, yes.
12 Q. Could you describe for us the methodology
13 that you employed in evaluating this site?
14 A. Yes. First of all, I always start any
15 site investigation by looking at the geology. The
16 geology, again, forms the basis and forms the
17 foundation to the understanding of the site. You
18 cannot understand hydrogeology without understanding
19 geology.
20 So in the geologic field there's a
21 number of principles that you have when you apply that
22 science. One is that the present is the key to the
23 past.
24 And what that means is you can look

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1 at geologic processes that are going on right now to
2 understand processes that have happened in the past,
3 meaning how the geologic deposits were laid down and
4 the condition of those geologic processes.
5 So I always want to start with
6 understanding that before I begin my site
7 investigation.
8 Like, for example, the Equality
9 Formation that we've talked about is a lake deposit.
10 Those kinds of deposits are being formed right now in
11 glacial areas. Those deposits are extensive, they're
12 uniform, and they form fine-grained materials in the
13 bottom of the lake beds. Because we can see those
14 processes now, we know what happened 10,000 years ago
15 when that type of deposit was made in this area.
16 Second of all, I have to put the site
17 in the context of the regional information that I
18 have, and that's very important because if the site
19 doesn't match regional information, then I've got to
20 tailor my investigation to be able to figure out why.
21 It helps to control to say how much data I need to
22 collect.
23 Second -- or third, I've taken a
24 multitude of information, testing, data about the site

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1 soils, hydrogeology and bedrock, and I've done that in
2 a number of ways so I can cross-check the information
3 that I've collected. So I've taken millions of data
4 points from this site, and I've used that to always
5 look at data multiple ways.
6 So I just don't rely on my
7 conclusions based on one set of data. I've considered
8 all the data that's been collected. There's no data
9 that I say I'm not going to look at.
10 And then I take all that information
11 and I construct my conceptual model of the site, and I
12 take the data and test that conceptual model to make
13 sure that I'm thinking about the site conditions
14 correctly.
15 I have to cross-check that picture
16 that I've formed in my mind about how the geology is
17 and how the hydrogeology is, and then from that I can
18 develop my understanding of groundwater and how the
19 flow systems work beneath the site.
20 Q. Now, Ms. Underwood, is this the
21 methodology that was utilized by the objector
22 geologist who testified here?
23 A. No, it was not.
24 Q. What method did they use in reviewing your

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1 work?

2 A. When I looked at the work that was -- the

3 testimony -- or heard the testimony or read the

4 transcripts, what I thought was, first of all, they

5 ignored the geologic processes.

6 They talked about material properties

7 but not about the actual geologic processes and the

8 formations and how they were formed and what you would

9 expect the conditions of those formations to be.

10 Second of all, they didn't put that

11 in the context of the regional information.

12 Third of all, they had selective use

13 of the data that they were looking at. And, for

14 example, none of them looked through all the boring

15 logs. They did not consider all the data.

16 Every one of the objector witnesses

17 on hydrogeology did not talk about the information

18 collected during the aquifer pump test and the

19 information that that provided about the overburdened

20 soils and the ability of those soils to form a

21 confining layer.

22 They all had a limited and somewhat

23 hurried review, and many of them misunderstood the

24 testing protocol that was done at the site.

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1 Q. Ms. Underwood, what subjects are you going

2 to address with us this evening?

3 A. There's four things that I am going to

4 address tonight. The first is going to be the field

5 borings for the soil borings and rock corings. The

6 second one is the tritium information. The third one

7 is information concerning the unconsolidated soils and

8 their ability to act as a confining unit, and then

9 talk a little bit about the borrow excavation.

10 Q. Now, did you conduct additional

11 site-specific investigations in collection of both

12 soil borings and rock cores as part of this

13 Application?

14 A. Yes, I did.

15 Q. Could you describe that for us, please?

16 A. Yes. Now, this is a slide that I had up

17 during my direct testimony. This is all new work that

18 was completed for this investigation and this

19 proposal. None of this is work that was done in the

20 prior application.

21 So we collected additional soil

22 borings and rock corings for this site, brand-new ones

23 where we took the samples out of the boring, logged

24 them just as they came out of the boring, both soil

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1 and rock samples, and looked at them and described

2 them and made our boring and soil coring logs.

3 Those logs were reviewed. We went

4 back to data that was collected in 2007 because we had

5 the soil cores and the rock cores to look at. We

6 relogged those cores, and then we did additional work

7 installing more piezometers, performing aquifer tests,

8 performing slug tests, collecting samples for

9 laboratory testing, measuring water levels over

10 multiple time periods, looking at the background

11 groundwater quality and conferring with the ISGS

12 experts in both glacial and rock geology.

13 So everything on here --

14 MR. MUELLER: Mr. Kinnally, how is this --

15 HEARING OFFICER KINNALLY: Let her finish, and

16 then you can make an objection.

17 Are you finished?

18 BY THE WITNESS:

19 A. I just want to -- everything on here is

20 new. There are some statements that suggested that

21 there was not new soil borings and new rock corings

22 done during this investigation, and I just wanted to

23 make that clear.

24 HEARING OFFICER KINNALLY: Okay. Now what's

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1 your objection, Mr. Mueller?

2 MR. MUELLER: It's not rebuttal. She testified

3 that there were new borings. This is not new since

4 she testified. It's new since the last Application,

5 and that's well-documented in the new Application.

6 HEARING OFFICER KINNALLY: I don't

7 understand --

8 MR. MUELLER: This is basically getting the

9 last word.

10 HEARING OFFICER KINNALLY: I don't understand

11 your object. Can you tell me what it is, please?

12 MR. MUELLER: It's not rebuttal. This is stuff

13 that she's testified to on direct, and it's in the

14 Application.

15 MR. PORTER: I would join in the objection.

16 The testimony that she's trying to get to, I guess, is

17 the recharacterization of the rock log borings --

18 boring logs, excuse me, but that isn't what this is

19 about. This is a rehashing of her geologic

20 investigation. This isn't rebuttal to what the

21 experts submitted at direct testimony.

22 HEARING OFFICER KINNALLY: Okay. Anyone else

23 want to be heard on that objection?

24 And, Mr. Moran, would you like to

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1 respond?
2 MR. MORAN: Certainly. There were numerous
3 questions raised, comments made by various
4 participants that somehow there were no new rock
5 cores, there were no new soil borings performed, and
6 given the process by which the questions and answers
7 are presented in the hearing, it was after
8 Ms. Underwood testified, and she's had no opportunity
9 to clarify those perceptions and those statements
10 about the work that she did.
11 HEARING OFFICER KINNALLY: Well, Mr. Bognar was
12 here, and I don't think you were here, Mr. Porter, and
13 I don't know if you were here, Mr. Mueller, but he was
14 very critical about the fact that there was
15 insufficient data for him to make a determination.
16 In fact, I believe he said that
17 because of the insufficiency or poor quality of the
18 location of the wells such as in the overburden and
19 things of that nature, that he felt that this
20 Applicant did not meet Criteria 2, so the objection is
21 overruled.
22 Go ahead, Mr. Moran. New question.
23 MR. MORAN: Yes. Thank you,
24 Mr. Hearing Officer.

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1 BY MR. MORAN:
2 Q. Ms. Underwood, how much additional data
3 did you collect?
4 A. In terms of soil and rock cores, we
5 doubled the information, the footage that was
6 collected during the first application. So we ended
7 up with about 6,000 feet of soil and rock core that I
8 could look at and review from the site.
9 Q. That's over a mile of rock core, is that
10 correct, soil and rock core?
11 A. Yes.
12 Q. Can you describe for us the logging
13 process that you undertook for that 6,000-plus feet of
14 soil borings and rock cores?
15 A. Yes. We started by collecting the new
16 information first. So we went out and drilled the new
17 soil cores and the new rock cores and logged that
18 using standard procedures that we have in place so
19 that we are consistently describing the soil and the
20 rock characteristics.
21 Once the new soil and rock cores were
22 completed, we had Dr. Kolata in the field looking at
23 those cores with us, and we also had Dr. Brandon Curry
24 looking at the glacial deposits.

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1 Q. Okay. Ms. Underwood, who is Dr. Kolata
2 and Dr. Curry?
3 A. Those are IS -- people from the Illinois
4 State Geological Survey that we consulted with to look
5 at our work with us and confirm that we were, in fact,
6 characterizing the soil borings and the rock corings
7 correctly.
8 Once that was completed, then we went
9 back to the original soil borings and rock corings,
10 having reviewed all of the new information, the fresh
11 samples, and then we relogged the borings that were
12 taken in 2007.
13 Once those borings and rock cores
14 were relogged, then I personally went out, took the
15 new boring log, looked at the boring log, and looked
16 at every one of the soil and rock cores to compare
17 them and check the logging that was done by my peers
18 and the people under my supervision.
19 And I needed to do that so that I
20 could come back and stand up here today and vouch for
21 the logging that was done on those samples.
22 Q. Now, Ms. Underwood, did your descriptions
23 vary in any way from the CEC soil borings and rock
24 cores?

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1 A. There were some minor differences in those
2 soil and rock cores. Generally they were related to
3 the nomenclature and the methodology that we used for
4 consistency. In terms of the actual soil
5 classifications, they were very similar. There was
6 one soil classification that was inconsistent with
7 what we saw.
8 We actually went back out in the
9 field, drilled another boring, took a soil sample from
10 that particular layer, sent it into the laboratory,
11 had it checked for grain size and permeability, and
12 found that, in fact, the way we had logged that
13 particular sample was correct. Otherwise, for the
14 most part they were the same.
15 Fracturing has been asked in some of
16 the questions. We actually logged more fractures in
17 the rock core than what was reported in the 2007
18 application, but they were very, very similar.
19 Q. How were the 2007 soil borings and rock
20 cores stored?
21 A. Those samples -- the soil samples, when
22 they were extruded and taken out of the tube in the
23 field, were placed in wax-impregnated cardboard boxes.
24 It's a very heavy cardboard. They're divided into

1 sections so that the soil cores can be placed in the
2 sections. The cardboard has been dipped in wax prior
3 to us using it to store the soil samples in. The
4 boxes are marked. The depth of the soil samples are
5 marked, and they're placed in those boxes.

6 For the rock core, because it's
7 heavier, you need a stronger box. So there's wooden
8 core boxes that are used for that. The same thing,
9 the actual rock is marked as it comes out of the field
10 so we can know the orientation. The depth of the rock
11 cores are marked, put in the boxes. The boxes are
12 labeled, the depths are labeled, the dates are
13 labeled. And those are all stored, then, in a store
14 house and covered with tarps.

15 It's very common to want to go back
16 and want to look at those samples again. That's why
17 we put them in the boxes.

18 And then we always ask the Illinois
19 Geological Survey if they would like these samples
20 when we're done with them.

21 For example, at the Prairie View site
22 they wanted the deep rock cores that we took at that
23 location. We are still storing those boxes for them
24 at the site because they don't have the storage

1 capacity to take those boxes now, and it's been more
2 than ten years since those core samples were taken.

3 Q. Ms. Underwood, let's move to the question
4 of tritium. Where does tritium come from?

5 A. Tritium is a natural -- naturally
6 occurring isotope of hydrogen. It's formed in the
7 upper atmosphere, so there's natural background levels
8 of tritium.

9 During the Cold War era when nuclear
10 testing occurred at the ground surface, there's
11 additional tritium added to the atmosphere. There's
12 also small amounts of tritium added to the atmosphere
13 from nuclear power plants.

14 When the tritium was added during
15 nuclear testing, groundwater scientists started
16 looking at the occurrence of tritium in groundwater to
17 help them understand groundwater flow. It's used as a
18 general indication of groundwater movement, but it's
19 not a precise dating technique.

20 So when I applied it to the site,
21 that's how I was using it. And then I was using it to
22 look at did I see differences between the tritium
23 levels in the shallow aquifer and then about halfway
24 through the aquifer at about an 80-foot level.

1 Q. And how does, in fact, tritium get into
2 the groundwater?

3 A. Several different ways. First of all, the
4 tritium that we found in the samples that we tested,
5 there were four shallow samples right at the top of
6 the aquifer, and there were four samples deeper in the
7 aquifer at about 80 feet.

8 The four samples in the shallow
9 portion of the aquifer were at about seven tritium
10 units. Now, different states use different levels of
11 tritium to say that it -- the water is older than
12 pre-1953. For example, Illinois uses less than one;
13 Indiana uses less than two; Iowa uses less than three.

14 What we found in the shallow
15 groundwater was seven, which is also within the
16 background tritium concentrations that you would see
17 right now without any kind of nuclear testing adding
18 tritium to the atmosphere.

19 In the four deep wells, three of the
20 samples showed tritium levels less than one, pre-1953.
21 One tritium sample was at 1.5, so just slightly above
22 one. If I was in another state, they would say that
23 would be less than -- or pre-1953 water.

24 How does that water show some tritium

1 levels? There's a number of different mechanisms.

2 One is simply from drilling that particular boring.
3 When we drill the rock core, we have to use water in
4 the process. Any water that we would get from the
5 surface, from a treatment plant, from a water system,
6 would have tritium in it.

7 Any time somebody drills a well in
8 the area, if water is used during the drilling
9 process, that can introduce tritium into the aquifer.

10 So that very small amount of tritium
11 is explainable in the deeper system that way.

12 In the shallow system, I'd like to
13 show you a couple of maps that will help to explain
14 how it gets into the shallow system.

15 I have a couple of maps taken from
16 the Surface Water and Groundwater Resources of Kendall
17 County. I've used maps from this publication before.
18 It was done by the United States Geological Survey.

19 The first map shows the physiography
20 or the land forms at the surface in Kendall County,
21 and we talked about Glacial Lake Wauponsee before, and
22 that's a feature that laid down glacial lake deposits.
23 (Indicating.)

24 Now, they also have a map in that

1 publication that shows what the surficial geology
2 deposits are. So this shows actually the type of
3 geologic materials at the surface. (Indicating.)
4 We can overlay those two maps so you
5 can see Glacial Lake Wauponsee and the surface geology
6 on this map. The surface geology actually shows
7 that -- this gray area, which is the part that
8 contains the Glacial Lake Wauponsee sediments.
9 (Indicating.)

10 Right down in the central south
11 portion of the county there's this purple area, and
12 it's got a couple little brown spots in it. If we
13 look at that area more closely and blow that up and
14 then overlay the roadmap so we can tell where we are
15 and show the site location, we have the site location
16 down kind of in the southeast portion of the map
17 that's shown. We have Whitewillow Road here, Brisbin
18 here, Ashley here, and then Highway 47 there.
19 (Indicating.)

20 Now, this purple area represents
21 where the bedrock is at or just below ground surface,
22 and these brown areas represent where there's sand at
23 the ground surface. (Indicating.)

24 And so tritium from precipitation can

1 get in precipitation, fall as rainfall, get into the
2 roadside ditches, infiltrate these areas directly into
3 the upper portion of the aquifer, and that's how it
4 gets into the aquifer.

5 So it's very consistent with what you
6 would expect to see if you looked at the geology of
7 the area.

8 So, again, what that showed me was
9 the shallow system had tritium; the deeper system
10 didn't. Those are not well connected systems in the
11 aquifer system. So the shallow aquifer is not well
12 connected to the middle portion of the aquifer, deeper
13 portions of the aquifer.

14 Q. Ms. Underwood, the next topic that you had
15 identified was the unconsolidated soils in the
16 overburden.

17 Is that overburden a confining layer?

18 A. Yes, it definitely is.

19 Q. Can you explain that for us, please?

20 A. Yes. The overburden soils form a
21 confining layer based on a -- significant amounts of
22 data and significant evidence that that's how it acts.

23 First of all, there's data that
24 showed -- this observational data that showed it was

1 low-permeability soils.

2 Second of all, we have testing data.

3 We have the laboratory tests. We have information
4 that we can glean from the slug tests. We have
5 information from the aquifer tests. We have
6 observations on the need for drain tiles. And then I
7 have additional information that I found out about the
8 construction of the pond over at the nursery that I'll
9 talk about later that also confirmed that it's a
10 confining layer.

11 Q. Why did you construct those water table
12 wells the way you did?

13 A. There was a number of reasons that those
14 wells were constructed the way they were, and I'll
15 illustrate that.

16 We had topsoil and then the clay
17 units and then the bedrock forming the top of the
18 aquifer. When we went to put in the shallow wells,
19 there are a number of purposes that we're trying to
20 fulfill when we put in those wells.

21 One, we absolutely have to have a
22 seal at the top of that well to make sure that we
23 don't have surface water infiltration into those
24 wells. So that's a minimum of five foot thick. That

1 has to have an underlying one- to two-foot layer of
2 very fine sand so we don't get the seal material into
3 the well itself, and then that's surrounded by sand.
4 (Indicating.)

5 When we drilled the well through the
6 clay, we did not get water coming into the well. And
7 one of the purposes of drilling the well is to have a
8 well with water in it. So we have the need to have a
9 safe well, and we have the need to have water in the
10 well.

11 We also try to get the water level to
12 be within the well screen because that gives us the
13 actual water table. Because we had very short well
14 screens, that was difficult to do.

15 Lastly, we try to use it to take
16 information about the physical characteristics about
17 the material that the well is constructed in. As we
18 drill these borings, since we were not getting water,
19 I had to make a decision on whether to continue deeper
20 into the bottom of the formation to get water, and
21 because I knew I was collecting other information
22 about the characteristics of the soil, I made the
23 conscious decision to deepen those wells until we
24 could no longer turn the auger into the materials,

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1 which meant that it went into the upper portion of the
2 weathered bedrock.
3 So we deepened the well, just went
4 into the upper portion of the bedrock. When we hit
5 the bedrock, and this is evidence that it's a confined
6 aquifer, water entered the well under pressure because
7 the water entered the well and was pushed up into the
8 well from the bedrock. (Indicating.)
9 That's the definition of a confined
10 aquifer. It's an aquifer under pressure. And the
11 fact that that's what happened when we drilled the
12 well showed us that it was a confined aquifer.
13 Once we had water in the well, then
14 we constructed the well itself, put the well pipe in,
15 put in a sand pack, and then put in a seal to seal off
16 anything from going down the borehole that was used to
17 construct the well. (Indicating.)
18 So this still provided me meaningful
19 data about the conditions in the soil material.
20 Q. Did you look at that information from the
21 water table wells and the lab testing to understand
22 the properties in the overburden?
23 A. Yes. I could cross-check the
24 characterization of the soils as a low-permeability

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1 material by looking at the laboratory information in
2 conjunction with the way the well was constructed.
3 I had laboratory information that had
4 the permeability of the clay at 5.9 times 10 to the
5 minus 8 centimeters per second.
6 Now, I just want to say something
7 about the lab testing because that's come up in
8 questions also. ASTM, the society for testing
9 materials, is the organization that makes these
10 standards.
11 For permeability testing, there is a
12 standard that's 23 pages long that lays out the exact
13 procedures laboratories have to follow to test this
14 material for permeability.
15 There is nothing in that standard
16 that says we are trying to mimic the exact stress
17 field that the soil sample is taken out of. What it
18 does say is that we have to maintain the volume of the
19 sample and maintain its saturation.
20 The two pages of the ASTM standard
21 that were passed out previously were out-of-date pages
22 from the standard, it was an old standard, and it was
23 only two out of the 23 pages.
24 So this is a rigorous process. It's

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1 a well-defined process, and it gives us the
2 permeability of the soil samples.
3 Now, I took the results from those
4 soil sample tests, which was 5.9 times 10 to the minus
5 7 -- 8. I had five feet of saturated clays, and I had
6 one foot of weathered bedrock at W 2 -- WT 202.
7 Now, when a slug test is conducted,
8 what I'm trying to do is test the answer from the slug
9 test against my picture of how this system works with
10 the clay and the weathered bedrock.
11 Water tries to come in through the
12 clay into the well into the sand pack, and water
13 tries, and does come in, from the weathered bedrock
14 both from the sides and from the bottom.
15 It was suggested that water only
16 comes in the bottom here. That's not true. It comes
17 into the sides where the sand pack material is.
18 (Indicating.)
19 Now, when I looked at the laboratory
20 permeabilities and I assigned a permeability of the
21 weathered bedrock at 10 to the minus 3 centimeters per
22 second, I can calculate what the slug test should show
23 if those are the conditions that I have.
24 And when I did that calculation, I

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1 found that I would estimate or calculate a hydraulic
2 conductivity from the slug test of 1.7 times 10 to the
3 minus 7. Now, the actual value was 1.2 times 10 to
4 the minus 7. So --
5 HEARING OFFICER KINNALLY: What's the
6 difference between the actual -- what is the
7 significance between the actual calculation that you
8 did, 1.2 times 10 to the minus 7, and 1.7 times 10 to
9 the minus 7th? Can you tell us what that means? What
10 is the difference? There's got to be some difference.
11 THE WITNESS: There is no difference, and
12 actually this number should be a 4 and not a 7.
13 (Indicating.)
14 HEARING OFFICER KINNALLY: Which number should
15 be a 4?
16 THE WITNESS: This should be 1.7 times 10 to
17 the minus 4 and 1.2 times 10 to the minus 4. Those
18 are the same numbers. (Indicating.) The accuracy of
19 the test, that's well within the accuracy of the test.
20 So those are essentially saying we
21 can have clay and we can have weathered bedrock and
22 it's just a very small portion in the weathered
23 bedrock to see the results that we got in the slug
24 test.

1 BY MR. MORAN:

2 Q. Now, Ms. Underwood, Mr. Kinnally had asked
3 Mr. Bognar a question regarding a statement CEC had
4 allegedly made that the overburden was a partially
5 confining unit, and that your statement, obviously, is
6 that overburden is a confining unit.

7 Are those two statements
8 inconsistent?

9 A. No, they're not. And they're not
10 inconsistent because I looked back in the 2007
11 application and looked at the way those -- that
12 terminology was used, meaning partially confining.

13 The 2007 application described this
14 clay layer as a confining unit. However, in the
15 western portions of the site, there was a bedrock high
16 where they indicated small areas or some locations may
17 be partially confining.

18 The area that they were talking about
19 is not within this Application. So the area that they
20 describe that does include the same area in this
21 Application is described as a confining unit, so there
22 is no inconsistency.

23 Q. Now, Ms. Underwood, was there additional
24 information that led you to believe that this

1 unconsolidated material in the overburden is, in fact,
2 a confining unit?

3 A. Yes, there was.

4 Q. And what is that information?

5 A. There was information from the aquifer
6 test that again provided me data and observations and
7 information from the field that these soils are a
8 confining unit. So I'd like to describe that.

9 When you do an aquifer test or a
10 pumping test, we have a well that we're pumping water
11 out, we pump water for four days, and we measured the
12 changes in pressure at that well. And we had eight
13 other wells that we were measuring the changes in
14 pressure in the aquifer as we pumped the pumping well.
15 And those were located at various distances away from
16 the pumping well.

17 Now, this is a page out of the
18 textbook Groundwater by Freeze and Cherry. It's
19 referenced in relationship to the pumping test or the
20 aquifer test in the Application. And this shows how
21 pressure or drawdowns will change during a pumping
22 test based on the kind of system that you're in.
23 (Indicating.)

24 This first example shows a confined

1 aquifer. Here's the aquifer shown with the dots, and
2 then it's confined by something -- a layer above it
3 and a layer below it. (Indicating.)

4 The shape of the drawdown during the
5 pump test looks like this. This is time, and this is
6 the change in the pressure or the water level in the
7 well. So you get that characteristic curve.
8 (Indicating.)

9 The second figure here shows the type
10 of curve that you would get if you're in a leaky
11 confined system. So you have an aquifer and it's
12 overlain by a leaky confining unit, one that allows
13 more water through, and it's underlain by another
14 unit. And when you have that kind of system and you
15 pump the well, the curve looks like this.
16 (Indicating.)

17 Now, this is the confined curve here,
18 the top curve, and the bottom curve then shows what it
19 would look like if you have a leaky system.
20 (Indicating.)

21 You have a different characteristic
22 curve shown in the third example if you have an
23 unconfined system. And, again, here's the curve for
24 the confined system, and here's the unconfined system.

1 (Indicating.)

2 Now let's look at the results that we
3 got from the aquifer test at the site. I have two
4 examples to show; one from a well that's taken right
5 near the top of the aquifer and one from measurements
6 taken about halfway through the aquifer.

7 This is from the deeper well. Again,
8 what you see is time, so this represents the four days
9 while we were pumping, and this shows the change in
10 the water level or the pressure within the aquifer,
11 because that's what you're measuring. (Indicating.)

12 The solid line represents the
13 characteristic curve, and every one of the black dots
14 represent a data point that we took continuously
15 during that test. We used transducers to do that, and
16 they continuously recorded those water level
17 measurements. (Indicating.)

18 When you get up in here there's so
19 many data points, it just looks like a black line, but
20 there's actually individual data points forming that
21 dark line. (Indicating.)

22 And you can see by looking at this
23 graph that it follows and fits a confined aquifer
24 system curve. It doesn't deviate and go below this

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1 line. If it was leaky or if it was unconfined, it
2 would have a different shape. (Indicating.)
3 Now, there a second piece of data
4 that we get from the aquifer test, and it's called
5 storativity. It's shown with this value S down here.
6 Storativity is another way to look at
7 whether the system is confined or unconfined. There's
8 typical values for confined systems and typical values
9 for unconfined systems.
10 Confined systems have values of about
11 10 to the minus 3 to 10 to the minus 5 or 6. The
12 value that we see here from this test is 10 to the
13 minus 3, 1.6 times 10 to the minus 3; clearly a
14 confined aquifer system.
15 Now, we have a second example. This
16 is from a shallow well, so this is a well that's being
17 tested right at the top of the aquifer. Again, you
18 can see the line behind that represents the normal
19 confined aquifer curve, and then you see all the data
20 points taken continuously during the test with the
21 transducer system, and you can see that, again, it
22 matches the confined aquifer type of curve. And that
23 is based on actual data. (Indicating.)
24 And if we look at the storage

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1 coefficient down here, the storativity, the value of
2 7 times 10 to the minus 6, again indicating a confined
3 system. (Indicating.)
4 So all of this information, the soil,
5 the characteristics of the soil, the fact that they're
6 clay, the fact that they're continuous across the
7 site, the fact that we have pump test information,
8 laboratory information and slug test information that
9 I can use to cross-check the data shows that these
10 soils act as a confining unit.
11 HEARING OFFICER KINNALLY: We're going to take
12 a break now. The girls need to rest their fingers.
13 Ten minutes.
14 (Recess taken.)
15 HEARING OFFICER KINNALLY: All right. Let's
16 take our places so we can get started.
17 All right. We're back in session
18 here and we have a quorum of the County Board, so
19 continue, Mr. Moran.
20 MR. MORAN: Thank you, Mr. Hearing Officer.
21 BY MR. MORAN:
22 Q. Ms. Underwood, do you recall some
23 questions that were asked about the potential impact
24 of borrow excavation on hydrology?

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1 A. Yes.
2 Q. And you indicated that there could or
3 might be some impact?
4 A. Yes.
5 Q. Okay. Could you explain that answer that
6 you gave, please.
7 MR. PORTER: Objection; it's not rebuttal.
8 HEARING OFFICER KINNALLY: Why isn't is
9 rebuttal?
10 MR. PORTER: She testified, as I recall, on
11 that on direct, was it not? It's been a while now,
12 Mr. Kinnally, but I believe it was on direct testimony
13 that came out, and it was questioned --
14 HEARING OFFICER KINNALLY: Do you know --
15 MR. PORTER: I'm sorry. I just remembered who
16 made the question, and I withdraw the objection.
17 HEARING OFFICER KINNALLY: Withdraw the
18 objection. Okay. Go ahead.
19 Do you remember the question?
20 THE WITNESS: No.
21 HEARING OFFICER KINNALLY: Okay. Why don't you
22 ask it again, Mr. Moran.
23 MR. MORAN: I will be happy to do that.
24 HEARING OFFICER KINNALLY: Thank you.

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1 BY MR. MORAN:
2 Q. Ms. Underwood, you said that -- you had
3 indicated that there could be some impact on the
4 hydrology with respect to the borrow area in response
5 to some issues that were raised.
6 Could you explain that answer?
7 A. Yes. I said that without really
8 understanding how the borrow was potentially going to
9 be excavated.
10 Now, the borrow area, when it's used,
11 if it's used, would have a minimum of five feet of
12 soil above the top of the aquifer. Based on the
13 materials that it would be excavated in, the clay
14 materials, and based on other observations that I've
15 seen nearby, there would not be any significant
16 seepage into that borrow area. So there would be no
17 need to dewater that for the excavation to occur.
18 There would be no dewatering of the aquifer, so there
19 will be no impact on the hydrology.
20 Q. Is there any evidence to support that
21 conclusion?
22 A. Yes, there is.
23 Q. Can you describe that evidence for us,
24 please.

1 A. Yes. To do that, again, a map from the
 2 Groundwater Resources of Kendall County, and this is a
 3 map that shows the elevation or the altitude of the
 4 bedrock surface. This is, again, contained in the
 5 Application, and what this shows is in the southeast
 6 portion of the County, there's a bedrock valley. Now,
 7 we start picking up that bedrock valley in the
 8 northeast portion of the facility at B-53 where the
 9 bedrock was deeper than in other portions of the
 10 facility. So if we overlay the proposed facility
 11 here, we can see that the bedrock valley is just to
 12 the east.

13 Now, just to the east of the facility
 14 there is a nursery that was discussed, and that
 15 nursery has a pond that was built. So I'd like to
 16 talk a little bit about what I found out about the
 17 pond and the conditions that occurred when that pond
 18 was excavated and as it filled with water.

19 MS. KRAMER: Mr. Kinnally, if I could object
 20 to this testimony. I believe it's completely new, and
 21 it's not rebuttal in nature.

22 HEARING OFFICER KINNALLY: Okay. Why isn't it
 23 rebuttal?

24 MS. KRAMER: Because it's newly presented

1 evidence that she discovered after the fact. It was
 2 not evidence that was presented in the Application or
 3 as a result of other experts testifying.

4 HEARING OFFICER KINNALLY: Okay. Anybody else
 5 want to be heard on that objection?

6 MR. BLAZER: Mr. Kinnally, I'm wading through
 7 the Ordinance, but I know there's a provision that
 8 authorizes you, I believe it's in Section 7,
 9 authorizes you to allow newly submitted documentation
 10 in the context of rebuttal, obviously it does have to
 11 be rebuttal. But I do recall, and actually I'm
 12 looking at it here, I just looked it up on the
 13 transcript, Mr. Mueller asked several questions of
 14 Ms. Underwood regarding the pond at the nursery, and
 15 Mr. Mueller also asked several questions of Mr. Norris
 16 regarding the pond at the nursery. So I believe this
 17 is rebuttal.

18 HEARING OFFICER KINNALLY: So you disagree with
 19 Ms. Kramer?

20 MR. BLAZER: I do, sir.

21 HEARING OFFICER KINNALLY: Okay. Anybody else
 22 want to be heard on this?

23 Mr. Moran? Do you want to --

24 MR. MORAN: Well, certainly it is new evidence,

1 and it's directly responsive to rebuttal. It is the
 2 very definition of what rebuttal is; to present
 3 whatever information may be appropriate, relevant,
 4 whether it's new evidence or old evidence, that
 5 responds to issues raised during the course of the
 6 objector's cases.

7 HEARING OFFICER KINNALLY: Okay. The
 8 objection is overruled. Go ahead.

9 BY THE WITNESS:

10 A. So if we look at the proposed facility
 11 area, the nursery is located at the corner of Brisbin
 12 and Whitewillow, right in this area. And if we blow
 13 up the air photo of the nursery area, you can see the
 14 nursery, and here's the pond that was constructed at
 15 the nursery. (Indicating.)

16 Now, Mr. Tim Wallace owns that
 17 nursery. I went and spoke to Mr. Wallace about the
 18 construction of that pond, looked at information that
 19 he had about the pond, and he described the conditions
 20 as that pond was built, which I've drawn up in a few
 21 schematics.

22 So if we look at a cross-section,
 23 what they found during the excavation of that pond was
 24 the same units that we see at the facility. They saw

1 topsoil, they saw an upper yellow clay, and they found
 2 a lower blue clay overlying the bedrock aquifer.

3 As that pond was excavated into the
 4 clay, there was no seepage into that excavation, and
 5 that was -- would be what you would expect during a
 6 borrow excavation, because that would occur in the
 7 clay soils.

8 As he continued the excavation of
 9 that pond, eventually he went down to the bedrock
 10 level, and when he hit bedrock, water began seeping
 11 into the bottom of the pond.

12 MR. PORTER: Mr. Kinnally, I'm sorry. I'm
 13 going to object. I know it's -- it's beyond hearsay.
 14 And I realize we're not following the Rules of Civil
 15 Procedure, but now we're testifying to what some third
 16 party apparently indicated happened when a pond was
 17 dug at some point in the past, we don't know exactly
 18 when at this present time, and as if it's a fact that
 19 that's what is occurred. It's just so absolutely
 20 speculative, it goes beyond basic hearsay. I'm going
 21 to impose an objection.

22 HEARING OFFICER KINNALLY: Well, I mean, if you
 23 look at the exhibit, Mr. Porter, it seems to me that
 24 there are pictures here that show a picture in 2003

1 which shows the levels of excavation starting from
 2 where the corn was to the first layer to the next
 3 layer to the next layer.
 4 Then in 2005 when the pond was
 5 excavated, it shows a pipe which is apparently putting
 6 water into the area that was excavated.
 7 And then three years later in 2008,
 8 you have another picture of the pier -- or, excuse me,
 9 a picture of the pond with a pier on it. So I think
 10 I'm going to overrule your objection.
 11 We don't need to have all the hearsay
 12 statements from the people. Let's just keep to the
 13 exhibit that is being tendered, because I think that's
 14 really what we're interested in here. So go ahead.
 15 BY THE WITNESS:
 16 A. So as water began seeping into the pond,
 17 that was because the pressure in the aquifer was
 18 pushing water up into the bottom portions of the pond.
 19 As the excavation continued, the pond eventually
 20 filled with water.
 21 Now, I have two pictures that
 22 Mr. Wallace provided to me. The first picture shows
 23 the initial portion of the excavation. You can see
 24 the yellow clay here. This would be the blue clay.

1 There's some standing water in the excavation. This
 2 is surface water runoff that's coming in there, and I
 3 know that because these water levels are at different
 4 elevations. If this clay was permeable, not a
 5 confining unit, then you would see these water levels
 6 equalize. (Indicating.)
 7 The second picture is from 2005. The
 8 pond is completed. You can see some bedrock boulders
 9 in the bottom portion of the deepest part of the pond.
 10 This pipe is actually the pond that he uses to pull
 11 water out of the pond for irrigation of the nursery,
 12 and you can see the sides of the pond have been graded
 13 with materials from the excavation itself.
 14 And there's two important things to
 15 notice about this picture of the pond excavation: One
 16 is you don't see seepage through the sidewalls
 17 consistent with what Mr. Wallace indicated, and you
 18 can see that the water is slowly coming into the
 19 bottom portion of the pond from the aquifer. Because
 20 the aquifer doesn't transmit water easily in a
 21 vertical direction, this doesn't fill up real fast.
 22 (Indicating.)
 23 It is direct evidence that there is
 24 not any type of karst conduit under this pond, because

1 if there was a karst conduit under this pond, it would
 2 immediately fill up, quickly fill up with groundwater
 3 coming through that conduit.
 4 And then the last picture is from
 5 2008, and this is the finished pond. It's filled up
 6 with water, and it shows, again, just what the water
 7 level is.
 8 Now, that water level and that water
 9 coming in from the aquifer is the piezometric surface
 10 from the aquifer. It is not representing the top of
 11 the aquifer.
 12 So the pond pictures, what was very
 13 important to me was there's definitely not any karst
 14 features under this pond, there's definitely not
 15 seepage coming through the clay sidewalls, and it
 16 shows, again, through direct observation that the clay
 17 soils are a confining unit and are not part of the
 18 uppermost aquifer.
 19 Q. Ms. Underwood, is there any question or
 20 doubt that the unconsolidated soils in the overburden
 21 at this site comprise a confining unit?
 22 A. There is no doubt in my mind that these
 23 soils are a confining unit.
 24 Q. Why do you say that?

1 A. Again, multiple observations: The pond
 2 observation, the tile observations, the way things
 3 came into the borehole or water didn't come into the
 4 borehole as we drilled the borings; then the actual
 5 testing information that we had, the laboratory tests,
 6 the slug tests, the aquifer tests. Extremely
 7 important, the geologic materials, the clay soils are
 8 not consistent with a permeable or aquifer material.
 9 The type of deposits that we have, the Equality
 10 Formation forms the major deposit in the footprint
 11 area that is a uniform, consistent, widespread deposit
 12 laid down in quiet water so there is no chance to have
 13 sand lenses or layers in that unit because it's a
 14 quiet water deposit.
 15 So all those factors I used to make
 16 the conclusion, which I believe strongly, that this is
 17 a confining layer.
 18 Q. Ms. Underwood, is there any question that
 19 this proposed Willow Run Landfill is not being
 20 constructed in the bedrock aquifer?
 21 A. The proposed facility is not within the
 22 aquifer. The aquifer is at the top of rock, and this
 23 is not within the aquifer.
 24 MR. MORAN: Thank you, Ms. Underwood. No

1 further questions.
 2 HEARING OFFICER KINNALLY: Okay. Mr. Kramer?
 3 MR. KRAMER: Thank you, Mr. Kinnally.
 4 CROSS-EXAMINATION
 5 BY MR. KRAMER:
 6 Q. Ms. Underwood, when you had these
 7 discussions with Mr. Wallace, did he indicate to you
 8 that he was either a geologist or a hydrogeologist?
 9 A. No, he was not.
 10 Q. You've indicated that there would be no
 11 effect on the hydrology of the borrow area to the
 12 south of the footprint by reason of the excavations in
 13 that borrow pit; is that a fair statement?
 14 A. Yes.
 15 Q. And have you seen a plan for those
 16 excavations?
 17 A. No.
 18 Q. In fact, you've heard numerous testimony
 19 that there is no plan?
 20 A. There is no final plan, that's correct.
 21 Q. So you can't, in fact, rely on any
 22 underlying observations because you've seen no
 23 drawings of how deep they'll dig, what type of
 24 materials they'll take out; is that a fair statement?

1 A. No. And it's not a fair statement for a
 2 couple of reasons.
 3 One is Mr. Hoekstra testified, and I
 4 concur, that there will be at least five feet of soils
 5 left in place in that borrow area.
 6 Second of all, there were borings
 7 done from the 2007 investigation in the southern
 8 portions of the site, and those indicate that the same
 9 geologic units would be in those areas.
 10 And lastly, because we understand the
 11 geologic deposits and where the Equality Formation is
 12 laid down, we know those are extensive formations and
 13 would be expected and are shown to be based on the
 14 mapping done by the USGS to be in that area.
 15 Q. Let's go to your slide, I believe it
 16 was 4, from your direct examination, not from this
 17 booklet, the one called "Geologic Layers."
 18 That slide indicates that the
 19 Equality layer has an upper confining unit thickness
 20 of as little as three-tenths of a foot; is that
 21 correct?
 22 A. Yes.
 23 Q. And that would be a mere four inches?
 24 A. Yes.

1 Q. To as much as 20 feet?
 2 A. Yes.
 3 Q. And, again, that's the same type of
 4 layering that you're comparing to the south borrow
 5 area, are you not?
 6 A. Well, where you find the .3 feet is
 7 dependent on the bedrock elevation and the conditions
 8 of the bedrock. So that thin Equality Formation is
 9 found in the western portion of the site, so the south
 10 borrow area would not be in that same area.
 11 Q. And do you include any soil
 12 classifications for that soil borrow area within the
 13 Application that was filed by Waste Management?
 14 A. I don't think so, although there's some
 15 borings south of the facility that I'm not sure if
 16 they'd be in the borrow area or not.
 17 Q. Okay. Could you go to your slide, it was
 18 called WT-202 with the colored layers, please.
 19 If you would -- we'll wait for it to
 20 print out, thank you.
 21 It was the last one before you went
 22 to your well test. They're not numbered in the
 23 exhibit. It's on Page 8 of the exhibit, if that's
 24 useful for you.

1 That's still not the correct one.
 2 HEARING OFFICER KINNALLY: Give her the
 3 booklet so we know. It's Page 8 of Exhibit 14 so we
 4 can move this along.
 5 MR. KRAMER: Thank you, Mr. Kinnally. She has
 6 it up now.
 7 BY MR. KRAMER:
 8 Q. Now, you indicated that the calculated
 9 tests yield a result in the upper confining unit, the
 10 clay area, of 1.7 times 10 to the minus 7; is that
 11 correct?
 12 A. No. This value, 1.7 times 10 to the
 13 minus 7, and it should be 10 to the minus 4, is the
 14 composite K that would be measured by this well screen
 15 because it intercepts both clay and this weathered
 16 bedrock.
 17 Q. Okay. So you're suggesting the lower
 18 right-hand number should be a minus 4?
 19 A. Yes.
 20 Q. And a minus 4 indicates that it has a
 21 higher permeability for water to flow through than a
 22 minus 7, does it not?
 23 A. That's correct.
 24 Q. And, again, a minus 7 would indicate an

1 extremely low permeability that water will not move
2 through?

3 A. That's correct.

4 Q. Now, when -- if you would go to Table 5.3,
5 again, of your direct exam. If it's not in
6 PowerPoint, that's fine, you can tell me that.

7 MR. MORAN: Is it Table 5-3?

8 MR. KRAMER: It is.

9 MR. MORAN: It's not in the PowerPoint.

10 BY MR. KRAMER:

11 Q. Do you have that exhibit with you in your
12 binder up there that you could find, or no?

13 A. I do.

14 HEARING OFFICER KINNALLY: Do you have it?

15 THE WITNESS: Yes.

16 HEARING OFFICER KINNALLY: All right. Next
17 question.

18 MR. KRAMER: Thank you, Mr. Kinnally.

19 BY MR. KRAMER:

20 Q. About a third of the way down, there's a
21 boring at WT-06 that it indicates in the first or
22 left-hand column for the piezometer?

23 A. Yes.

24 Q. And if you go to the middle column, it

1 gives you the result of the slug test hydraulic
2 conductivity, does it not?

3 A. Yes.

4 Q. And that result in that particular well
5 testing hole was 1.1 times 10 to the minus 4?

6 A. Yes.

7 Q. And, again, that is a high permeability
8 allowing water to move?

9 A. Yes.

10 Q. Now, that test in the right column
11 indicates that the material it was done in was CL and
12 CH, does it not?

13 A. That's correct.

14 Q. And that material or those definitions
15 stand for lean clay or fat clay, do they not?

16 A. Yes.

17 Q. And if we look at all of the designations
18 on Table 5.3 from top to bottom, that is the only test
19 that shows it was done solely in fat clay and lean
20 clay?

21 A. That's what the table shows, but, in
22 fact --

23 Q. Thank you.

24 Now, with regard to that particular

1 test, WT-06, was that compared to the laboratory test?

2 A. I'm not sure what you're asking. I'd have
3 to see if there was a lab test done on that one.

4 Q. That's what I'm asking. Thank you. If
5 you would, please.

6 HEARING OFFICER KINNALLY: Do you have it,
7 Ms. Underwood?

8 THE WITNESS: I have it, I just have to find
9 it.

10 BY THE WITNESS:

11 A. There is no lab permeability at -- I'm
12 sorry, at B-202.

13 BY MR. KRAMER:

14 Q. We were at WT-06.

15 A. Oh, I'm sorry. Which is B-31.

16 There is no laboratory permeability
17 at B-31B.

18 Q. Thank you. When you showed us the exhibit
19 for WT-202 which is in your Petitioner's Exhibit 14,
20 the colored layers, how many wells did you drill
21 solely in the upper unconfined material, or, as you're
22 calling it, the confined layer that did not touch the
23 bedrock layer?

24 A. One.

1 Q. And where was that at?

2 A. Way in the northeast corner of the
3 proposed facility near the corner of Whitewillow and
4 Brisbin.

5 Q. And what label was given to that? What
6 number well, please?

7 A. 53 -- 53-B.

8 Q. Now, with respect to the wells that you
9 sunk into the upper aquifer, again, based on your
10 table, that would have been into the Galena layer?

11 A. Yes.

12 Q. Did you pair any of those wells in the
13 upper aquifer with a shallow well in the upper unit of
14 clay to determine whether there was any drawdown?

15 A. No, I determined the properties of that
16 confining unit during the pump test by the results of
17 the shallow wells at the top of the aquifer, and what
18 that showed was that there was not water coming in
19 from the overlying soils or my data would have had a
20 different characteristic.

21 Q. Well, with regard to the wells that you
22 sunk in the aquifer, you used an instrument, you told
23 us about, called a transducer?

24 A. Correct.

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1 Q. And that gave you multiple readings over a
2 period of time, did it not?
3 A. Yes.
4 Q. Did you use a transducer in the well that
5 you did in the clay material?
6 A. No, that was probably outside the radius
7 of influence of the pumping well. We didn't see the
8 cone of depression or the drawdown, the pressure
9 drawdown to that extent.
10 Q. But, again, no transducer was used in the
11 shallow well?
12 A. In the -- in WT-53, no, we did not include
13 that as part of the pump test.
14 Q. Thank you. You talked about tritium just
15 briefly. You indicated what could cause it.
16 Do you have an opinion with a
17 scientific degree of certainty or are you able to
18 conduct any test to tell what precisely caused tritium
19 in the deep water wells where you found it?
20 A. I believe it would be the result of
21 drilling the well itself where we used water.
22 Q. Did you test the water used to determine
23 the tritium level in it?
24 A. No.

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1 MR. KRAMER: Thank you. I have no further
2 questions.
3 MR. BLAZER: Mr. Kinnally, can we take a quick
4 break? I'm advised we're having some minor technical
5 difficulties.
6 HEARING OFFICER KINNALLY: Okay.
7 (Brief interruption.)
8 HEARING OFFICER KINNALLY: All right. We're
9 back in the game now. The situation has been
10 corrected.
11 So in that regard, I believe --
12 MR. KRAMER: Can we reserve? Kelly, I think,
13 is using the restroom and pass it down to George.
14 HEARING OFFICER KINNALLY: Okay. You're done,
15 Mr. Kramer?
16 MR. KRAMER: I am, yes.
17 HEARING OFFICER KINNALLY: Okay. And
18 Mr. George Mueller, you can go next.
19 MR. MUELLER: Thank you.
20 CROSS-EXAMINATION
21 BY MR. MUELLER:
22 Q. Ms. Underwood, the Equality and Lemont
23 deposits, when were they laid down in this great
24 Wauponsee Lake?

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1 A. The Equality deposits would have been
2 probably by 10 and 12,000 years ago and the Lemont,
3 prior to that.
4 Q. And which are the less permeable of those
5 two?
6 A. They're both very low permeability
7 materials. We have laboratory tests from both. I
8 think they both show either 10 to the minus 7 or
9 10 to the minus 8.
10 Q. Now, another way to get tritium levels to
11 go down in water is to mix fresh water with old water;
12 right?
13 A. Yes.
14 Q. If you dilute the fresh water with -- or
15 new water, young water, whatever you want to call it,
16 with enough old water, you're going to take that
17 tritium level down to a non-detect, aren't you?
18 A. You could. It would depend how much water
19 you had mixing.
20 Q. And if I can take you to the -- your slide
21 with the purple depiction of the bedrock surface being
22 pretty close, the blowup of it, if we get -- there's
23 the one. Okay.
24 How far is that from the site

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1 boundary at its closest point?
2 HEARING OFFICER KINNALLY: How far is what?
3 MR. MUELLER: The purple area from the site
4 boundary.
5 HEARING OFFICER KINNALLY: Okay. I'm sorry.
6 Go ahead.
7 BY THE WITNESS:
8 A. Very close. I mean, the map is too gross
9 of a scale to get an exact number, but it's right near
10 the very northwest corner of the proposed facility.
11 BY MR. MUELLER:
12 Q. I mean, would you say maybe a half mile?
13 A. Not that far.
14 Q. And that's all on the west side of Walley
15 Run, isn't it?
16 A. Yes.
17 Q. Wouldn't water moving to the southwest in
18 the surface units -- or moving to the southeast,
19 excuse me, in the surface units from this purple area
20 discharge at Walley Run?
21 A. Not necessarily, no. And that's because
22 Walley Run isn't always running. It -- Walley Run
23 only collects groundwater during wet periods of the
24 year; otherwise, it's dry. And especially in the

1 upper reaches of Walley Run, it's not connected to the
2 aquifer to intercept groundwater.

3 Q. Okay. Now, if we go to the next slide
4 after that one, that -- we would drill the well,
5 right -- well, before we get into the bedrock, you
6 depict a well here that's stopped in the clay, and you
7 said you didn't get any water; right?

8 A. That's correct.

9 Q. Is that true for all seven of the water
10 table wells?

11 A. For the most part, they didn't get water.

12 Q. What does "for the most part" mean?

13 A. I'd have to go back and look at field
14 notes.

15 Q. You weren't out there when those seven
16 wells were drilled, were you?

17 A. That's correct.

18 Q. And do you know how long they waited
19 before they decided to drill it another foot or two
20 deeper?

21 A. Typically we would wait a few hours.
22 Oftentimes we would stop, they would go out to lunch
23 or something and then come back.

24 Q. Is that documented in the Application,

1 that drilling stopped in the clay and then resumed
2 some -- after lunch?

3 A. No.

4 Q. No delays in drilling are documented in
5 the Application; correct?

6 A. No.

7 Q. No, I'm wrong; or no, no --

8 HEARING OFFICER KINNALLY: Well, just put it in
9 a positive, clearer --

10 MR. MUELLER: Are any delays -- good point,
11 Mr. Kinnally.

12 BY MR. MUELLER:

13 Q. Are any delays in drilling documented in
14 the Application?

15 A. No, there are none.

16 HEARING OFFICER KINNALLY: Thank you.

17 MR. MUELLER: Thank you.

18 BY MR. MUELLER:

19 Q. If we can then go to the slide with the
20 calculations where you've got the actual calculated
21 and all of that. That one.

22 Now, in this particular case, 202,
23 the well screen was how many feet? Five feet?

24 A. I'd have to go back and look at the well

1 log.

2 Q. Well, isn't that what it says right on the
3 slide there, five feet?

4 A. The five feet is indicating the saturated
5 clay material.

6 Q. That doesn't --

7 A. No, it's not indicating the well screen.

8 What I'm doing in this calculation is
9 looking at the potential contribution of water to the
10 slug test from the clay versus the weathered portion
11 of the bedrock.

12 Q. Well, to do that, wouldn't you have to
13 look at the length of the well screen and compare that
14 to the length of the sand pack underneath it?

15 A. I would look at where the clay was
16 saturated in relationship to the sand pack.

17 Q. So you would not look at the length of the
18 well screen?

19 A. No, because what we use is the effective
20 well screen. The sand pack has a very high
21 permeability, that's why it's put in that way, so that
22 water enters not only where the pipe is slotted but
23 where the sand pack occurs.

24 Q. Now, not all sand packs in the seven water

1 table wells were one foot, were they?

2 A. No, that's correct.

3 Q. In fact, some of them were as little as
4 like three or four inches; right?

5 A. A half a foot, maybe four-tenths of a
6 foot, that's correct.

7 Q. Okay. And I think you testified that
8 another reason you did this is because you needed
9 space above the screened interval and, therefore, you
10 had to use fairly short screen lengths anyway; right?

11 A. Shorter screen lengths. That would be
12 typical, yes, that's correct.

13 Q. Well, in fact, in water table well 211,
14 you used a nine-foot screen, didn't you?

15 A. I'd have to look at the well construction
16 log. I don't remember.

17 Q. Maybe you should.

18 HEARING OFFICER KINNALLY: Well, are you going
19 to ask her a question about it?

20 MR. MUELLER: I am.

21 HEARING OFFICER KINNALLY: All right. You can
22 look at that, then.

23 BY THE WITNESS:

24 A. 211?

1 BY MR. MUELLER:
 2 Q. Yes.
 3 A. The screened portion was nine feet.
 4 Q. Okay. And the sand pack was four-tenths
 5 of a foot; correct?
 6 A. What portion of the sand pack?
 7 Q. Underneath the screen, the one that
 8 intercepted your fractured bedrock.
 9 A. Four-tenths of a foot, that's correct.
 10 Q. And did you perform this impact
 11 calculation for 211?
 12 A. I did not do it for 211 specifically, but
 13 what I did do was vary these values to see how the
 14 answer reacted to various values. So I shortened this
 15 one foot up to a half a foot and calculated the value
 16 that way, and it was just below 1 times 10 to the
 17 minus 4th. So I didn't do each well specifically, but
 18 I did look at the range of conditions when I looked at
 19 this calculation.
 20 Q. Are those reported anywhere, those
 21 calculations?
 22 A. No.
 23 Q. And did you weigh the permeability from
 24 the sand pack interval equally with the permeability

1 from the clay interval, or did you use some kind of
 2 geometric mean?
 3 A. I did not use a geometric mean, and I'm
 4 not sure what you mean by did I weigh --
 5 Q. Well, tell me the methodology that you
 6 used to do the calculation.
 7 A. There's a calculation that will calculate
 8 the average hydraulic conductivity of these two units
 9 together. And so I took the hydraulic conductivity or
 10 permeability of the clay, the hydraulic conductivity
 11 of the weathered bedrock, did that calculation, and
 12 this is what the composite permeability would be, 1.7
 13 times 10 to the minus --
 14 Q. But my question is, what's the method for
 15 doing the calculation? What's the equation that you
 16 used?
 17 A. I think it's the sum of the hydraulic
 18 conductivity of the clay times the thickness of the
 19 saturated clay divided by the total thickness plus the
 20 hydraulic conductivity of the weathered bedrock times
 21 the thickness of the weathered bedrock divided by the
 22 total thickness.
 23 I'm not absolutely positive that's
 24 totally correct, but it's like that.

1 Q. Okay.
 2 A. It's -- it's in the textbooks.
 3 Q. That helps.
 4 And, now, the sand pack only
 5 intercepts the well area outside the riser pipe,
 6 doesn't it?
 7 A. I'm sorry. Could you repeat the question?
 8 Q. Let me ask another one.
 9 There is an end cap at the bottom of
 10 this pipe to prevent water from the aquifer from
 11 coming in directly on the bottom, isn't there?
 12 A. The cap is on there to prevent the sand
 13 from coming into the bottom of the pipe.
 14 Q. Does it also have the effect of preventing
 15 water from coming in?
 16 A. Well, into the bottom.
 17 Q. Okay. Now, you testified -- so you didn't
 18 do the specific calculation for any well other than
 19 202; right?
 20 A. That's correct, but I looked at a variety
 21 of --
 22 Q. Okay.
 23 A. -- differences in those thicknesses.
 24 Q. Those -- and that look is not reported?

1 A. That's correct.
 2 HEARING OFFICER KINNALLY: We've asked this
 3 question twice already. Let's move on here.
 4 MR. MUELLER: Okay, Mr. Kinnally, we'll do the
 5 best we can. I'm trying to understand this new
 6 material.
 7 BY MR. MUELLER:
 8 Q. The ASTM method that you said was
 9 outdated, when -- what was the year of that
 10 publication, 2002?
 11 A. Which -- I'm not sure which --
 12 Q. Well, we admitted as KRL Exhibit No. 1 two
 13 pages of ASTM Standard D 5084.
 14 HEARING OFFICER KINNALLY: Well, we didn't
 15 admit those.
 16 MR. MUELLER: Well, I'm going to --
 17 HEARING OFFICER KINNALLY: You haven't offered
 18 them yet. So they're not admitted, but they were
 19 mentioned by Mr. Norris.
 20 MR. MUELLER: Let me offer Kankakee Regional
 21 Landfill Exhibit No. 1 at this point, then, ASTM
 22 D 5084.
 23 HEARING OFFICER KINNALLY: Is there any
 24 objection?

1 (No response.)
 2 HEARING OFFICER KINNALLY: All right. That
 3 will be admitted.
 4 (Kankakee Regional Landfill Exhibit
 5 No. 1 admitted.)
 6 BY MR. MUELLER:
 7 Q. Now, Ms. Underwood, I think you testified
 8 that that was an out-of-date standard?
 9 A. Yes.
 10 Q. How has that standard changed since 2002?
 11 A. I thought the standard that -- the two
 12 pages that you provided me were from 2000. The most
 13 recent is 2003, and I didn't go back and compare
 14 changes between 2000 and 2003.
 15 Q. So you don't know whether it's changed at
 16 all?
 17 A. Well, they republished it, so I would
 18 conclude that there's changes in that standard.
 19 Q. Did you compare the standard that was
 20 admitted with the most recent one?
 21 A. No, I did not.
 22 Q. You --
 23 A. I only had the two pages.
 24 Q. You don't know whether Paragraph 4.5 from

1 that standard has been changed in any way, do you?
 2 A. No, I do not.
 3 Q. You don't know whether Paragraph 4.6 from
 4 that standard has been changed in any way, do you?
 5 A. No.
 6 Q. And, by the way, back to the calculation
 7 of these lab -- these permeabilities where you weigh
 8 in the lab value, there was, in fact, no laboratory
 9 test taken at 202; correct?
 10 A. That's correct. I used the average from
 11 all the laboratory permeabilities in that -- in
 12 calculating that value. It was used as a cross-check
 13 to see if I would get the results of the slug test
 14 that I saw with these conditions.
 15 MR. MUELLER: That's all I have.
 16 HEARING OFFICER KINNALLY: Thank you,
 17 Mr. Mueller.
 18 Mr. Belt?
 19 MR. BELT: I have no questions, Mr. Kinnally.
 20 HEARING OFFICER KINNALLY: Okay. Thank you
 21 Mr. Porter?
 22 MR. PORTER: Just a couple.
 23
 24

1 CROSS-EXAMINATION
 2 BY MR. PORTER:
 3 Q. In regard to the tritium in the deep
 4 wells, there were two specific locations where there
 5 were -- there was tritium noted in excess of the
 6 reportable amount; is that correct -- or at an amount
 7 that raised some question; is that right?
 8 A. None of them raised any questions for me.
 9 Q. Well, P-02D and P-06D were at levels that
 10 were at least referenced in the groundwater report; is
 11 that correct?
 12 A. I'd have to look --
 13 Q. They were at detectable amounts; is that
 14 right?
 15 A. I believe -- there was four results. Two
 16 were less than the detection, one was at .8 and one
 17 was at 1.5.
 18 Q. Okay. And your explanation for the .8 and
 19 the 1.5 is that there may have been tritium in the
 20 well, the water used to dig the well; is that correct?
 21 A. During the rock coring, yes, and well
 22 installation, yes.
 23 Q. And isn't it true that the wells could
 24 have been developed to make sure that there was no

1 contamination from the digging of the well itself?
 2 A. Those wells were developed, but during the
 3 development process, because coring requires a lot of
 4 water to keep the core barrel working correctly and
 5 the drilling equipment working correctly, you may not
 6 withdraw every single drop of that water.
 7 Q. Well, if you got a result that you
 8 believed suggested that somehow it had been impacted
 9 by your well water, you could have repeated the test;
 10 could you not?
 11 A. I wasn't using the test that way. I was
 12 using the test to give me information about the
 13 innerconnectedness of the shallow aquifer and the deep
 14 aquifer. When we get down to those very low levels of
 15 tritium, the precision of that method to say this is
 16 exactly the date that it means is not there. It's
 17 not -- it's a grosser indication than trying to apply
 18 it the way it is trying to be applied.
 19 Q. If that -- those amounts, those detectable
 20 amounts were not caused by the well water -- the water
 21 used to dig the well itself, then isn't that evidence
 22 of communication of the shallow well with the deep
 23 well?
 24 A. No.

1 Q. And --

2 A. It's inconsistent with all the other data

3 that's available. So to take one tritium result and

4 draw conclusions without looking at all the rest of

5 the information, the geology, the hydrogeology, the

6 other testing that was done, would be a misapplication

7 of those results.

8 Q. Except for your explanation that maybe the

9 water used to dig the well had tritium, you have no

10 other explanation for those detectable amounts in the

11 deep wells; is that correct?

12 A. Water wells use water when those are

13 drilled. During the drilling of water wells, you add

14 water to the aquifer.

15 Q. Okay.

16 A. So that's another way. There's wells

17 nearby. So there's multiple ways to introduce new

18 water into that system, and I believe Mr. Bognar also

19 indicated that.

20 Q. But isn't it true on your direct testimony

21 you indicated that apparently the tritium was there

22 for horizontal flow? I mean, this is new testimony,

23 is it not, that the tritium is there because of

24 potential contamination caused by the well drilling

1 itself?

2 HEARING OFFICER KINNALLY: Well, we've got two

3 questions there. You want to break them up?

4 MR. PORTER: I apologize. You are correct,

5 Mr. Kinnally.

6 HEARING OFFICER KINNALLY: Try again.

7 MR. PORTER: And I will try again.

8 BY MR. PORTER:

9 Q. Isn't it true that this is brand-new

10 information that was not provided previously, that the

11 explanation for the tritium was the possible

12 contamination from well drilling? It was not

13 contained in your original Application?

14 MR. MORAN: Objection; form of the question.

15 We had a couple questions in there.

16 HEARING OFFICER KINNALLY: We do. Let's do one

17 at a time.

18 MR. PORTER: One more time.

19 HEARING OFFICER KINNALLY: Sustained.

20 BY MR. PORTER:

21 Q. Was this information that the deep well

22 tritium limit -- detectable amounts were possibly

23 caused by the well drilling contained in the original

24 Application?

1 A. I -- that's correct, I did not say that

2 during my direct testimony, that's correct.

3 Q. You would agree, would you not, that it is

4 impossible for those tritium amounts to be the result

5 of flow from the Newark recharge area; correct?

6 A. That's correct, the tritium would not have

7 entered the system from the Newark area.

8 Q. On Page 9 there's a reference -- this is

9 your new handout tonight -- a reference to aquifer

10 test observation for two wells.

11 How long was that test run?

12 A. Four days.

13 Q. That test could have been run longer; is

14 that correct?

15 A. You couldn't -- yes, you can run pump

16 tests for various amounts of time.

17 The time that it was run was

18 sufficient to see and test for the effects of a leaky

19 confining unit.

20 Q. Well, let's take a look at Page 8, and at

21 exhibit -- the bottom portion of that there is a

22 diagram of unconfined, (c), and isn't it true that if

23 you stop a test early enough, these arcs can look very

24 similar and, therefore, the key is to run the test a

1 sufficient amount of time in order to use those

2 diagrams?

3 A. That's incorrect, because if you look at

4 the shape of these curves and you asked about the

5 unconfined curve specifically, it begins to deviate in

6 the early portions of the pumping. So you -- and that

7 happens because when you have a confined -- unconfined

8 system, you begin to actually drain the water out of

9 the material. If you have a confined system, you're

10 just changing the pressure.

11 So once you start pumping in an

12 unconfined system, you start draining water

13 immediately and you see the deviation from the

14 confined curve early on.

15 Q. You would agree that a better way would be

16 to place an observation well in the alleged confining

17 unit to determine the behavior of the unit during the

18 pump test; correct?

19 A. No.

20 MR. PORTER: I have nothing further.

21 HEARING OFFICER KINNALLY: All right.

22 Mr. Lyle?

23 MR. LYLE: No questions.

24 HEARING OFFICER KINNALLY: Okay. Ms. Kramer?

1 MS. KRAMER: No questions.
 2 HEARING OFFICER KINNALLY: Okay. Any
 3 participant?
 4 MR. MILLIRON: Yes.
 5 HEARING OFFICER KINNALLY: Okay. Come on up.
 6 State your name, please.
 7 MR. MILLIRON: Todd Milliron, 61 Cotswold
 8 Drive, Yorkville.
 9 CROSS-EXAMINATION
 10 BY MR. MILLIRON:
 11 Q. Was there a reason you did not utilize a
 12 rain gauge at this site to understand the site's
 13 hydrology?
 14 A. Yes, because I looked up precipitation
 15 data from nearby weather stations.
 16 Q. Would the rain soaking into the ground
 17 affect the level and pressure of the aquifer or what
 18 you found down there?
 19 A. Yes. When you have precipitation and it
 20 increases the pressure on the aquifer because there's
 21 extra water on top of the aquifer, that pushes down on
 22 the aquifer and that changes the water level in the
 23 aquifer.
 24 Q. And was those results -- did any of those

1 results turn up in the transducer wells?
 2 A. Well, when we conducted the aquifer test,
 3 we measured background water levels, I believe, three
 4 days prior to conducting the test and during the test,
 5 and I don't remember specifically if we saw impacts
 6 from rainfall or not, but we would have accounted for
 7 those in the test.
 8 Q. Okay. When the aquifer test wasn't being
 9 done, were those transducers left on over a period of
 10 time?
 11 A. Prior to the test, yes.
 12 Q. But they were only three days prior to the
 13 test?
 14 A. That's correct.
 15 Q. You didn't use them to, whatever, pull
 16 data points for months or periods of time when they
 17 could have been set to done that way?
 18 A. No. There had been transducers used for a
 19 long period of time in the 2007 application, and I did
 20 not feel it was necessary to continue making those
 21 measurements.
 22 Q. Okay. And was those compared to rain
 23 events?
 24 A. Yes.

1 Q. And what did you find?
 2 A. There's responses in the wells with rain
 3 events.
 4 Q. So there is some permeability there based
 5 upon rain soaking in the ground?
 6 A. No, because when you add water into the
 7 unconsolidated sediments, you add weight to the
 8 aquifer and that changes the pressure in the aquifer
 9 so you can see a response. I saw typical responses
 10 for a shallow aquifer, confined aquifer.
 11 Q. Okay. There was some high chloride
 12 readings that were also taken in some of the tests you
 13 did. How do you explain those?
 14 A. I'm assuming that you're referring to
 15 comments about road salt. Road salt would get into
 16 the system the same way that tritium from background
 17 levels would get into the system.
 18 So we have bedrock to the west of the
 19 site that's at the surface. The ditches along the
 20 roads are probably right on top of bedrock. When you
 21 have runoff carrying road salt, that will infiltrate
 22 into the upper portion of the rock and you will detect
 23 that, then, in the shallow aquifer.
 24 Q. Okay. Could we look at that one site that

1 you put up that had like the geology from way back
 2 when of the lake and the Marseilles thing? I don't
 3 know which one that was.
 4 HEARING OFFICER KINNALLY: That's Page 4 of
 5 Exhibit 14.
 6 MR. MILLIRON: Okay.
 7 HEARING OFFICER KINNALLY: Okay. What's the
 8 question?
 9 BY MR. MILLIRON:
 10 Q. The question would be on that, can you
 11 explain the composition of that Marseilles Moraine?
 12 What did you find in that area?
 13 A. Well, we could look at -- you would find
 14 different types of glacial deposits that are deposited
 15 at the front of the glacier as it melts. So that can
 16 range from a variety of grain sizes all the way from
 17 clay to boulder-size particles in that material.
 18 Q. Okay. Does that Marseilles Moraine area
 19 kind of -- I forget which -- when Mr. VanHook spoke
 20 about, I don't know, the study of where there's parts
 21 of this County, there's good places for landfills and
 22 there's places, you know, that aren't as good in the
 23 southern part of the County, does that kind of
 24 correspond to that Glacial Lake Wauponsee and the

1 Marseilles Moraine?
 2 MR. BLAZER: Objection; beyond the scope.
 3 HEARING OFFICER KINNALLY: Well, it probably
 4 is, and I don't understand the question myself.
 5 Could you kind of rephrase that a
 6 different way, Mr. Milliron, please?
 7 BY MR. MILLIRON:
 8 Q. Okay. What I'm trying to get at is, I
 9 guess, is that I remember that picture. I can't
 10 remember what it's -- what that was called. It was
 11 some type of study that somebody did and it was used,
 12 but it isn't supposed to be used to site a landfill.
 13 MR. BLAZER: I believe he's talking about the
 14 Berg map.
 15 MR. MILLIRON: That's it.
 16 BY MR. MILLIRON:
 17 Q. Does the Berg map correspond to the
 18 differences between the Glacial Lake Wauponsee and the
 19 Marseilles Moraine?
 20 MR. BLAZER: Objection; beyond the scope.
 21 HEARING OFFICER KINNALLY: That's overruled.
 22 Let's see if she knows.
 23 BY THE WITNESS:
 24 A. I actually don't know. I'd have to look

1 at both maps and compare them.
 2 BY MR. MILLIRON:
 3 Q. Okay. All right. It seemed like there
 4 was a correspondence there, and that's what I was
 5 trying to get at.
 6 Would the Marseilles Moraine have --
 7 would that might be a better area for possibly a
 8 landfill with thicker clay deposits and that type of
 9 thing, possible?
 10 MR. MORAN: Objection. It's beyond the scope
 11 of her direct. It's not relevant to this proceeding.
 12 HEARING OFFICER KINNALLY: Well, I'm going to
 13 overrule it because she didn't make a study of the
 14 area, so I don't know how she would know that, but
 15 let's see what the witnesses has to say.
 16 BY THE WITNESS:
 17 A. There's a number of different factors that
 18 you would have to consider, and, you know, without
 19 looking at all those factors, I don't -- I can't
 20 answer the question.
 21 MR. MILLIRON: All right. I think I'm done.
 22 Thank you.
 23 HEARING OFFICER KINNALLY: Okay. Thank you.
 24 sir.

1 Anyone else.
 2 MR. SCHULTZ: Yes.
 3 HEARING OFFICER KINNALLY: State your name,
 4 please.
 5 MR. SCHULTZ: My name is Lee Schultz.
 6 HEARING OFFICER KINNALLY: Okay.
 7 CROSS-EXAMINATION
 8 BY MR. SCHULTZ:
 9 Q. Ms. Underwood, you have a lot of data with
 10 this particular site. Can that data that you
 11 collected be interpreted differently between
 12 geologists?
 13 A. Yes.
 14 Q. What happens if the liner leaks, seeps
 15 very slowly?
 16 MR. MORAN: Objection. She hasn't addressed
 17 the liner and whether it would leak or seep or
 18 anything similar.
 19 HEARING OFFICER KINNALLY: No, that's
 20 overruled. Go ahead. You can answer.
 21 BY THE WITNESS:
 22 A. Based on my analyses, there would be no
 23 impact.
 24 BY MR. SCHULTZ:

1 Q. In your opinion, is this an ideal area for
 2 a landfill considering all the conditions that exist?
 3 A. I think that's what we're here for.
 4 That's what the Board is going to evaluate.
 5 HEARING OFFICER KINNALLY: No, I think
 6 there's a little different question. His question is
 7 basically is this the best site for a landfill, in
 8 your opinion.
 9 Isn't that your question, sir?
 10 MR. SCHULTZ: Yes, sir, is it an ideal site.
 11 MR. MORAN: If that's the question,
 12 Mr. Kinnally --
 13 HEARING OFFICER KINNALLY: He just said it was.
 14 MR. MORAN: I would object to it.
 15 HEARING OFFICER KINNALLY: That's overruled.
 16 Go ahead and answer it, if you know.
 17 BY THE WITNESS:
 18 A. Again, there's various factors that go
 19 into making that decision. Based on the geology, this
 20 is a safe location for the location of a landfill.
 21 BY MR. SCHULTZ:
 22 Q. How deep is the aquifer?
 23 A. It varies across the site from probably
 24 about six to 20, 30 feet. I don't remember the exact

1 numbers.
 2 Q. From the surface?
 3 A. Yes.
 4 Q. With all the data you have, can you
 5 guarantee there will never be contamination to the
 6 aquifer from the landfill considering the soil makeup?
 7 A. Yes, it's my opinion you would not have
 8 any impact based on the design of the site, the soil
 9 materials underneath it, and the way the groundwater
 10 system works.
 11 Q. So you could guarantee there will never be
 12 contamination from the landfill?
 13 MR. MORAN: Objection; she just answered it.
 14 HEARING OFFICER KINNALLY: I think she did
 15 answer it. She said in her opinion, it won't.
 16 MR. SCHULTZ: Thank you.
 17 HEARING OFFICER KINNALLY: Okay. Thank you.
 18 MR. MILLIRON: I have one more question I
 19 forgot to ask. May I come back, please?
 20 HEARING OFFICER KINNALLY: All right.
 21 CROSS-EXAMINATION
 22 BY MR. MILLIRON:
 23 Q. The question was, do you know how the site
 24 was chosen and the methodology used to choose it?

1 think it was to site 53; is that a correct statement?
 2 A. No, no. We have multiple testing data
 3 from the upper confining unit. So we have -- I don't
 4 remember the exact number of permeability tests, 10,
 5 something like that, laboratory tests in the upper
 6 confining unit, and then I have the results from the
 7 aquifer test that test the permeability of that
 8 aquifer -- of the confining unit and of the aquifer,
 9 and then we had the slug test information that didn't
 10 provide me an exact number on that confining unit but
 11 gave me information about the properties of that
 12 confining unit.
 13 Q. Well, I think the question was asked of
 14 you that -- and I don't have it in front of me right
 15 now because I buried it again, but I think the
 16 classification of clay on particle CL and something
 17 else, that was the only classification in there that
 18 you took samples of with the numbers?
 19 A. No. On I believe it's Table 5-3, it lists
 20 all the different laboratory tests that were done --
 21 wrong table.
 22 Q. I couldn't do that again, if I had to.
 23 A. I'm sorry. Table 5-2. So there is one,
 24 two, three, four, five, six, seven, eight, nine

1 MR. MORAN: Objection; relevance.
 2 HEARING OFFICER KINNALLY: No, I think she
 3 already testified to that before, but go ahead and
 4 answer the question. Overruled.
 5 BY THE WITNESS:
 6 A. No.
 7 HEARING OFFICER KINNALLY: Thank you.
 8 BY MR. MILLIRON:
 9 Q. Do you know who picked the site?
 10 MR. MORAN: Objection.
 11 HEARING OFFICER KINNALLY: She just said she
 12 doesn't know.
 13 MR. MILLIRON: Okay.
 14 HEARING OFFICER KINNALLY: All right. Any
 15 other participants?
 16 Okay. How about somebody from the
 17 County Board? Do they have any questions for this
 18 witness?
 19 EXAMINATION
 20 BY BOARD MEMBER DAVIDSON:
 21 Q. Yes, Bob Davidson. Good evening,
 22 Ms. Underwood. I got one question.
 23 Just the way I understand it, you
 24 conducted one test of the upper clay area; correct? I

1 laboratory tests done on those materials. And then
 2 every single well that went through the overburden was
 3 tested, and then we had the pump test results. And
 4 then I had the description of the soil materials and
 5 the testing that was done to confirm what type of soil
 6 materials there were.
 7 So the one well was the -- there was
 8 only one well that was constructed completely in
 9 overburden materials, and that well was put into a
 10 sand lense that was just way in the corner of the
 11 site.
 12 Q. Well, then that leads to the question that
 13 I have. I mean, that one well, what you're stating,
 14 then, I think everybody here and including myself,
 15 that's -- you know, we understand where the aquifers
 16 are and -- but the biggest issue that's sitting here
 17 before us is that clay barrier between those aquifers
 18 that why didn't you conduct more wells like you did
 19 well 53 across the whole site to -- I mean, everybody
 20 here is concerned about contamination, and everybody
 21 here understands, and this is the third hearing, that
 22 it's, you know, it's at three foot and the barrier
 23 between it that counts.
 24 I mean, granted, you can put all the

1 could look at the colors, we could look at the
2 conditions, and we could use that to understand, then,
3 the other rock cores and soil cores.

4 Q. Okay. And you said that your attempt to
5 draw water into the well, that well up in the
6 northwest corner, while only in the Mason, Wedron
7 layers, was not documented in your Application?

8 A. I'm not sure of the question.

9 Q. That well was the only well that was
10 drilled and left in the clay layer?

11 A. It actually went through clay and there
12 was a sand lense and then it went into more clay. So
13 it actually -- we specifically put that well in
14 because it encountered a sand layer, a sand lense,
15 because we knew it wasn't continuous. So we wanted to
16 see the result of that well when we slug tested it.

17 When we slug tested that well that
18 actually had cleaner sand material in it for a short
19 section, we got a result consistent with that sand.
20 So it wasn't just in clay.

21 Q. So is that the only area in the entire
22 site that you had actually found a lense, because
23 before you said because this was a lake that that was
24 very even and there were no lenses and there were no

1 small particles, that it was a very consistent --
2 that's why -- well --

3 A. Yeah, the lense that we found over at 53
4 was associated with the Lemont Formation. You will
5 occasionally find lenses in there.

6 Under the footprint of the landfill,
7 there's very little Lemont. It's almost all Equality.
8 So that lense is not associated with the Equality
9 Formation.

10 Q. Okay. Is it your opinion that the area of
11 the borrow is a confining layer or non-confining?

12 A. It would be a confining layer. It would
13 be within the same types of soils that we found at the
14 site.

15 Q. And that's based on your tests from '07?

16 A. Yes, from the borings to the south, and
17 then with the geologic maps, which what we found has
18 been very consistent with those geologic maps.

19 Q. Okay. When we talk about Mr. Wallace's
20 pond, what you're asking us to believe is that in the
21 three years depicted between the pictures that the
22 pond filled from the bottom up, from the aquifer up,
23 not from the clay layer, not from the pipe sticking
24 out of the side, or not from the surface?

1 A. No, it would have had water being
2 contributed to it from the drain tiles that also
3 entered that pond. So it would have been a
4 combination of seepage coming up and also surface
5 water running into it.

6 Q. Quite honestly, we don't know how that
7 pond filled, from what layer it filled? You can't
8 identify the water as coming up from the aquifer or
9 coming in from the -- we basically don't know how that
10 pond filled; is that correct?

11 A. Well, I can tell you that when I look at
12 cuts into soil materials, when you have seepage, you
13 can see those seepage areas. If it's seeping any
14 substantial quantity of water, you will see that
15 seepage. You'll see it in changes in color, you'll
16 see it in changes -- you'll see the actual seepage.
17 And that isn't evident at all in the pictures that I
18 looked at and also in the description that Mr. Wallace
19 related to me.

20 Q. How big is that pond?

21 A. About two acres.

22 Q. Okay. So from that picture you could tell
23 that there wasn't any seepage?

24 A. Yeah, and the fact that when the pond was

1 finished, it wasn't full. So if you had the clay
2 soils that were not clay that were some kind of
3 aquifer material, that pond would be filled by then,
4 you know, it would be filling up, and you don't see
5 that. It's inconsistent with all the information that
6 we have about those materials --

7 Q. So he stated he did not pump that pond at
8 all when he was drilling -- or when he was digging the
9 pond?

10 A. He did pump the pond occasionally either
11 to control surface water or some of the seepage that
12 came in.

13 Q. Okay. Was your well driller the person
14 who determined there was no water in the clay level
15 and decided to go into the bedrock?

16 A. Yes, it was my person that was observing
17 the driller drilling the borehole that made that
18 determination.

19 Q. But none of that was documented as far as
20 the time allotment or how much water come up or the
21 fact that no water came up?

22 A. No, I went back -- that was my Ph.D.
23 glaciology person -- and I checked with him again
24 prior to this hearing to make sure I understood the

1 observations, and that's what he told me.
 2 Q. So the drill well into the clay, come back
 3 in two hours if there's not a substantial rise in the
 4 water, then they decided to go to the bedrock and then
 5 the water came in?
 6 A. Yeah, they talked to me, I thought through
 7 the process, made the decision to continue, and we
 8 did.

9 BOARD MEMBER WEHRLI: Okay. All right. Thank
 10 you.

11 BOARD MEMBER WYKES: I have no questions.

12 BOARD MEMBER PURCELL: John Purcell. Okay.
 13 I've got several questions.

14 EXAMINATION

15 BY BOARD MEMBER PURCELL:

16 Q. I just want to make sure I understood you
 17 correctly.

18 You said tritium is considered a
 19 general indicator but not a precise indicator; is that
 20 correct?

21 A. That's correct.

22 Q. Okay. I'm reading from the Illinois EPA
 23 site regarding use of tritium in assessing aquifer
 24 vulnerability. And the site states -- I just want to

1 see if you understand this or not. Now where the heck
 2 did that go -- "Groundwater systems with recharge
 3 occurring prior to the 1950s will have a tritium level
 4 decreased by radioactive decay to levels at or below
 5 1 TU. These groundwater systems are considered not
 6 vulnerable. Conversely, groundwater systems which
 7 have been recharged after the early 50's will contain
 8 tritium levels at or significantly above the natural
 9 pre-bomb background concentrations and are concerned
 10 vulnerable."

11 Does that sound familiar to you at
 12 all?

13 A. I haven't read that particular document.

14 Q. Okay. But -- I won't say that. Okay.

15 All right. We'll go to the
 16 Application. This is in Volume V, Page 748, at least
 17 on the disk. I don't know what it is in the paper,
 18 Appendix H-3, Tritium in Groundwater. "The relative
 19 ages of regional groundwater are 'pre-bomb or
 20 submodern' (pre-1952 Tritium Units, less than or equal
 21 to 1), 'modern,' (post-1972, between 4 and 15 TU), or
 22 'mixed,' (post-1952, between 1 and 4 TU), which are
 23 consistent with classifications and published
 24 literature, (Kay and others, 2005; IEPA, 1997; Clark

1 and Fitz 1994; and Bradbury, 1991)."

2 Were you responsible for putting this
 3 in here?

4 A. I didn't write that exact sentence, but I
 5 reviewed it, and I'm aware of it, yes.

6 Q. So you would agree with it, then?

7 A. Yes.

8 Q. Okay. Now, if you go to Page 750,
 9 Table H-3, "Summary of Tritium in Groundwater,"
 10 particularly well P-6D -- I assume that means D is
 11 deep; correct?

12 A. It's approximately 80 feet deep. So it's
 13 in the middle --

14 Q. How many feet?

15 A. 80.

16 Q. 80, okay?

17 A. It's in the middle portion of the aquifer.

18 Q. Okay. 80 feet.

19 And how about P-6S, the shallow --
 20 how deep would that one be?

21 A. That would be into the upper soils and
 22 then just into the top of bedrock, into the weathered
 23 bedrock.

24 Q. Approximately how many feet deep?

1 A. 10 or 12 feet.

2 Q. 10 to 12. Okay.

3 A. Actually, I think it's -- yeah, it might
 4 be a little less than that.

5 Q. Less than or equal to 10 to 12 feet.
 6 Okay.

7 Now, the P-6D has a TU level of 1.51
 8 which we've talked about many times tonight, but your
 9 own document here, if I can get this thing to go
 10 again, that would be mixed or post-1952 between 1
 11 and 4 TU? Am I reading that correctly, according to
 12 your document?

13 A. I believe the tritium result is around 7.

14 Q. In the upper. But in the deep -- in the
 15 shallow it was 7, but in the deep it was 1 point
 16 whatever I said, 57?

17 A. Could you repeat the question?

18 Q. Well, I guess what I'm asking is -- I'll
 19 go back here. This is when I wish I did it on paper
 20 in front of me.

21 Okay, P-6D, which would be the deep
 22 well, the tritium units or TU is 1.51?

23 A. Correct.

24 Q. Okay. And then -- and in Appendix H-3,

1 Tritium in Groundwater, the relative ages of regional
 2 groundwater are pre-bomb or submodern -- thank you --
 3 modern or mixed, post-1952 between 1 and 4 TU.
 4 So would the 1.51 be considered mixed
 5 between 1 and 4 TU?
 6 A. Yes.
 7 Q. Okay. So I'm reading here that there are
 8 four -- or there were four deep wells, P-2D, P-3D,
 9 P-6D and P-7D where levels of tritium were tested?
 10 A. That's correct.
 11 Q. Okay. And 25 percent of those, one out of
 12 four, exceed the level of 1 which is considered by the
 13 IEPA and your own literature to be mixed or post-bomb;
 14 is that correct?
 15 A. It would contain some component of water
 16 that had to enter the system after 1953, yes.
 17 Q. Okay. You also stated -- and if I am
 18 stating this incorrectly, please correct me -- that
 19 tritium can be introduced by well drilling from the
 20 upper levels or the shallow wells to the deeper
 21 levels; is that correct?
 22 A. Well, not specifically from the well
 23 drilling. It would be the use of water during the
 24 well drilling process. So it's not taking water from

1 the shallow aquifer, necessarily, and putting it
 2 deeper. It's more likely coming from water used in
 3 the drilling process. But it can come from either
 4 place.
 5 Q. If it came from the upper to the lower,
 6 wouldn't that indicate hor -- or vertical, that would
 7 be vertical, vertical conductivity?
 8 A. Well, through the borehole while you're
 9 drilling the well.
 10 Q. Okay.
 11 A. But once you completed the well, you
 12 wouldn't have that --
 13 Q. Okay.
 14 A. -- connection.
 15 Q. Help me out with well testing. I'm not a
 16 well expert, not even close to one.
 17 This P-6D, would you know -- you
 18 already told me the depth. Would you know the
 19 diameter of that well?
 20 A. They're all two-inch diameter wells.
 21 Q. Two-inch. Okay.
 22 A. That's the pipe diameter. The hole
 23 diameter, I think, is six or eight inches. I don't
 24 remember.

1 Q. Okay. But the pipe itself is two inches?
 2 A. Yes.
 3 Q. But you say the hole, then, are six or
 4 eight inches? That means water could come from above
 5 down below in that hole six or eight inches while the
 6 well is being drilled before it's capped off?
 7 A. Yes.
 8 Q. Okay. Now, then, after the well is
 9 drilled, what's the next step? Is water pumped out --
 10 I guess it's -- let me strike that first one.
 11 After the well is drilled, is the
 12 next step to pump out any foreign or introduced
 13 contaminants before a test is done?
 14 A. You develop the well, that's correct, and
 15 depending on how the well responds, that controls how
 16 much water you actually end up pumping out during the
 17 well development.
 18 You look for other criteria than just
 19 the volume of water you pump out. You look at whether
 20 the well is producing any sediments or not.
 21 Q. But those things are done after the well
 22 is drilled but prior to the actual testing?
 23 A. Yes.
 24 Q. Okay. So if tritium were introduced from

1 the upper level or the shallow aquifer to the deep
 2 aquifer and then after the well was drilled all of the
 3 foreign contaminants were pumped out, would not the
 4 tritium that was introduced from the upper level to
 5 the lower level, or potentially introduced from the
 6 upper level to the lower level, would that not also be
 7 removed before the test is done?
 8 A. You don't have -- you don't use any
 9 contaminated water when you're drilling these wells.
 10 So let's make that clear first. We're using potable
 11 water when we're drilling these wells, so we're not
 12 introducing contaminants.
 13 What you're trying to do when you
 14 develop the well is take out any impacts of the
 15 drilling fluids or just rock flow or the grinding up
 16 of the rock material as you're drilling the well. You
 17 don't -- you can't tell if you've taken all the water
 18 that you use during drilling out during the
 19 development because it looks just like the aquifer
 20 water. So there's no way to physically tell whether
 21 you've pulled out all the water that went into the
 22 rock during the drilling process or not.
 23 What you look for is that
 24 producing sediments or not, and if it's not, then you

1 take the sample.
 2 Just one other thing.
 3 Q. Sure.
 4 A. Private wells that are open throughout --
 5 many of the private wells drilled are open through a
 6 long distance of the aquifer. And so if water enters
 7 through those well boreholes or those well boreholes
 8 actually connect the upper portion of the aquifer with
 9 the deeper portion of the aquifer, it then can
 10 transport -- the actual borehole can transport water
 11 down into the lower portions of the aquifer.
 12 Q. So if there were leakage that's spread
 13 out, it could find these wells that are supposedly out
 14 there that may have transported this tritium down deep
 15 so this contamination could also go down deep and
 16 penetrate the deep well or the deep aquifer?
 17 A. Well, you wouldn't expect that to happen
 18 much because there's no vertical grading, essentially,
 19 in this area.
 20 Q. I'm confused as to -- and it's because I
 21 don't understand this, so I'm asking for your
 22 assistance to help me understand it.
 23 If I'm drilling a well and there's
 24 no -- did you say vertical or horizontal?

1 A. Vertical. There's little vertical
 2 gradient because we're in the middle portion of the
 3 flow system where flow is horizontal.
 4 Q. Yeah, but that was, I guess, what my
 5 question was.
 6 If there were leakage and the leakage
 7 spread out to one of these wells that was drilled not
 8 by your company or your operation but by one of these
 9 other wells that you're referring to that's already in
 10 existence and it found those wells, then it could
 11 penetrate down deep and then (undistinguishable
 12 utterance) come back across?
 13 A. Well, there's nothing that wants to drive
 14 it down. What it would do is start moving
 15 horizontally.
 16 Q. But I thought you just said it could have
 17 been introduced by one of the wells that connects from
 18 the upper aquifer to the lower aquifer, or did I
 19 misunderstand that?
 20 A. That's -- no, you did not misunderstand.
 21 During the drilling process when
 22 you're using water, then you can introduce that.
 23 Depending on how that well is used, potentially you
 24 could, you know, cause some movement within that

1 borehole. But it's most likely from the drilling
 2 process itself.
 3 Q. You had mentioned in your original
 4 testimony on September 13th if there were a
 5 one-square-meter hole put in this liner, that there
 6 would be no plume in 5,000 years?
 7 A. That's right. We could not develop a
 8 plume that was detectable at the monitoring system
 9 after 5,000 years.
 10 Q. But did I just hear you say there was
 11 horizontal conductivity or conductivity or whatever
 12 the phrase is?
 13 A. Yes.
 14 Q. If there's horizontal connectivity or
 15 conductivity, then why wouldn't you get a plume to
 16 form?
 17 A. Because there's not sufficient leakage to
 18 cause that plume. Even with the one-square-meter hole
 19 which is mandated by the IEPA for that calculation, we
 20 could not produce that plume. We could not produce
 21 the plume to set our well spacing on.
 22 Q. Okay. After the water samples were taken
 23 from these wells, how much time elapsed from the
 24 drawing of the test water until the actual testing, do

1 you know, approximately? A day? A week? A year?
 2 A. A short period of time. A day -- a couple
 3 of days at the most.
 4 Q. Okay. So that wouldn't significantly
 5 affect the half-life of the tritium that was in the
 6 water?
 7 A. No, no.
 8 Q. Okay. That's -- I was just trying to
 9 understand that.
 10 Okay. Let's see here. Can you go to
 11 the pictures of the nursery ponds, please, or the
 12 nursery pond. I guess not you, your assistant there.
 13 Okay. I have some questions on these
 14 ponds. That's the first one to start with. That's
 15 perfect. I think Mr. Wehrli asked some of these, but
 16 I just want to clarify for myself.
 17 What in this picture indicates the
 18 source of those two puddles, ponds, whatever we see
 19 there, the source of the water?
 20 A. I talked to Mr. Wallace, I looked at the
 21 pictures, and I looked for a couple of different
 22 things. If it was coming from seepage, I looked for
 23 indications along these excavations of areas that
 24 seep, and I -- here, at least, I don't see any seepage

1 areas.

2 Then I looked at the color of the

3 soils and I looked at the elevation of the water here

4 and the water here. And based on that and based on

5 talking to Mr. Wallace, this water was not coming from

6 seepage out of these clay side walls. (Indicating.)

7 Q. What are the relative elevations of those

8 two puddles relative to each other, that is?

9 A. This one is higher than this one.

10 (Indicating.)

11 Q. How do you know that?

12 A. Just looking at it.

13 Q. Just looking at it you can tell it's

14 higher?

15 A. Yes. And I can tell here we have the

16 lighter color clays and we don't see the lighter color

17 clays here, so I know I'm below this elevation down --

18 Q. So by that statement, should I believe

19 that lighter colored clays are at the same level

20 throughout this whole site and throughout the site for

21 the landfill and they don't undulate? I think that's

22 the proper word, I'm not sure, roll.

23 A. They're not going to have substantially

24 different thicknesses than what we see here. There

1 would be some variation, but I wouldn't expect to see

2 this yellow clay become -- this looks maybe three feet

3 thick here, I would estimate. It's not going to be

4 five or 10 feet thick. (Indicating.)

5 Q. How deep is that further pond?

6 A. I don't know the depth of these

7 excavations.

8 Q. Okay. So you really don't know, then, if

9 the levels of water are different if you don't know

10 the depth of the ponds?

11 A. The pond levels are dependent on runoff

12 and precipitation mainly coming into these ponds.

13 It's not related to the -- I know these aren't down to

14 bedrock at this point.

15 Q. No, I'm just saying the relative levels,

16 the top of water, I guess. If you don't know the

17 depth, you can't really say that the one is deeper

18 than the other or higher than the other or lower than

19 the other?

20 A. The depth of the water isn't dependent on

21 how deep the hole is. The top surface of the water is

22 not dependent on the depth of the hole.

23 Q. Okay.

24 A. I have water in this hole that looks like

1 it's shallower than this hole. (Indicating.)

2 Q. Yeah, but I guess what my point is -- not

3 my point, my question is, could the depth -- wouldn't

4 that also be a factor of how deep the hole is?

5 A. No.

6 Q. Okay.

7 A. I mean, in a deeper hole, you're going to

8 have a deeper depth of water. That's not going to

9 change the surface of the water elevation.

10 Q. Okay. In that picture -- no, let's

11 actually go to the next picture, summer 2005, if I

12 could, please, if you would, please.

13 What is that -- I call it gray --

14 what is that gray liner?

15 A. Those are the soils that he excavated from

16 the pond that he used to grade the edges of the pond.

17 Q. Okay. Now, which soils would those be

18 from the previous 2003 picture, because the ones in

19 2003 look brown to me, brown and light brown. These

20 look gray. To me they're different colors. Which

21 ones would they be?

22 A. I think it's a mixture of the both that

23 yellow and that brown or blue clay. They're both clay

24 materials, and that's what the soil materials were.

1 That's what he used to grade the sides of the pond.

2 Q. Okay. In the 2003, summer of 2003, how

3 long has that water been sitting there?

4 A. I didn't ask him that question.

5 Q. So you don't know at all?

6 A. That's correct.

7 Q. Okay. That's fine.

8 In the summer of 2005 picture, how

9 long was that water sitting there?

10 A. I don't know.

11 Q. Okay.

12 A. I know that it hasn't had time to fill up.

13 That's what I looked at when I saw that picture.

14 Q. Okay. The summer of 2005, you have no --

15 can you say with 100 percent certainty how all that

16 water got into that pond?

17 A. Well, what Mr. Wallace indicated to me was

18 that water seeped into the bottom when they got down

19 to the rock. So it's either that or surface water

20 coming into the pond from the drain tiles.

21 I can tell by looking at the picture

22 that I don't have seepage coming in the side walls.

23 Q. Do you know when those side walls were

24 finished prior to this picture?

1 A. No.
 2 Q. Okay. Did -- was there any written
 3 documentation other than these three photos of when
 4 these holes were dug and when the water got to those
 5 levels?
 6 A. No.
 7 BOARD MEMBER PURCELL: Okay. I might be done
 8 here. Let me just check, if I could, please.
 9 Okay. I think I am done. Thanks.
 10 EXAMINATION
 11 BY BOARD MEMBER WYKES:
 12 Q. I have a question. Bill Wykes.
 13 You said that most likely the P-06D
 14 well tritium level of 1.51 most likely came in from
 15 the fact that it was water from the drilling the well?
 16 A. That's correct, or from, you know, other
 17 wells in the area that have introduced newer water
 18 into the system.
 19 Q. Well, we're supposed to be looking at
 20 scientific data here. That -- doesn't that show this
 21 that you had a predetermined conclusion that you were
 22 not going to find that they should have all been
 23 under 1, and when it went over 1, you just decided to
 24 say -- explain it that it had to have come from some

1 other source?
 2 A. What I was using the tritium information
 3 for was to tell me was the water in the shallow
 4 similar to the water in the deeper, and it served its
 5 purpose to show me that.
 6 It was also consistent with the road
 7 salt information and all the other geologic
 8 information. There was nothing in that number -- and
 9 that number often is considered pre-bomb water by
 10 other governmental organizations -- to represent older
 11 water. So I was not concerned or that didn't tell me
 12 I needed to do more information. It wasn't something
 13 so inconsistent that I needed to do additional
 14 testing.
 15 Q. But it was inconsistent enough for you to
 16 say that had -- it could not have come from
 17 transferring of a flowing of water from the vertical
 18 down to that level?
 19 A. Actually, the value of 1 -- I didn't even
 20 see this as an issue because it was so close to the
 21 value of 1 that to me it was older water. And that's
 22 what I was trying to determine. It's older water than
 23 the water at the top of the aquifer.
 24 Q. Then I -- I mean, if we can't go by what

1 the data says, I mean, to me it's -- you know, none of
 2 it's worth if we're going to try to explain it away.
 3 Anyway, that's just my question. Thanks.
 4 A. The data is saying that that deeper water,
 5 every sample from the deeper wells is older than the
 6 water that's up at the surface. And that's what I was
 7 using it for, and all the data tells me that.
 8 HEARING OFFICER KINNALLY: Pam?
 9 BOARD MEMBER PARR: No questions.
 10 HEARING OFFICER KINNALLY: Mr. Blazer?
 11 MR. BLAZER: Just a few, Mr. Kinnally.
 12 CROSS-EXAMINATION
 13 BY MR. BLAZER:
 14 Q. Ms. Underwood, I think you can get the
 15 sense that some of the Board members are not exactly
 16 satisfied with your answers regarding P-06D. So I get
 17 the sense that what you're saying is that from your
 18 perspective, the half-unit difference between 1 and
 19 1.51 is statistically insignificant to you?
 20 A. Yes.
 21 Q. Could you explain in plain English why you
 22 think that?
 23 A. Because the measurement of tritium is not
 24 that precise of a measurement. There's ways that

1 tritium can be introduced into the deeper portions of
 2 the aquifer or into the sample during the drilling
 3 process so that just because it's slightly above 1, to
 4 me it tells me it's at that 1 level. It's older
 5 water.
 6 MR. BLAZER: Sorry, John, I need it back.
 7 BY MR. BLAZER:
 8 Q. If we look at Table H-3 that Mr. Purcell
 9 was referring to, I think we've established that P-02D
 10 was at .87, 03D and 07D were less than 1.
 11 Why is it that water from the
 12 drilling process would not have been introduced into
 13 those three but may have been introduced into P-06D?
 14 A. It could have been introduced in all of
 15 those wells during the drilling process, but during
 16 the development process, you may not extract all of
 17 the water introduced into the well. You develop the
 18 well so that you have clear water coming out of it.
 19 And so you might see slightly different results, and
 20 that is a very slight difference.
 21 In addition, I mean, during the bomb
 22 testing, tritium levels being introduced at the
 23 surface and just west of the site where the bedrock is
 24 at the surface was in the thousands of parts of

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1 tritium units, like 3, 4, 5, 6,000 in the rainfall.
2 So you had very high concentrations during the '50s
3 and early '60s.
4 Q. And you don't see those present under the
5 proposed facility at this site?
6 A. That's correct.
7 Q. And where do you believe the local
8 recharge area would be?
9 A. Just to the west of the site where that
10 bedrock is close to the surface where you have road
11 ditches dug down below the ground surface a little
12 bit, and that's where you can introduce water, both in
13 that bedrock area and along the ditches.
14 Q. That was the slide with the purple area
15 that you showed us?
16 A. Yes.
17 Q. All right. As far as the soil samples
18 that were stored, I understand that the rock samples
19 wouldn't have necessarily have been affected by
20 temperature changes, but let's talk about the soil
21 samples.
22 Obviously you did both site testing
23 and you did laboratory testing; correct?
24 A. Correct.

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1 Q. Did you do new laboratory testing of the
2 2007 samples that had been stored?
3 A. We did not use any of the samples from
4 2007 for laboratory testing.
5 Q. Why not?
6 A. Because they were older samples. We
7 wanted the samples fresh. We need to take them with a
8 Shelby tube. They're no longer contained in this
9 Shelby tube, so it would actually be physically
10 impossible to take those samples for permeability
11 testing.
12 We could have taken grain size
13 samples from those, but we had the new borings to take
14 grain sizes from. So there was no need to go back to
15 those samples and take samples.
16 Q. So all of the laboratory testing that was
17 done for this Application was from new samples?
18 A. Yes.
19 Q. And, again, obviously another issue that
20 has come up repeatedly is the question of why you
21 didn't put more wells into the unconsolidated soils
22 without going into the bedrock. And I thought I heard
23 you say this, but I'm not sure, so I need you to be a
24 little bit more specific, please, so we can understand

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1 this.
2 Was the reason that you didn't put
3 more wells into the unconsolidated deposits because
4 you felt that there wouldn't be any water in the wells
5 to test?
6 A. That was one of the reasons, yes. And the
7 other reason was I collected other data, other
8 information about that confining unit in other ways.
9 Q. All right. Have you reviewed Mr. Bognar's
10 report?
11 A. Yes, I have.
12 Q. All right. I'm referring to a statement
13 on Page 4 of his report where he says "LBG opines that
14 gauging the so-called effectiveness of this unit's
15 confining ability or its relationship with the
16 underlying aquifer was never physically established
17 nor quantified because piezometers from which
18 hydraulic information could be gained were not
19 constructed in this overburdened unit during the CECI
20 investigation."
21 Do you agree with that statement?
22 A. Yes, during the CECI investigation, that
23 was true.
24 Q. And is that different now?

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1 A. We do not -- no, there's physical data
2 that tells us about the confining unit.
3 Just let me read the sentence.
4 Q. All right. It's on Page 4 toward the
5 lower middle of the second full paragraph. It starts,
6 "However, LBG opines."
7 Do you see it?
8 A. Yes. It was physically established and it
9 was quantifiable based on the results of the aquifer
10 test that gave me physical information about that
11 confining unit.
12 And I actually have conducted tests
13 where I've tried to put the wells in the clay unit,
14 pumped the underlying aquifer, and could not get a
15 response in the clay -- in the clay, and that was
16 actually at Prairie View. So I've attempted that
17 before in the past.
18 I can get physical real data from the
19 aquifer test the way it was done to tell me about the
20 confining unit, and that's what I did.
21 So that's an incorrect statement.
22 HEARING OFFICER KINNALLY: Well, why wouldn't
23 you just put the -- put the wells in this confining
24 unit that you say and then come back and tell -- put

1 in the Application that there were no results and you
2 didn't get any water? I mean, it would seem so
3 obvious to me that that's what you would do. I don't
4 understand why you didn't do it?

5 THE WITNESS: I had multiple other pieces of
6 evidence, and I needed -- I went through the
7 explanation of why I drilled the wells the way I did.

8 HEARING OFFICER KINNALLY: But wouldn't that be
9 the most convincing evidence? I mean, that's the
10 slant of all the questions that have been asked you by
11 the Board here.

12 THE WITNESS: It would be additional evidence.

13 But, again, like I said, I've actually done it at this
14 area in Prairie View and couldn't get a response.

15 HEARING OFFICER KINNALLY: Okay.

16 THE WITNESS: So based on my experience, I made
17 the decisions that I did.

18 BY MR. BLAZER:

19 Q. It was your opinion or you believe that
20 Mr. Bognar didn't consider your aquifer test?

21 A. I saw no place where he talked about the
22 results of the aquifer test showing that it was
23 confined conditions or the storage value showing that
24 it was confined conditions.

1 MR. BLAZER: All right. That's all I have,
2 Mr. Kinnally.

3 HEARING OFFICER KINNALLY:
4 EXAMINATION

5 BY HEARING OFFICER KINNALLY:

6 Q. All right. I only have one -- you've been
7 up there a long time, and I know this is rebuttal. I
8 just have one series of questions.

9 Will you take out Minooka
10 Exhibit No. 4, which is Mr. Bognar's report, and turn
11 to Attachment D. And if you do not have the
12 attachments labeled A, B, C and D, I have them here
13 for you, if you do not have them.

14 Do you have that one?

15 A. Yes, Attachment D.

16 Q. All right. Now, we were told by
17 Mr. Bognar that this is a superimposition of a drawing
18 that you originally submitted in the Application. Is
19 that accurate or no? I thought that's what he said.

20 A. Well, I know --

21 Q. If you don't know, that's fine.

22 A. Yeah, I don't know.

23 Q. It doesn't really make a whole lot of
24 difference, I guess.

1 A. It actually looks like the topographic map
2 on maybe -- I'm not sure what the herringboned lines
3 represent.

4 Q. Okay. In the northeast corner of the
5 site, there are at least 15 points, if you look at the
6 legend, which indicate that the water table is at or
7 above the liner bottom.

8 Do you see that?

9 A. Yes.

10 Q. All right. Now, does that mean that the
11 liner is going to sit in water?

12 A. There would be portions, small portions of
13 the clay liner, the bottom of the clean water, that
14 would be below the water table; not in the aquifer,
15 but below the water table.

16 Q. And the water table is there because why?
17 Tell me why the water table is there in relation to
18 its geology. Why is the water table at that level?

19 A. Because the clay can't transmit water, so
20 it gets stuck in the clay and then it reaches an
21 equilibrium with the surrounding topography where the
22 pressure at the top of the water table is zero.

23 Q. And the composition of that water is made
24 up of -- where does it come from?

1 A. Precipitation.

2 Q. Okay. No groundwater?

3 A. Well, once you're below the water table,
4 you would consider it as groundwater.

5 Q. I understand. I just want to talk about
6 the water table.

7 Is the water table composed solely of
8 precipitation?

9 A. The water table is a surface. It's
10 supplied by precipitation.

11 Q. Anything else?

12 A. No.

13 HEARING OFFICER KINNALLY: Okay. Thank you.

14 All right. Do you have any other
15 questions, Mr. Moran?

16 MR. MORAN: I have one question.

17 REDIRECT EXAMINATION

18 BY MR. MORAN:

19 Q. Ms. Underwood, with respect to these
20 piezometers that people have been mentioning could
21 have been placed entirely within the overburden, if
22 that had been done, would that yield any useful
23 information?

24 A. I'd probably have dry wells. So it would

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1 just show me, again, confirming that I wasn't getting
2 water out of those clay materials.

3 Q. And could you and had you done that then
4 been criticized for putting in piezometers that
5 yielded no useful information regarding the water
6 levels within that unit port?

7 MR. PORTER: Objection; calls for conjecture.

8 THE REPORTER: I'm sorry. Who said that?

9 HEARING OFFICER KINNALLY: I don't know.

10 MR. PORTER: Mr. Porter.

11 MR. LYLE: And a conclusion. Mr. Lyle.

12 HEARING OFFICER KINNALLY: Well, there have
13 been a lot of conclusions here tonight.
14 I'm going to overrule that. You can
15 answer the question.

16 BY THE WITNESS:

17 A. Yes, and I've seen reports where dry wells
18 go in and then they're immediately abandoned.

19 MR. MORAN: Thank you very much.

20 HEARING OFFICER KINNALLY: All right. Any
21 other questions?
22 (No response.)

23 HEARING OFFICER KINNALLY: Okay.
24 Ms. Underwood. Thank you again for coming and giving

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1 us your information. We appreciate it. You're
2 excused.
3 (Witness excused.)

4 HEARING OFFICER KINNALLY: We're now going to
5 take a 10-minute break, and then we're going to hear
6 closing statements. And we're going to finish
7 tonight. So however long they take, we're going to be
8 here.
9 (Recess taken.)

10 HEARING OFFICER KINNALLY: All right. Let's
11 get started here. We have a quorum, and we will begin
12 the closing arguments at this point.
13 I would like just to make one
14 admonition, and that is that once the hearing is
15 closed, the -- anyone, any participant, has the right
16 to submit a written comment, and that written comment
17 would have to be submitted within 30 days. You don't
18 count today. So it would start running tomorrow, the
19 2nd. So it would need to be filed by November 1st
20 since we have 31 days in October.
21 The other thing is if you're going to
22 file a written comment, it can be no longer than 25
23 pages per the Ordinance.
24 The other thing is that I asked

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1 Mr. Bognar to supply two articles that he relied upon
2 in his report, and those are on page -- I think it's
3 4 -- I'm sorry, that's on Page 5.

4 MR. KRAMER: I do have those marked.

5 HEARING OFFICER KINNALLY: Okay. If you could
6 file those at some point. You don't need to --
7 whenever.

8 MR. KRAMER: I didn't know if that picked up
9 loud enough.

10 HEARING OFFICER KINNALLY: That's fine. If you
11 could file those, because I think I'd like to read
12 them.

13 MR. KRAMER: Yes, sir.

14 HEARING OFFICER KINNALLY: So Mr. Mueller, I
15 don't think you ever introduced your exhibits. Can we
16 do that? Can we get that done?

17 MR. MUELLER: I'm ready to do it right now.

18 HEARING OFFICER KINNALLY: Well, let's do it.

19 MR. MUELLER: 1 was admitted tonight.
20 2 were boring logs B-17 and 33 from
21 the old and the new Application. I'd move for the
22 admission of that.

23 HEARING OFFICER KINNALLY: Any objection?
24 (No response.)

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1 HEARING OFFICER KINNALLY: Admitted.
2 (Kankakee Regional Landfill Exhibit
3 No. 2 admitted.)

4 MR. MUELLER: No. 3 were the cover page and
5 internal page from the instruction manual for the
6 MIGRATE model.

7 HEARING OFFICER KINNALLY: Any objection?
8 (No response.)

9 HEARING OFFICER KINNALLY: Admitted.
10 (Kankakee Regional Landfill Exhibit
11 No. 3 admitted.)

12 MR. MUELLER: No. 4 was Page 9.6.62 from the
13 groundwater impact assessment in the Waste Management
14 Prairie View application.

15 HEARING OFFICER KINNALLY: Any objection?
16 (No response.)

17 HEARING OFFICER KINNALLY: Admitted.
18 (Kankakee Regional Landfill Exhibit
19 No. 4 admitted.)

20 MR. MUELLER: No. 5 was the MIGRATE inputs used
21 by Ms. Underwood at the Willow Run 1 application.

22 HEARING OFFICER KINNALLY: Any objection?
23 (No response.)

24 HEARING OFFICER KINNALLY: Admitted.

<p style="text-align: right;">Page 2337</p> <p>1 (Kankakee Regional Landfill Exhibit 2 No. 5 admitted.) 3 MR. MUELLER: I couldn't find in searching this 4 afternoon what No. 6 was. 5 HEARING OFFICER KINNALLY: Well, you know, I 6 can't help you with that one. 7 MR. MUELLER: All right. No. 7 were a 8 collection of various pages from the Application that 9 I used in cross-examination. 10 HEARING OFFICER KINNALLY: All right. Well, 11 they're already in the Application. 12 MR. MUELLER: Right. 13 HEARING OFFICER KINNALLY: They're admitted. 14 MR. BLAZER: Mr. Kinnally, just for the record, 15 No. 6 was Figure G-41, water table contours and Table 16 G-3 from the Application. 17 HEARING OFFICER KINNALLY: Well, they're 18 already in the record so I don't think we need to 19 admit those. 20 MR. MUELLER: No. 8 also was various pages from 21 the Application just marked for convenience. 22 HEARING OFFICER KINNALLY: All right. Any 23 objection to that? Okay. Those are admitted. 24</p>	<p style="text-align: right;">Page 2339</p> <p>1 HEARING OFFICER KINNALLY: All right. Hearing 2 none. Okay, Mr. Moran, you have the floor for your 3 closing statement. 4 MR. MORAN: Thank you very much, Mr. Hearing 5 Officer. Members of the County Board, fellow 6 participants, citizens and interested residents: 7 We appreciate your consistent and persistent review 8 and consideration of the evidence that we've presented 9 in connection with this site location Application. 10 Clearly, it's been a long and winding 11 road and one that has allowed us the opportunity to 12 present to you the evidence in support of all of the 13 statutory criteria and also the requirements set out 14 in the Kendall County Siting Ordinance. 15 But one thing this case is not about 16 is it is not about whether a landfill is a good thing 17 or a bad thing or even how we feel about landfills, 18 whether they're appropriate technologies, whether 19 they're the appropriate way for us to dispose of 20 waste. This isn't about how many witnesses appear or 21 citizens come in to oppose a proposal for this 22 Application. It isn't about whether people have the 23 opinion that all landfills leak or that any landfill 24 is going to affect or negatively impact somebody's</p>
<p style="text-align: right;">Page 2338</p> <p>1 (Kankakee Regional Landfill Exhibit 2 No. 8 admitted.) 3 MR. MUELLER: No. 9 were the boring logs from 4 the old and new applications for B-20 and 26. 5 HEARING OFFICER KINNALLY: Any objection? 6 (No response.) 7 HEARING OFFICER KINNALLY: Admitted. 8 (Kankakee Regional Landfill Exhibit 9 No. 9 admitted.) 10 MR. MUELLER: No. 10 was Ms. Underwood's 11 MIGRATE baseline inputs from this Application. 12 HEARING OFFICER KINNALLY: Any objection? 13 (No response.) 14 HEARING OFFICER KINNALLY: Admitted. 15 (Kankakee Regional Landfill Exhibit 16 No. 10 admitted.) 17 HEARING OFFICER KINNALLY: And 11 was already 18 admitted. 19 HEARING OFFICER KINNALLY: Anything else, 20 Mr. Mueller? 21 MR. MUELLER: That's it. 22 HEARING OFFICER KINNALLY: Does any other 23 lawyer have any exhibits they want to introduce? 24 (No response.)</p>	<p style="text-align: right;">Page 2340</p> <p>1 property value. 2 This is a case about whether the 3 evidence that's been presented satisfies the statutory 4 criteria, those nine criteria set out in the Illinois 5 Environmental Protection Act, because those criteria 6 set out the standards by which you must judge this 7 Application. 8 Those standards set out in the Act 9 are not absolute standards that require a guarantee 10 against any problem or against any risk. In fact, 11 those criteria assume that a proposed landfill will be 12 incompatible, will have adverse impacts. 13 The critical consideration in 14 reviewing this Application is whether steps have been 15 taken and evidence presented to minimize that impact 16 and manage or limit any risk. That impact and that 17 risk, in terms of the evidence that has been 18 presented, if it is established that that those issues 19 have been satisfied, then this Application should be 20 granted. 21 And the showing that we make, the 22 obligation that we have is to make that demonstration 23 by a preponderance of the evidence; a preponderance of 24 the evidence meaning that the statement or the</p>

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1 contention made is more likely true than not true.
2 It isn't a standard that requires a
3 showing beyond any reasonable doubt; the criminal
4 standard that we're all familiar with that would
5 allow, for example, for doubts or uncertainty raised
6 by certain witnesses as to any of these showings would
7 be sufficient. It would not be.
8 Our burden is to show that these
9 criteria have been met by a mere 51 percent of the
10 evidence as it's presented; more likely true than not.
11 And in terms of this Application,
12 what evidence have we seen with respect to the
13 criteria? Criterion 1 as it relates to need was
14 established through the testimony showing that the
15 amount of waste generated within the service area over
16 the planning life of this landfill exceeded by well
17 over 46 million tons the available disposal capacity.
18 Criterion 4 addressing whether this
19 facility is located within the 100-year floodplain.
20 The testimony and exhibits presented by Mr. Nickodem
21 clearly established that Willow Run falls outside the
22 100-year floodplain.
23 Criterion 5 as it relates to the plan
24 of operations for the facility was demonstrated by the

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1 testimony of Mr. Hoekstra in which he described the
2 plans addressing spill control, emergency action, fire
3 prevention, accident prevention, and security.
4 Criterion 6 as it related to traffic
5 requires a showing that the traffic routes designed
6 for this facility were done in such a way as to
7 minimize any impact on existing traffic flow.
8 Mr. Miller's testimony addressed that
9 issue and established that, indeed, the routes to and
10 from this facility minimize that impact and that there
11 was no evidence indicating other routes or better
12 routes that would further minimize that impact.
13 Criteria 8 as it relates to plan
14 consistency was established that the Kendall County
15 solid waste plan, indeed consistent with the proposal
16 that has been made here for this sanitary landfill.
17 Criterion 7 and Criterion 9 do not
18 apply to the facility. It will not be accepting
19 hazardous waste, and the facility is not located in a
20 regulated recharge area.
21 Criteria 3 requires a showing that
22 the Applicant has taken or will take those feasible
23 steps necessary to minimize any incompatibility with
24 the character of the surrounding area or any negative

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1 effect on property value.
2 That showing requires that this
3 Applicant, as was done through the testimony of
4 Mr. Yocca, has proposed feasible steps to provide
5 landscape screening, berming, and setbacks to provide
6 appropriate buffers and transitions from surrounding
7 properties.
8 Criterion 2 addressing the question
9 of whether this facility has been designed, is located
10 and proposed to be operated to protect the public
11 health and safety is met with a showing that the
12 design of the facility will be protective of the
13 aquifer, of water wells in the area, and of the
14 environment.
15 The testimony that we've heard from
16 Mr. Nickodem established the design of this facility
17 with the leachate collection and management system,
18 surface water management controls, gas management
19 controls, the environmental monitoring, and the double
20 composite liner will, indeed, protect the aquifer,
21 will protect the surrounding water wells and will
22 protect the environment.
23 And Mr. Nickodem stated unequivocally
24 and without contradiction that this facility will

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1 function as intended and will not result in any
2 release to groundwater or water wells.
3 Indeed, the performance standards and
4 requirements set forth in the Host Agreement, which
5 has been made part of this Application, also establish
6 those procedures and those design elements which will
7 ensure protection of the aquifer and the surrounding
8 water wells.
9 The cases talk about what is required
10 in order to establish that Criterion 2 was not met,
11 and that requires evidence that the design of this
12 facility is flawed, that the operations in some way
13 are flawed and would present a substantial risk to
14 surrounding areas, or that any applicable governmental
15 regulation is violated or ignored.
16 No testimony. No evidence was
17 presented in this case that would in any way
18 challenge, much less establish, that the design of
19 this facility is flawed in any way, that it won't
20 function as intended, and be protective of those
21 valuable resources; the aquifer, surrounding water
22 wells, and the environment.
23 The evidence also addressed the
24 extensive and complete hydrogeologic characterization

1 of the site at which Willow Run is proposed to be
2 located.

3 That testimony and that evidence
4 shows a comprehensive and evaluative and a complete
5 characterization of the units in and around this
6 landfill and that this facility being constructed
7 above that bedrock aquifer in an area where the sub --
8 the subgeologic units beneath this facility have been
9 accurately and completely characterized, and the
10 discussion that we have had now over these few weeks
11 regarding that five -- minimum five-foot
12 low-permeability layer that will be below this liner
13 system.

14 And we have heard, as we did again
15 tonight, from Ms. Underwood the various and the
16 numerous data and tests, none of which have been
17 challenged, the data that she's presented to us, to
18 establish the characteristics of that unit.

19 What is that data? That data is that
20 in looking and characterizing the material, we see in
21 that unit a clay material, a clay material of low
22 permeability tested out from numerous evaluations as
23 being low-permeability material, as indicating, as
24 well, with the aquifer tests that were performed,

1 critical tests, that establish that that unit is a
2 confining unit because if it weren't, the testing that
3 were done of this aquifer would not have shown or
4 demonstrated that the water in those wells once
5 drilled into the bedrock rose above the top of the
6 bedrock. That is conclusive and unrefutable evidence
7 that that unit is a confining unit.

8 And the fact that a number of
9 piezometers were not screened entirely within that
10 unit was, as Ms. Underwood pointed out, entirely
11 unnecessary to a characterization, an accurate
12 characterization of that unit, because had that been
13 done, it would have yielded no useful information and,
14 in fact, would have been a basis for criticism because
15 those wells put in that overburden would have yielded
16 no information on water levels, on any saturation
17 within that unit; and the criticism would have been
18 you haven't identified the proper water levels within
19 this unit, the water table as we've defined it, and it
20 simply would have provided nothing useful, in fact,
21 would have opened this Applicant up to additional
22 criticism and -- additional criticism.

23 This site will be designed as
24 indicated with multiple elements to ensure its

1 protectiveness, as we heard from both Mr. Nickodem and
2 Ms. Underwood.

3 This liner system will be built above
4 the bedrock aquifer, will be built with the following
5 elements; an upper 60-mil geomembrane, the
6 geocomposite layer, the GCL, as it was referred to,
7 the lower geomembrane, the three feet of
8 low-permeability compacted clay which is the earthen
9 component of the double composite liner system, as
10 well as that minimum five-foot low-permeability layer.

11 That system operates together with a
12 leachate collection and management system which will
13 ensure that any leachate formed within this landfill
14 will be removed. Those levels of leachate will be
15 kept to a minimum, and, in fact, only exist to any
16 significant extent, perhaps a foot or two, three feet,
17 in the sumps.

18 Because of that, there will be no
19 accumulation, there will be no thickness of leachate
20 that will be able in any fashion to escape or be
21 released from this facility, which is why the leachate
22 management system as Mr. Nickodem pointed out, is
23 probably the most critical element of this design and
24 to ensure its protectiveness.

1 But beyond that, the different
2 elements in this system which are critical are the
3 elements that I've just identified, and those make up
4 part of a design which in no way was criticized, which
5 was in no way established as being insufficient in any
6 respect, and that testimony and that evidence
7 establishes that Criterion 2 was met beyond any
8 question.

9 With that presentation and with that
10 evidence as it's been presented to you, we submit that
11 each of the criteria which are set out in the Act have
12 been established by beyond a preponderance of this
13 evidence and that the decision of this County Board
14 based upon that presentation should be to affirm and
15 grant local site approval for Willow Run.

16 Thank you.

17 HEARING OFFICER KINNALLY: Okay. Thank you,
18 Mr. Moran.

19 Mr. Dan Kramer.

20 MR. KRAMER: Thank you, Mr. Kinnally.

21 On behalf of the Village of Minooka
22 and certainly on behalf of our office my heart-felt
23 thanks go out to you Board members because again, as
24 Mr. Moran pointed out, this is an arduous process and

1 you sat here a lot of nights that you probably got
 2 family and other obligations you'd like to take care
 3 of.
 4 I also want to compliment what I
 5 think have been very professional presentations by my
 6 colleagues here, the Applicant, the citizen
 7 participants, and those people -- other government
 8 agencies that were represented by counsel.
 9 I want to talk to you about two
 10 background matters, and then I want to give you the
 11 three reasons why you should give a negative
 12 recommendation to the Illinois Pollution Control Board
 13 in regard to this Siting Application.
 14 The first is the background of the
 15 Application. You all were here for the 2'07 model,
 16 you were here for the 2'08 model, and the differences
 17 that you may have felt you've gained on it were a
 18 shorter useful life for life of the landfill footprint
 19 to 14-and-a-half years as opposed to 35.
 20 You got a height reduction of about
 21 54 feet from over 200 feet to 181.
 22 You got a liner that originally in
 23 2'07 was proposed to be under 65 percent of the site
 24 with, as it was stated in that application, a minimum

1 of six inches of protective soil underneath.
 2 Now you've got the double liner
 3 system, you've got the minimum three feet of compacted
 4 clay that the IEPA says you must have, and you've had
 5 repetitive statements about this at least five foot of
 6 a confined upper unit that's going to protect you.
 7 And I think it's very important to
 8 see what you've got and what you don't have.
 9 If your decision was right the first
 10 time around, then Mr. Nickodem's testimony the very
 11 first night that he gave his was I don't care or I'm
 12 not concerned about the geology on the site, I'm only
 13 concerned about the design because the liner is not
 14 going to leak.
 15 The EPA cares about the geology.
 16 Ms. Underwood certainly cares about the geology. The
 17 three geologists care about the geology. And, most of
 18 all, you, the finders of fact, care about that
 19 geology.
 20 I don't think it would probably be a
 21 60 Minutes news flash that I don't always agree with
 22 County Board Member Davidson, but it might be worthy
 23 of a Mike Wallace question when he asked Mr. -- or
 24 Ms. Underwood tonight, why didn't you do more tests in

1 the underlying confinement area that we're all
 2 concerned about, and at the end of the day, there is
 3 no confusion.
 4 If you go to what's been identified
 5 as Table 5-3 in the Application, the clear designation
 6 that every geologist who you've heard testify in this
 7 matter has said that the definitional term for clay is
 8 either CL or CH, and at WT-06, that is the one and
 9 only one of the tests that was done in what the
 10 Applicant wants you to believe is an upper confining
 11 unit.
 12 If you go about halfway down that
 13 exhibit, you're going to see a boring at WT-53 that
 14 has lean clay, but then it has all kinds of sand lense
 15 and different sand and gravel materials mixed in.
 16 And I'd strongly disagree with
 17 Mr. Moran and Ms. Underwood with my limited knowledge
 18 that further borings in that alleged upper confining
 19 unit would not have given you useful information.
 20 It's the show-stopper.
 21 If they had one or two or three or
 22 four borings that told you across there that there was
 23 no water present, we couldn't even question that
 24 matter. The other three geologists that testified

1 would have said it was verified.
 2 You heard Mr. Bognar. He's never
 3 testified for an objector or a governmental agency
 4 reviewing an application in the past. He's only
 5 testified for applicants.
 6 And you also heard his testimony that
 7 he had no criticism of the tests that were performed
 8 by Ms. Underwood. His criticism was verification.
 9 Like President Reagan used to say about the Russians
 10 and the weapons treaties, trust but verify, and
 11 there's no verification.
 12 And that material above the bedrock
 13 is crucial because that's been your concern before,
 14 obviously, and it's your concern now.
 15 We have, it's very interesting, in a
 16 correlating table that's labeled as G-3 -- going back
 17 to the piezometer, that well that measures that's put
 18 down in those two borings that I just talked about.
 19 On WT-06, there's two and only two
 20 readings about 60 days apart, in February and April of
 21 '08. In many of the other holes, there's four or five
 22 borings indicated back from '07, '08. Again, they
 23 were verified. They were proved out.
 24 The interesting thing in Table G-3

1 about WT-06 is in a 60-day period, there was a drop in
2 the water level from just those one spot readings of
3 almost a foot and a third. If there was no horizontal
4 conductivity and if this material is of low
5 permeability, where did a foot and a third of water go
6 in 60 days?

7 It's not a hard concept to
8 understand. Those additional tests in that upper
9 unconsolidated unit would have told you that or
10 excluded the possibility.

11 Another thing that's really important
12 is Applicant's Exhibit 14 this evening. If you take a
13 look when you have time to deliberate at the last of
14 the WT-202, which are the colored drawings which had
15 the calculation results on the right side,
16 Ms. Underwood gave you a couple crucial statements
17 tonight that we didn't hear about on direct exam.

18 One is she used a term of saturation
19 in the upper confining unit, which means there's water
20 present, it's not dry, and she talked about it being
21 grouped with that upper aquifer, and that was exactly
22 John Bognar's testimony, that he didn't find proof of
23 an upper confining unit; he found evidence, based on
24 her tests, because of the saturation level of that

1 unconsolidated material and the water present where
2 she drilled into that top aquifer and bedrock layer,
3 that that was actually the combined aquifer.

4 And if that's true, again, we have to
5 have doubts about permeability or the flow of water,
6 that it's much more permeable than the Applicant has
7 led you to believe.

8 Again, going back to Table 5-3 about
9 those two particular tests, the one in all clay and
10 the one that went from clay to the sand lense, they
11 have site or slug test hydrological conductivity
12 results of 1.1 times 10 to the minus 4.

13 Ms. Underwood, and I appreciate her
14 candor, agreed with me tonight, those are high
15 permeability. That means water can flow through
16 horizontally.

17 When you look at your Application,
18 you're going to find that there was only one
19 laboratory test, and it was used from the '08
20 materials, I agree with her, not the '07 materials,
21 verifying the lab test results as far as the
22 conductivity or the flow of water in the field result;
23 and the one and only one comparison you have shows
24 that same number to a degree, it shows the 1.7 times

1 10, but the verification or to the power is instead of
2 being point -- or dash minus 04, it's to minus 7,
3 which is a low permeability.

4 And that tells us right there that
5 you can't replicate in the lab the conditions at the
6 site, and it means the magnitude or the lessening of
7 flow of water in that one and only lab test is three
8 times greater than the field test that was performed.

9 And that's what you're asking to be
10 made a judgment on. You're asking to take one test
11 and her interpretive skills -- and I've been impressed
12 generally with her skills -- but we've got three other
13 equally or better-qualified geologists saying we don't
14 have trouble with what she did up to the point, but
15 she didn't go to the next step.

16 And we're not dealing with CL
17 Nelson's Landfill on the north side of Yorkville 100
18 years ago. We're dealing with an industry leader
19 here. Cost is not a problem. Doing transducers to
20 get 30 or 40 or 60 readings over a period of months
21 would have been the safest thing to do, and if they
22 came back dry holes, God love them, they've proved
23 their case.

24 And remember, the burden, as counsel

1 has indicated, is preponderance of evidence, but the
2 burden is always on that Petitioner to present the
3 evidence. The burden isn't on you as a County Board
4 member, it's not on the County's environmental
5 attorney. It's not on any of us folks back here.
6 It's on the Applicant, and they haven't carried their
7 burden in regard to Criterion 2.

8 The other background area I want to
9 go to just briefly, and it's not exactly a criterion,
10 but it's certainly part of it. Again, you may look at
11 the changes made between 2007 and 2008 and say, boy,
12 this is a swell business deal for the County. We've
13 got them down from 35 to 14-and-a-half years, we're
14 going to have a lovely revenue stream if this is
15 approved; but what you're doing is making a
16 shortsighted business decision if you recommend that
17 they have met the criteria in relation to the
18 long-term risk that not you folks will probably ever
19 encounter as 10 board members, but your future board
20 members, your children, my children, and the children
21 of the residents of this County.

22 And if there's no risk involved or
23 you feel they've minimized the risk, I think the best
24 answer that they haven't is to look at the curriculum

1 vitae's of all the geologists that you've had and look
2 at their background and see how many facilities
3 they've participated in that have had leaks and
4 problems.

5 I don't believe there's ever been an
6 engineer alive who's designed a facility to fail. I
7 believe truly Mr. Nicoderm is telling the truth to the
8 best of his ability. But if you looked at all those
9 geologist's CV's, they've all participated in cleanups
10 and leaks, and there would be no reason for the EPA
11 regs about what do we care about the geology
12 underneath if there were never leaks.

13 Now, moving on to the three areas
14 that, again, I think support our position that you
15 should not recommend approval to the Pollution Control
16 Board, one is procedural based on your Kendall County
17 Ordinance.

18 There's two facets to 08-15. One is
19 certainly directed to the Hearing Officer. We've
20 directed our motion to dismiss to him, and I'm not
21 going to bore you with those details. But there's a
22 second part of that procedural aspect that has not
23 been complied with by the Applicant that's a fact
24 question; it's not a law question.

1 Section 4.63 and Section 4.83 of the
2 Ordinance clearly provide that the Applicant has to
3 include in their Application a proposed
4 after-operation plan including any changes in
5 topography, all new surface features, and for plans on
6 how the site controlled and engineer features will be
7 comparable with end use.

8 Now, if we just look at the footprint
9 and the Application itself, again, I don't have any
10 quarrel with the design of Mr. Nickodem. What I have
11 a problem with and factually the Applicant has not
12 complied with those two sections of the Kendall County
13 Ordinance, is Mr. Nickodem's testimony that we made a
14 calculated move not to include the borrow areas on the
15 south in this Application.

16 In other words, again, in the 2007
17 application, you folks got roughly 669 acres included.
18 The Applicant makes a calculated move to remove
19 300-something acres from it, but other than the area
20 west of Walley Run Creek next to Sherrill Road -- or,
21 excuse me, Whitewillow Road, they still are affecting
22 the entire site that was subject to the original 2'07
23 application only they haven't included it here.

24 I've got to admit, I shared

1 Mr. Kinnally's concern tonight that we have an offer
2 of proof before an objection is made about a matter
3 that we didn't know what they were going to testify
4 to.

5 But on direct exam, we had five
6 witnesses from the Plaintiff in the last two weeks, or
7 the Applicant, who have said we have no plan on the
8 area south of our footprint.

9 Tonight we hear I have an opinion,
10 from Ms. Underwood, that whatever we do down there
11 won't hydraulically or hydrogeologically impact
12 surrounding owners of property.

13 How can you render that opinion
14 without a plan? If you remember, last Monday I asked
15 Mr. Bognar that question. He said I can't give you an
16 answer. It's not included in the Application. I've
17 got absolutely no filed information to render an
18 opinion.

19 I would love to have had Mr. Weis
20 here tonight because we've sure defended a lot of
21 farmers, Mr. Willis types or Mr. Wallace, landscapers,
22 nursery people who have dug ponds like we're talking
23 here, and unless there were full-blown water studies,
24 engineering plans, site development permits, they had

1 in effect, or so the County thought, and the State's
2 Attorney's office prosecuted them.

3 The Applicant tonight states, well,
4 we know we've got to get a site development permit,
5 and they know it's crucial, they know it is integral.
6 Mr. Nickodem and Mr. Hoekstra testified to that on
7 their initial direct, and of course they thought it
8 was crucial or Mr. Hoekstra would have not testified
9 tonight.

10 But there is no way you can make a
11 finding under Criteria 2 that moving potentially 3.1
12 million cubic yards of dirt from that borrow area to
13 the south is not going to have any impact on public
14 health, safety, or welfare as it relates to the
15 Village of Minooka or to the surrounding owners; and
16 there is no way you can make a finding consistent with
17 Criterion 3 that the Applicant has minimized the
18 impact of this facility on the Village of Minooka or
19 surrounding owners when you're going to remove
20 potentially that amount of material. You just can't
21 do it.

22 And you probably say, well, gee, the
23 Village of Minooka is about three miles to the east,
24 as far as the Village proper, but under its

1 intergovernmental agreement, you heard the Mayor of
2 the Village of Minooka give the testimony or his
3 statement that there's an intergovernmental agreement
4 with the City of Morris that this site falls within
5 their growth and their planning area. So the Village
6 of Minooka will be south of this site, and it's
7 currently east of this site.

8 Now, with respect to Criterion 3,
9 which is the third reason why you should recommend
10 denial of this, we've heard three witnesses. We heard
11 Mr. Duffy as a land planner, we heard Mr. Yocca as a
12 landscape architect and we heard Mr. Poletti whose
13 primary qualifications are as an appraiser but who has
14 a lot of landfill experience.

15 Mr. Duffy submitted and testified to
16 two exhibits that I'd like you to recall or take down
17 in your notes, if you would, Figures 9 and Figure 10,
18 and although I know Mr. Kinnally and I have an
19 inherent disagreement about this because he commented
20 about it, those two exhibits were labeled landscape
21 examples. They are not landscape plans, and your
22 County Ordinance specifically or explicitly says you
23 have to have a landscape plan.

24 Now, I'm not trying to be picayunish

1 and play word games, but a landscape plan to anybody
2 in that profession, particularly the three experts who
3 testified who all are in that business, has a very
4 definite meaning.

5 It means it's a plan that you as a
6 Board or the County environmental attorney or
7 Mr. Labardi as the State's Attorney representative
8 could go out and enforce. It has to have some notes
9 or some pictorial that's enforceable. All it says is
10 it's examples.

11 When we questioned Mr. Duffy on
12 cross-exam as to how did you minimize the impact of
13 this facility on the Village of Minooka or surrounding
14 property owners, he admitted he's never looked at the
15 Village of Minooka plan, he's never talked to anybody
16 from the Village of Minooka. Frankly, it was barely
17 mentioned in his report that Minooka was even in
18 Kendall County.

19 So how did he minimize that impact?
20 He talked about, well, we're doing it by landscaping.
21 Taking him at his word, okay, we're looking at your
22 berms, we're looking at your examples, and the only
23 place you show them is on Whitewillow Road.

24 We don't have a town north of it.

1 We've got a couple of houses, and I applaud their
2 efforts to protect those couple of houses, but we have
3 Ridge Road, which I saw on one of Ms. Underwood's
4 drawings tonight had the Minooka Moraine.

5 Everybody here knows Ridge Road sits
6 up high and looks over the horizon to the west. Those
7 folks are going to see the landfill footprint.

8 There is no landscaping shown on the
9 east boundary of the property at all. There is none
10 on the industrial-type buildings that are shown to be
11 on the east side. There is nothing shown on the south
12 side. There is nothing shown on Sherrill Road. And
13 so there is no minimization of impact to Minooka or
14 those surrounding owners on the south or east.

15 You say, well, gee, we can solve
16 that, we'll make that one of our conditions of
17 recommendation. Can you when that south 300 acres
18 going to Sherrill Road isn't part of the Application?

19 Mr. Kinnally will decide if they have
20 jurisdiction or not, but they haven't included it, so
21 where do you get off in telling them to do something
22 in land that's not included.

23 A second gentleman who testified,
24 Mr. Yocca -- frankly we've used him a lot as a planner

1 and zoning. He's got great environmental credentials.
2 But, again, he says, well, here's some examples of
3 things I could do.

4 There's not one statement in the
5 Applicant's binders that says this is what we're going
6 to do. In fact, if you look at the Duffy report and
7 you look at the Yocca report, they're totally
8 opposite. They don't show the same entrance.

9 And, again, that concerns me for a
10 couple of reasons, because there's nothing binding
11 here on you County Board members from the Applicant
12 saying this is how we'll do it or what we'll do.

13 Mr. Kinnally, again, asked a couple
14 interesting questions of two of the Applicant's
15 witnesses. He asked two of them, have you ever talked
16 about expansion or have you ever discussed it, and I
17 believe they were telling the truth. They said no.

18 But why do we have the entrance on
19 the west side of Walley Run Creek with somebody of the
20 credentials of Dave Yocca as an ardent conversationist
21 where you have the ability or the risk of polluting
22 Walley Run Creek with a bridge and a street going over
23 it if there's no expansion considered?

24 Why do we have two proposed different

1 entrances? Why isn't that entrance east of Walley
2 Run, let's say right in the middle of the site down
3 the vacated Church Road so we don't have to create
4 more impervious surface? It makes us suspicious as
5 the Village of Minooka.

6 In terms of the two 3A criterion,
7 that's the testimony you have, and I submit they
8 couldn't give you an opinion showing how they
9 minimized the impact on anyone, because other than
10 somebody driving by on Willow Run Road -- or
11 Whitewillow Road or the few houses that are to the
12 north, there's absolutely no minimization testified to
13 on the first part of Criterion 3 by those two
14 witnesses.

15 You get to the second part of
16 Criterion 3 and you have Mr. Poletti's testimony.
17 When you look at his CV, he says he's testified in
18 about 20-some landfills or more. He's always
19 testified for an applicant.

20 He has in zoning cases said he's
21 testified in cases about particular land uses, and he
22 freely admitted on cross-exam that he's never found a
23 landfill had any effect on surrounding property owners
24 under Criterion 3, and he's never found in any zoning

1 case he's testified that the use he was testifying
2 about had any impact. You can take that for what it's
3 worth.

4 But the telling part was Mr. Poletti
5 on cross-examination was asked by us on what factors
6 are you basing your opinion that there's no effect on
7 the value of surrounding owners, and his response was,
8 well, the landscaping and the berming.

9 And, again, where was it,
10 Mr. Poletti? Did I miss something in the Application?
11 Is there some berm on the east side? Is there some
12 berm on the south side? And oh, by the way, what
13 about this 300-acre borrow area? Well, I didn't know
14 about that, nobody told me that was involved here.

15 So it's clear the Applicant has not
16 met their burden on 3B on the second part of
17 Criterion 3.

18 So, again, I would ask you to take
19 into account the holes in the Petitioner and
20 Applicant's case. We have not talked about any of the
21 other criterion. We've cross-examined occasionally.

22 But I think the show-stoppers are
23 Criterion 2 and 3 and your own Kendall County
24 Ordinance that the Applicant has clearly and

1 unequivocally said we've made a calculated decision
2 not to include it, not to give you a shot at that, and
3 we're just presuming that the big hole or however big
4 or however deep, isn't going to have any effect on
5 public health, safety, and welfare, and it's not going
6 to affect surrounding property values.

7 Again, thank you very much for your
8 consideration.

9 HEARING OFFICER KINNALLY: Okay. Thank you,
10 Mr. Kramer.

11 You know, I don't want to limit
12 anybody, but if we have six other people that are
13 going to give final arguments, we're going to be
14 eating boiled eggs here at about 3:00 in the morning.

15 Again, you can say a lot of this in
16 your closing written argument which will be, I think,
17 probably remembered more than the -- not saying you're
18 not eloquent and you're not all good lawyers, which
19 you all are, but if we could limit it somehow.

20 Ms. Kramer, do you want to give a
21 closing argument.

22 MS. KRAMER: I'll be very brief.

23 Ladies and Gentlemen of the Kendall
24 County Board, Hearing Officer Kinnally, I would also

1 join in with my colleagues both personally and on
2 behalf of my client in thanking you for your time and
3 attentiveness throughout this proceeding.

4 As each of you have probably heard
5 through the past two proceedings and throughout the
6 course of this proceeding and this evening,
7 Criterion 2 states that the facility located so -- or
8 the facility is located so as to minimize
9 incompatibility with the character of the surrounding
10 area and to minimize the effect on the value of
11 surrounding properties.

12 My client owns approximately 158
13 acres of highly productive farmland located directly
14 southwest along Sherrill Road of the subject site and
15 then owns approximately 81 acres of farmland southeast
16 of the proposed site at the intersections of Brisbin
17 Road and Sherrill Road.

18 In its Application and confirmed
19 through the testimony of Mr. Nickodem, Mr. Duffy,
20 Mr. Yocca, and Mr. Poletti, the Petitioner completely
21 fails to provide any type of landscape buffering,
22 berming, native plantings, or any visual screening to
23 my client's property to the south, to other property
24 owners owning property directly to the south of the

1 subject site, and to any member traveling -- of the
 2 traveling public traveling east along Sherrill Road.
 3 Additionally, the Petitioner contends
 4 that the effect of the impact on surrounding property
 5 values is minimized through the property protection
 6 plan that's been incorporated into the Host Agreement.
 7 And although the Host Agreement is
 8 generally well-written, this Agreement offers no
 9 protection to the property owners if the property is
 10 not sold -- if the property is sold as it does not run
 11 with the land. So a subsequent purchaser is not
 12 protected by this particular property protection plan.
 13 Furthermore, any gifts to children,
 14 grandchildren, or other family members are not
 15 included as a protected class within this property
 16 protection plan.
 17 No protection whatsoever is offered
 18 to a property owner within a one-mile radius of the
 19 subject site if the Applicant or owner of the subject
 20 site voluntarily ceases operation, has its licensed
 21 revoked, or if the property owner within a one-mile
 22 radius never receives a fair market offer to sell
 23 their property.
 24 Last but not least, in order to

1 qualify, a protected landowner must list their
 2 property with a licensed realtor in the Multiple
 3 Listing Service.
 4 As lifelong residents of Kendall
 5 County, a traditionally agricultural community, you
 6 all probably know that generally highly productive
 7 farmland is not listed in the MLS but oftentimes
 8 auctioned off at farm auctions or placed for sale with
 9 agricultural real estate brokers.
 10 As a result of the Applicant's
 11 complete and utter failure to minimize the impact of
 12 this site through landscaping buffers along the
 13 southeast and south -- or the entire southern border,
 14 along with the deficiencies contained within the
 15 property protection plan, on behalf of my client, I
 16 would respectfully request the Board deny the
 17 Application based on Criterion 3.
 18 HEARING OFFICER KINNALLY: Okay. Thank you,
 19 Ms. Kramer.
 20 Mr. Mueller?
 21 MR. MUELLER: Thank you. Good evening, Ladies
 22 and Gentlemen. Like my colleagues, I too want to
 23 thank you for your attention, your excellent
 24 questions, and your sheer effort in going through

1 this.
 2 If it sounds too good to be true, it
 3 probably is. And I would urge you in making up your
 4 decision here to be suspicious of anyone who purports
 5 to have an answer for everything. And this Applicant,
 6 especially based on the rebuttal testimony tonight,
 7 has an answer for everything. That ought to cause you
 8 some concern.
 9 Now, with all respect to Mr. Kramer,
 10 you're not making a recommendation to the Pollution
 11 Control Board. You are deciding this case and whether
 12 or not the statutory criteria in 39.2 have been met.
 13 And that doesn't mean that you're just making a
 14 recommendation. In fact, I don't think a local denial
 15 has been reversed by the Pollution Control Board since
 16 the early 1990s.
 17 Your role here is to decide the
 18 unique criteria in the Statute, and you get to define
 19 that role in terms of what does that mean and what
 20 weight do we want to give to it. That's your call to
 21 make here, and it's your unique call.
 22 Now, there's been throughout these
 23 hearings the suggestion that, well, if we make a
 24 mistake or if there's something that's missing or off,

1 the EPA and the Pollution Control Board can fix it in
 2 the end.
 3 First of all, you as a County Board
 4 are empowered to consider all of the public health,
 5 safety, and welfare ramifications surrounding the
 6 design, location, and operation of the proposed
 7 facility, and that's a quote directly from an
 8 Appellate Court case.
 9 Similarly, you cannot defer your
 10 responsibility or any uncertainty, more typically, to
 11 the Pollution Control Board or the EPA. I know that
 12 came up in connection with the GIA where someone said,
 13 well, it will all get worked out in the end, but the
 14 truth is the Pollution Control Board and the courts
 15 have said you cannot defer to the EPA; and, in fact,
 16 in the Town & Country 1 case, a siting condition that
 17 was -- that things had to be subject to EPA approval
 18 was found to be insufficient to rescue an application.
 19 Now, the criterion that I'm most
 20 concerned about is No. 2, and that has three elements
 21 in it. The facility has to be designed, located, and
 22 proposed to be operated so as to protect the public
 23 health, safety, and welfare.
 24 Now, I'm not concerned with

1 operations, but I'm concerned both with design and
2 location, and that makes me different than
3 Mr. Nickodem who is concerned only with design and who
4 basically told you that the design in 2007 was as good
5 as it gets, the changes in 2008 were not technically
6 necessary, and that the facility then was completely
7 protective and the facility now is completely
8 protective.

9 With an attitude like that, he's not
10 in step with the law or with the mandate of the
11 Statute.

12 In order for you to approve this
13 Application, you've got to find that it's both
14 designed to protect public health and located as to
15 protect public health. In fact, the courts have
16 frequently called this a location suitability
17 analysis. I'm going to submit to you that the
18 location is not suitable.

19 Mr. Nickodem opined that it didn't
20 really matter because even though the engineered
21 barriers would fail within 200 years, and that's the
22 time span he put on it, including that double
23 composite liner system, he said all of the waste, all
24 of it, will decompose within 50 years.

1 Now, Ladies and Gentlemen, there is
2 no scientific support for that conclusion, and it is,
3 I submit to you, bizarre and unheard of.

4 But Mr. Nickodem in the Application
5 said something else that completely undermines part of
6 what he's talking about and that undermines a lot of
7 the analysis that's been done. On Page 8.5 -- or 8-5
8 of this Application in the last paragraph at the
9 bottom of the page it says, "The additional 70 years
10 after the post-closure care period when leachate
11 removal is not performed, the average annual leachate
12 head buildup on the double composite liner system is
13 four inches." I asked him about that, and in the
14 transcript it will reflect that he said, yes, that's a
15 true statement.

16 Well, if you have an average annual
17 buildup of four inches, at the end of that 70 years,
18 you've got 21 feet of leachate in that facility. And
19 mind you, it's an earthen dam that they're building
20 here.

21 And so for that reason I'm going to
22 submit to you that all of this testimony by him that
23 the leachate collection system is the most important
24 part of the design goes out the window when his own

1 Application proposes to turn the pumps off and let the
2 leachate build up at the rate of four inches a year at
3 the end of the 30-year post-closure care period.

4 Mr. Nickodem was inconsistent and
5 decidedly not conservative on a number of issues, and
6 some of those -- I mean, the one that was obvious is
7 the day after he testified that they didn't size it
8 for bizarre, outlandish storms and rain events such as
9 the one in 1996, we had one similar to that, again, a
10 storm that exceeded the stormwater design systems.

11 Moving on to Ms. Underwood, there
12 was a lot of testimony early in this hearing about
13 the groundwater impact assessment and that she used
14 unrealistic parameters, and that if you used realistic
15 and legitimate parameters, the GIA failed.

16 Mr. Kinnally asked Mr. Norris near
17 the end of his testimony, he said, where in the
18 Ordinance does it say that the GIA ought to be
19 important to the County? And Mr. Norris said, I
20 didn't read the Ordinance. And Mr. Kinnally took
21 exception to that. He said, you mean to tell us you
22 didn't read the Ordinance? He said, no, I didn't.

23 I'm going to submit to you that the
24 questioning missed the point. Mr. Norris wasn't here

1 to tell you whether the Ordinance had been complied
2 with; Mr. Norris was here to tell you whether he
3 thought we had a solid hydrogeologic and geologic
4 investigation and whether the conclusions drawn about
5 the geology made sense and were supported by the
6 evidence.

7 And as to the GIA, the point is, no,
8 they didn't have to do one; no, your Ordinance doesn't
9 require it; but if they're going to offer it up, it
10 says volumes, Ladies and Gentlemen, if they don't do
11 it correctly and if they offer up something that
12 fails. And then you have a prospect of a dire
13 prediction. They made the prediction, and if we
14 substitute realistic parameters, we have groundwater
15 impact.

16 No, they didn't have to do it, but
17 the fact that they couldn't do it right when they
18 chose to says volumes about how much faith to give to
19 this Applicant.

20 The other big subject, and it was a
21 big subject tonight, was the tritium. And several
22 Board Members asked about the tritium in the deep
23 well. You know, I'm more concerned about the tritium
24 in the shallow wells, because those are also in the

1 aquifer.
2 And as you'll recall, Ms. Underwood
3 said the entire site is underlain by a minimum of five
4 feet of this stuff so impermeable that when I walked
5 her through the math, it takes 500 years for something
6 to get through that minimum of five feet.

7 Well, if it takes 500 years to get
8 through, how did the tritium get down there, because
9 the levels of the seven-plus tritium units that we see
10 in the upper part of the aquifer represent water
11 that's younger than 1972. That's the last 35, 36
12 years. So it had to get there somewhere.

13 And then she says, well, you know,
14 maybe some of that comes in off-site. That's
15 thousands of feet away. Ms. Underwood told you the
16 horizontal flow in that aquifer is 13 feet per year.
17 If you multiply that times the 36 years, you up it
18 about 500 feet. That doesn't get you to that purple
19 area on her exhibit.

20 And for those reasons, the tritium
21 completely, completely undermines her entire
22 conceptual model of an upper confining unit because
23 the water in the upper part of the aquifer is young,
24 and the water in the lower part, in some places, is at

1 least intermediate, meaning less than 60 years old.
2 Now, Ms. Underwood then said, well,
3 I've got to assume contamination. And that's part of
4 the we-have-an-answer-for-everything attitude that
5 they have here. We have to assume contamination
6 because it's inconsistent with all the other data that
7 we have.

8 No, it's not. It's inconsistent with
9 all the other data that she wants to rely upon to
10 support her conclusions, but it is not inconsistent
11 with the fact that there is fractures which provide
12 preferred pathways for flow, rapid flow, through both
13 the soil layers and the bedrock aquifer; it's not
14 inconsistent with the road salt and chloride that's
15 down there; it's not inconsistent with the fact that
16 the water levels in deep and shallow wells moved up
17 and down in tandem as if they were connected; it's not
18 inconsistent with the map that showed radial flow
19 indicative of a recharge area.

20 There's plenty of data that's
21 completely consistent with the tritium data indicating
22 that we have rapid downward movement of water in that
23 aquifer.

24 And then Mr. Blazer says, well, yeah,

1 but there's an uncertainty, you know, maybe it's not
2 statistically significant, a 1.51. If you look at
3 that table, the next column over is the uncertainty
4 factor, and the uncertainty factor for that 1.51
5 tritium unit in well 6D was .27, which means even
6 with the uncertainty factor, we're still over the
7 level of 1. And, in fact, since that uncertainty
8 factor can go both ways, 2D might also have tritium in
9 the deep unit because it was measured at .87 with the
10 same .27 uncertainty factor.

11 So what evidence is there for the
12 confining layer underneath the site? The laboratory
13 permeability tests. Those are the tests on nine
14 samples for this entire, entire proposal that are
15 roughly the size of this coffee cup. That's the size
16 of a soil laboratory sample. As Mr. Norris said, a
17 couple hockey pucks.

18 She's asking you to risk everything
19 on those nine samples. And what we know is they
20 represent intact materials, they don't represent
21 fracture flow, and the testing methodology itself says
22 the connection between that laboratory result and what
23 goes on in the earth has not been established. And on
24 top of that, she pressurizes them to a depth of 80

1 feet to reduce the pore spaces.

2 We have, Mr. Kramer pointed out, at
3 least one slug test that was taken exclusively in the
4 clay and showed a very permeable unit. And I'm going
5 to submit to you, and this is just very quickly, water
6 table well 211 says that it was screened partially in
7 the upper aquifer, but it wasn't if you compare the
8 soil boring to the as-builts on the test. So I submit
9 you've got 3. You've got 6, you've got 211, and
10 you've got 53 that all have high permeabilities of
11 soil materials not impacted by the uppermost aquifer.
12 And she could have tested more to demonstrate whether
13 or not there was an impact.

14 Mr. Kramer has covered the issue with
15 the borrow area, and I can only add one thing: I
16 heard Mr. Nickodem say we're taking all of the soil
17 from there so we don't have to put any traffic on the
18 roads, and it's a perfect setup.

19 Well, because of all the concerns
20 that this Applicant heard about the impact, the size
21 of that borrow area and all of that, they said, well,
22 you know, maybe we'll bring some in from other
23 sources. Mr. Hoekstra's testimony tonight, again, was
24 we have an answer for everything, and his testimony

1 contradicted the testimony of Mr. Nickodem. It's a
 2 lot of soil, and it would be, if you brought it all
 3 in, probably 100 truck trips per day.
 4 So in closing, I just want to say
 5 that don't base this on the volume of data or the
 6 number of hours people spent on it, because if you
 7 find the truth quickly, you don't need to spend
 8 hundreds and hundreds of hours trying to figure out a
 9 way around it. And for all those reasons, I would ask
 10 that you deny this Application.

11 Thank you very much.

12 HEARING OFFICER KINNALLY: Okay. Mr. Belt?

13 MR. BELT: Thank you, Mr. Kinnally.

14 I too would like to thank the Board
 15 for your patience and attention during these
 16 proceedings, and on behalf of the City of Morris, we
 17 appreciate the opportunity to participate.

18 When I gave my opening remarks back
 19 at the beginning of this proceeding, I had suggested
 20 that we were going to put on evidence that would
 21 indicate that to site a landfill directly beneath an
 22 instrument approach surface was both a significant and
 23 an unreasonable risk, and I believe that through the
 24 testimony of Jeff Vogen, we've shown that.

1 I think that the Applicant, in
 2 addressing this issue and other issues, have engaged
 3 in a series of oversights.

4 What are the consequences of siting a
 5 landfill directly beneath an instrument approach
 6 surface as was testified to by Mr. Vogen? I would
 7 submit that it's a recipe for disaster.

8 It's been established during these
 9 proceedings that landfills attract birds. It's also
 10 been established that areas of open water attract
 11 birds. It's been established through the Applicant's
 12 witnesses that their landscape plans actually are
 13 intended to attract birds as evidenced by the
 14 suggested benefit end-use of bird watching. It was
 15 also stipulated during the course of this proceeding
 16 that birds -- mid-air bird strikes cause damage to
 17 aircraft, the pilots, and their passengers.

18 When you combine these factors with
 19 the fact that we have a bird control plan which is
 20 grossly inadequate to address the concerns of the City
 21 of Morris as it relates to the operations of the
 22 Morris Airport and combine that with the fact that
 23 there's been no professional consultation by the
 24 Applicant with either the FAA or the USDA, we have a

1 situation here that I would submit to you borders on
 2 being reckless.

3 The -- I mentioned that there were a
 4 series of oversights, and I think the Applicant
 5 started with its first oversight by suggesting to you
 6 that there was a distance of 3.3 miles from the
 7 airport to this landfill facility. Unfortunately, the
 8 Applicant relied on an outdated map which was actually
 9 depicted on two different exhibits which took
 10 measurements from a wrong point on a nonexistent
 11 runway to the Morris Airport.

12 I realize Mr. Hoekstra was out at --
 13 to the airport to meet with Mr. Vogen, so I'm not
 14 quite sure how we came up with a measurement from a
 15 nonexistent runway, but I think Mr. Vogen did an
 16 excellent job of straightening that out and pointed
 17 out that the actual dimension is 2.3 miles, a
 18 difference of over 5,000 feet, obviously, when you
 19 correctly take into consideration the measurement from
 20 the airport operations area to the landfill footprint
 21 itself.

22 I would also remind you that we have
 23 shown, and I think it's uncontested, that we basically
 24 have a difference of 500 feet of elevation, assuming

1 that this landfill were to be approved, for aircraft
 2 approaching the Morris Airport from the Joliet VOR
 3 instrument approach as they pass over this landfill.
 4 Mr. Vogen pointed out through his investigation that
 5 it's not a temporary passing over the facility, it --
 6 an aircraft would pass approximately three-quarters of
 7 a mile over the landfill, and he also pointed out that
 8 aircraft are on a declining scale or declining
 9 altitude as they continue on approach to the Morris
 10 Airport.

11 That's significant because it is
 12 uncontroverted that approximately 90 percent of the
 13 bird strikes occur below 2,000 feet. And for a pilot
 14 flying at or about 696 feet, was the highest altitude
 15 on a declining basis to the airport, I would submit
 16 that that is an extremely low altitude for a pilot to
 17 recover in the event of a mid-air bird strike.

18 The other oversight is related to the
 19 bird control plan. You've heard nothing where the
 20 Applicant has submitted that they've consulted with a
 21 wildlife biologist. There's been no site-specific
 22 study specifically related to the Morris Airport that
 23 they've told you about that provides any information
 24 in terms of bird populations, migrating birds, gulls,

1 any types of -- any types of bird whatsoever; no
 2 specific studies as to Kendall County or Grundy
 3 County; again, no consultation with the FAA or USDA,
 4 notwithstanding Mr. Nickodem's testimony, which I
 5 found compelling that he had testified -- I'm sorry,
 6 he had consulted with the FAA in the past, he had
 7 found those consultations helpful, he had incorporated
 8 those recommendations into prior designs, but for some
 9 reason that didn't happen here. And I would submit
 10 that that's information that I think the Board would
 11 find helpful in determining both Criterion 2,
 12 Criterion 3, and Criterion 5 of the -- this
 13 Application that is pending before you.

14 In fact, if you have a moment to look
 15 at the bird control plan, I would submit that it is a
 16 plain vanilla application where not only is the City
 17 of Morris not mentioned but the Morris Airport itself
 18 is not mentioned, either.

19 Another oversight which has already
 20 been touched on and I'm not going to spend a lot of
 21 time on it, but it's this undefined borrow area that
 22 came up in the Applicant's case in chief and then came
 23 up tonight, I guess, with a little different theory
 24 than what we've been hearing now for the last

1 three-plus weeks.

2 The borrow area -- I think it was
 3 confirmed through our witness's testimony that large
 4 areas of water attract birds. You also heard
 5 testimony from Mr. Vogen's personal observations of
 6 Waste Management's Prairie View facility, that there
 7 were three separate flocks of gulls flying around that
 8 would fly up to 1,000 feet and back down to the
 9 facility.

10 Large -- I would submit that a large
 11 open area or large open areas of water is only going
 12 to aggravate and be a further attractant to birds
 13 locating at this facility.

14 The landscape plan. Mr. Yocca was
 15 very open with his testimony as was Mr. Duffy --
 16 HEARING OFFICER KINNALLY: I don't think we
 17 need to hear about that anymore. We've heard enough
 18 about the landscape plan, Mr. Belt. Move on to
 19 another area, please.

20 MR. BELT: Let's talk about Settler's Hill. I
 21 found that to be an interesting topic that was not
 22 addressed in the Application nor -- well, wasn't
 23 revealed until there was testimony from Mr. Hoekstra.
 24 The first time that came up was through his direct

1 testimony. And according to Mr. Hoekstra, I
 2 understand he has extensive experience with Settler's
 3 Hill Landfill and that he was unaware of any bird
 4 strikes associated with the DuPage Airport. Although
 5 there was no comparative analysis that was done from
 6 my reading of the transcript, he was unfamiliar with
 7 anything related to the Morris Airport.

8 I would ask that you, in your
 9 deliberations, review Morris Exhibit No. 29. I
 10 believe that's -- I think that's compelling evidence
 11 in terms of the -- which is the FAA National Wildlife
 12 Strike Database which, again, is compelling in terms
 13 of the bird strikes in relation to landfills that are
 14 located in close proximity to airports.

15 As Mr. Vogen testified, out of the 29
 16 bird strikes that are identified, 26 of those occurred
 17 on the north-south runway, which I would submit is in
 18 close proximity to the Settler's Hill Landfill.

19 You heard Mr. Vogen offer a number
 20 of opinions in terms of compatibility and that this
 21 facility, if approved, would have a detrimental impact
 22 on both the VOR instrument approach and the VFR
 23 departure path. Mr. Vogen also indicated that this
 24 facility, if approved, would have a negative impact on

1 airport operations and that the plan of operations are
 2 not designed to minimize the area from operational
 3 accidents of bird strikes. I don't believe you heard
 4 any testimony to the contrary as it relates to the
 5 Morris Airport operations.

6 In conclusion, I would ask that you
 7 hold the Applicant to its burden of proving all of the
 8 criterion associated with this Application, but most
 9 specifically, as it relates to the Morris Airport,
 10 Criterion 2 related to the health, safety, and welfare
 11 of the public; Criterion 3 as it relates to the
 12 compatibility issue; and Criterion 4 as it relates to
 13 other operational accidents.

14 In conclusion, I would like to thank
 15 you again for your time and attention, and I would
 16 again request that you deny this petition. Thank you
 17 very much.

18 HEARING OFFICER KINNALLY: Thank you, Mr. Belt.
 19 Mr. Porter?

20 MR. PORTER: Thank you. Rick Porter on behalf
 21 of Grundy County. I will keep my comments brief and
 22 edited in light of the late hour.

23 First, I would like to -- I've been
 24 directed to let you know that the State's Attorney

1 from Grundy County, Sheldon Sobol, would like to
2 extend our thanks to the members of the Board for
3 dedicating your time. We know it's been extensive to
4 review this decision which could affect the lives of
5 both the citizens of your County and Grundy County.

6 As a close neighbor to this proposed
7 Application and a recipient of the impacts from the
8 Application, Grundy County wanted to be certain to
9 have an independent review of the proposal to
10 determine if, at a minimum, the health, safety, and
11 welfare had been protected.

12 In order to accomplish that, we hired
13 Patrick Engineering to conduct that independent
14 review, and they have unequivocally told us that
15 Criterion 2 has not been met and that the health,
16 safety, and welfare is not protected by this proposed
17 Application.

18 In addition to Criterion 2, which
19 I'll discuss in further depth in a few moments, we are
20 also concerned that Criterion 3, Criterion 6, and
21 Criterion 8 have not been met.

22 In particular, as to Criterion 6, a
23 couple brief comments. Mayor Kopczick has testified
24 that there is a particular concern that this traffic

1 plan calls for the trucks to exit the interstate only
2 at 80 at 47 -- off of Interstate 80 at 47. There's no
3 allowance for any dispersion of the truck traffic, and
4 without that allowance, the impacts on 47 are further
5 exacerbated for an already busy roadway.

6 We also heard tonight that there are
7 apparently going to be numerous truckloads for
8 off-site material that is going to be brought to the
9 facility that have not been accurately identified in
10 the traffic plan, and, therefore, Criterion 6 has
11 clearly not been met because they haven't shown a
12 minimization of the impacts.

13 As to -- we're also very concerned
14 about Criterion 3, and in particular, I'd like to
15 discuss the property value impact study that was
16 discussed by Mr. Poletti.

17 You heard from Mr. Poletti that he
18 had been retained over 22 times in the past 30 years,
19 and on every occasion he has come to a conclusion that
20 the impacts to property values have been minimized.
21 And you'll find, if you take a look at his reports,
22 that he actually finds that there's no impact to
23 property values, and he's always come to that
24 conclusion.

1 Mr. Poletti cherry-picks his data by
2 selecting a target area which is not uniformly
3 equidistant from the proposed site. He also
4 cherry-picks -- once he picks a control area, he then
5 goes through and cherry-picks the data within the
6 control area. He eliminates certain data. For
7 example, he throws out trilevels or bilevels based on
8 the conclusion that he wants to reach.

9 In this study, he threw out homes
10 constructed before 1960 despite the fact that the
11 homes in the area are, indeed, constructed before
12 1960. If you'll take a look, in his Livingston County
13 study, he only threw out homes that were
14 constructed -- he didn't throw out homes that were
15 constructed in 1950. So within his own report, he
16 uses inconsistent parameters for coming to his
17 conclusions.

18 You'll also note that in his Clinton
19 study, he removed homes of larger than five acres from
20 his residential analysis, but in his Livingston study,
21 he removed homes of over 10 acres. In this case, he
22 excluded any home that had an annual increase greater
23 than 10 percent in one year but then removed homes
24 with decreases of five percent.

1 You'll note in the Livingston County
2 study for some reason he removed any homes sold in the
3 year 1997 but used those in this study. He
4 cherry-picks his data in order to come to a
5 conclusion.

6 We believe it's obvious that his
7 testimony is incredible and that he comes into these
8 cases with a clear predetermination that there is no
9 impact to property values. Therefore, it's easy for
10 him to come to a conclusion that that impact has been
11 minimized.

12 As to Criterion 8, we would like to
13 note that your County Solid Waste Management Plan
14 requires that a site must be proposed to be developed
15 in an area that protects the health, safety, and
16 environment. For the reasons I'm going to discuss
17 regarding Criterion 2, that clearly has not been met,
18 and, therefore, you don't have consistency with your
19 County Solid Waste Management Plan.

20 Furthermore, your plan requires
21 consistency with your County Siting Ordinance, and as
22 Mr. Kinnally has pointed out, Ms. Underwood did not
23 delineate and characterize the nature and extent of
24 the regional watershed basin or whether or not there

1 are one, two, or more aquifers in the watershed.
2 Therefore, your local Ordinance has not been followed
3 and you don't have consistency with your Solid Waste
4 Management Plan.

5 All right. Moving on to Criterion 2,
6 and I will be brief. We hired Patrick Engineering.
7 They have alerted us that they are very concerned that
8 this proposed location has poor geology and
9 hydrogeology.

10 Recall that this is the exact same
11 location that was proposed in the first application,
12 and the same experts have testified, Ms. Underwood and
13 Mr. Nickodem. At the prior application it was
14 determined that it had to be withdrawn apparently
15 because of concerns with groundwater. As a matter of
16 fact, the first time around, the Hearing Officer and
17 Kendall County consultants recognized that this site
18 was an extremely sensitive hydrogeologic area.
19 Nothing substantially has changed here as to this
20 proposed location. It is still a bad site.

21 Mr. VanHook informed you that over
22 his career he has worked directly for the EPA, they've
23 been his client, and he generally does not work for
24 applicants. He simply has no ax to grind. He isn't a

1 competitor. He is simply an independent
2 hydrogeologist hired to tell us whether or not he
3 believed there was an impact.

4 He informed you that we never told
5 him we had a preferred outcome. We simply gave him
6 the material, he reviewed it and came to a conclusion.

7 Mr. VanHook told you that there were
8 angle borings which showed fractures in those borings.
9 There is substantial evidence of vertical flow here.
10 There was also tritium and chloride found in both the
11 upper and lower portions of the aquifer in the shallow
12 and deep wells.

13 We've learned that tritium is a
14 substance which does not occur naturally in the ground
15 and, rather, it is either the result of nuclear
16 testing or it comes from rain. Therefore, it had to
17 be at the ground surface at a time period that would
18 make it impossible for there not to be vertical flow,
19 and that's because the recharge area here is a
20 substantial distance from the area where the tritium
21 was found.

22 And as Mr. Mueller has pointed out,
23 today we hear of a local recharge area, and yet that
24 is still of a distance that makes it impossible for

1 the amount of tritium to be in the upper aquifer that
2 we have seen.

3 Mr. VanHook also showed you Grundy
4 County Exhibit No. 2, and that was the key to the Berg
5 report. And that references the potential for aquifer
6 contamination and the areas that are best and worst
7 when it comes to potential for aquifer contamination.
8 Particularly, any area that has permeable bedrock at
9 or within 20 feet is classified as A-1, the worst
10 possible area when we're talking about potential
11 aquifer contamination.

12 That's exactly what you have at this
13 site. They've never denied that you have permeable
14 bedrock at or within 20 feet of the land surface. As
15 a matter of fact, we even saw a photo today of a pond
16 developed in the very area that was clearly within 20
17 feet of the land surface that apparently tapped into
18 the aquifer merely by digging down a shallow area.
19 There is no doubt that under the Berg test this is the
20 absolute worst location that you can pick.

21 Mr. VanHook also showed you using the
22 same map, the Berg map, that you have ample locations
23 in Kendall County that would be more appropriate for a
24 landfill. Now, you have to do site-specific analysis

1 once you pick a location, we understand that, but
2 clearly this map identifies that there are more
3 appropriate areas.

4 As further evidence that the
5 Applicant has been extremely aggressive rather than
6 conservative in its analysis here, it attempts to
7 convince you that the site is appropriate by using and
8 recharacterizing two-year-old soil borings which
9 showed fractures and then looking at them again and
10 suddenly they don't show fractures.

11 We also know that the Applicant
12 included a groundwater model, and in that model, the
13 Applicant did not use their usual input values;
14 instead created new values in order to show the model
15 passed.

16 Mr. VanHook explained that the model
17 was used contained diffusion values for the HDPE liner
18 and the geocomposite layer, the GCL, with absolutely
19 no explanation for their basis, and they never
20 provided one. So Patrick Engineering looked at the
21 prior Siting Applications at Laraway and Kankakee, as
22 well as did some independent research regarding a GCL
23 layer, and used normal figures and the model didn't
24 pass.

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1 Unfortunately, that got somewhat
2 misconstrued as some suggestion we were making that
3 they had to show a passing model here. No. They
4 presented a model, and when you input the normal
5 parameters, the parameters they usually use, it
6 doesn't pass.

7 So why? Why did they use unusual
8 parameters? It's because this is a site with vertical
9 downward flow. This is essentially the same type of
10 site that Waste Management itself has opposed in
11 Kankakee and -- because it's inappropriate for a
12 landfill. In Kankakee, they at least had arguably an
13 inward gradient across the site which doesn't exist
14 here. So, again, this is not an appropriate site.

15 Mr. VanHook also pointed out that
16 Waste Management has defined the lower formation of
17 the Galena aquifer as a confining unit, but in Patrick
18 Engineering's opinion, there is simply not near enough
19 evidence to ever come to that conclusion.

20 Waste Management primarily based
21 its conclusion upon the recharacterizations of the
22 boring logs, but if you actually consider the angle
23 borings which showed fractures and the tritium and
24 chloride found in the aquifers, it's abundantly clear

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1 that there is vertical flow here. We all know it.
2 Furthermore -- and this hasn't been
3 discussed tonight -- there is the existence of
4 chloride in the upper shallow wells, and we heard
5 testimony that hasn't been refuted that that is
6 evidence most likely being caused from salt from
7 roadways. So, again, you've got -- and that's
8 supposedly below a confining unit. So, again, you're
9 having communication of the groundwater with an upper
10 aquifer in a short amount of time.

11 This experimental double liner system
12 is designed to provide capacity and revenue for only
13 14 years, but the citizens of Kendall and Grundy
14 County will have to live with its impacts forever. If
15 Kendall County wants a landfill, we respectfully
16 suggest that a more appropriate, safer site should be
17 selected. Thank you.

18 HEARING OFFICER KINNALLY: Okay. Mr. Lyle?
19 MR. LYLE: Thank you, Mr. Kinnally.

20 And, again, to the Ladies and
21 Gentlemen of the County Board, thank you for all your
22 time.

23 It seems like I've gotten to know you
24 rather well over the past two years. Every six months

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1 we get together and go to a landfill hearing. I would
2 like to have not had that opportunity to schedule
3 something else on my calendar for next spring. So if
4 we can get that accomplished, I'd be very grateful.

5 Most of the things that I had planned
6 to talk about this evening have previously been
7 covered, so I'm not going to belabor the matter other
8 than to point out the things that I have in my notes
9 that I particularly want to bring to your attention
10 that may not have already been covered rather
11 completely by most of the previous speakers.

12 Particularly as to Criteria 3, I
13 think the one thing that I -- that wasn't particularly
14 mentioned was that the screening obviously is a -- is
15 incomplete, but also point out that the screening was
16 not -- there was no screening provided for any of the
17 gas conversion to energy equipment or buildings on the
18 east side -- I guess that's presumptively where they
19 would be -- and that was something that was required
20 by the Ordinance but was not included in that
21 particular part of the Application.

22 Additionally, the borrow area to the
23 south which hasn't been included will obviously create
24 a big problem for those people who live directly south

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1 of the proposed landfill. Obviously we're going to
2 have heavy equipment, the noise, the dust, the change
3 of character, the property, all those things that go
4 with something that is out of your control as a County
5 Board because it wasn't included within the
6 application.

7 I think it's been pointed out at this
8 hearing that all sites have beneath them some form --
9 some form of aquifer. It maybe shallow, it may be
10 deep, but somewhere beneath the site, any site,
11 there's going to be a natural -- an aquifer, and the
12 difference being that in this case the natural
13 aquifer -- or the aquifer is not covered by the
14 natural material that is normally provided for in
15 other areas, particularly as Mr. Porter was pointing
16 out, the -- my exhibit, Page 69, Figure 60 --
17 Figure 32 of the Surface Water and Groundwater
18 Resources of Kendall County, which is in Lyle
19 Enterprises Exhibit No. 5, points out that there are
20 particularly two -- a large section of the County that
21 has 50 foot of largely impermeable clay, and there is
22 another cone-shaped area to the northeast of this site
23 which has a relatively impermeable bedrock within 20
24 feet of the surface. Those are areas which I believe

1 if this Applicant is seeking to site a landfill, that
 2 is where they should be looking.
 3 I believe the Applicant -- just a
 4 moment while I...
 5 Finally, on behalf of Lyle
 6 Enterprises being one of the landowners in close
 7 proximity to the site and all of those who will be
 8 negatively impacted now and for many years to come, I
 9 request that you find through your collective wisdom
 10 that this pristine piece of Kendall County property
 11 and the underlying aquifer beneath it be spared from
 12 the landfillers -- the landfillers of the world.
 13 Thank you.
 14 HEARING OFFICER KINNALLY: Okay. Thank you,
 15 Mr. Lyle.
 16 Mr. Blazer, do you have anything to
 17 say?
 18 MR. BLAZER: Mr. Kinnally, in the last hour and
 19 a half, I've developed a new appreciation for the
 20 phrase "less is more." I'll reserve my comments for a
 21 written submittal. Thank you.
 22 HEARING OFFICER KINNALLY: Okay. Thank you.
 23 Did you want to make any further
 24 statement?

1 MR. MORAN: Very briefly, Mr. Hearing Officer.
 2 HEARING OFFICER KINNALLY: Okay. Very briefly.
 3 MR. MORAN: Thank you.
 4 Members of the County Board, let me
 5 leave you with this: Speculation is not evidence.
 6 Doubt is not proof.
 7 The information presented and the
 8 evidence presented in this matter on a number of
 9 various issues is comprehensive, it's extensive, it's
 10 complicated, it's sophisticated, and it's difficult to
 11 interpret. But in looking at this evidence, I would
 12 ask that you consider the totality of the evidence as
 13 it's presented, the credibility of that evidence, and
 14 the experience to which it refers.
 15 And specifically as it relates to the
 16 discussion that we've had tonight, we've had the
 17 preceding nights with respect to the unconsolidated
 18 materials in that overburden, we've heard numerous
 19 pieces of data and evidence that support the notion
 20 that that unit is a confining layer, and to look and
 21 determine that certain piezometers were not put solely
 22 in that overburden as somehow proof that that unit is
 23 not a confining unit would be error and would be
 24 inaccurate.

1 And similarly with many other
 2 assertions that have been made by these respondents,
 3 by the witnesses, I ask that you look carefully at all
 4 the evidence that's presented, to look at that
 5 evidence, and in making a conclusion and a judgment,
 6 don't ignore the numerous pieces of evidence that
 7 support the evidence and the testimony of these
 8 witnesses, particularly as it relates to the geology
 9 and the hydrogeology of this unit and the design of
 10 this facility and ask yourself, has there been any
 11 evidence presented that would prove in any way that
 12 this design is somehow flawed or that these geologic
 13 and hydrogeologic units aren't what was demonstrated
 14 to be the case by the wealth of evidence. Thank you.
 15 HEARING OFFICER KINNALLY: Okay. Anybody else
 16 want to say anything?
 17 MR. MILLIRON: Can I have you enter this into
 18 the record?
 19 HEARING OFFICER KINNALLY: You want to what?
 20 What do you want to do?
 21 MR. MILLIRON: I had a speech, but I'm not
 22 going to take people's time with this. I will give it
 23 to you, and I would like it entered into the record so
 24 we can all go home.

1 HEARING OFFICER KINNALLY: Okay. That's fine.
 2 Do you want to stamp that.
 3 All right. I get the last say
 4 because it's my hearing.
 5 First of all, I want to thank
 6 everyone who came. I take these things very
 7 seriously, and for all the criticism about the
 8 process, I think it's a good process myself. It's a
 9 reason why I like to be a hearing officer, because we
 10 try to give everybody a chance to say what it is they
 11 want to say, including the Applicant and all the
 12 participants.
 13 So everyone who came, whether you
 14 agree, disagree, agree with me or whatever, I want to
 15 thank you for coming and giving your information
 16 because this is a big decision, as I said the last two
 17 times we did this, that the County Board takes very
 18 seriously. And I've worked with them and Eric Weis
 19 and Mr. Blazer on the last three of these, and they do
 20 take it very seriously. And I think the best way that
 21 I can say that is because you see that they're all
 22 here just about every night.
 23 John Church couldn't be here -- he
 24 would have been here -- because he's sick. I know

1 he's listening to the tapes and looked on our realtime
2 and all that.

3 So you've got people that are very
4 committed to this process, and I thank them for that,
5 and I think you should be thankful for that, as well.

6 So with all that said, I appreciate
7 you all coming. I know we've been at this for quite
8 some time.

9 And as I said, if you want to make a
10 written finding -- or written comment or written
11 memorandum, you can do that within 30 days. You
12 should file it by November 1st. After that, the
13 County Board will make a decision. They have a time
14 frame within which to do that, and they will make that
15 time frame. And from then, after that decision is
16 made, then their job is done.

17 So, again, thanks for coming, and
18 thank you to the Clerk as well as my Court Reporters
19 who have been here every night and working diligently,
20 and adios.

21 * * * * *

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23
24

1 STATE OF ILLINOIS)
) SS.

2 COUNTY OF DU PAGE)

3 I, Janet L. Galasso, CSR. No. 84-002176, and
4 Kathleen M. Grove, CSR No. 84-002197, do hereby
5 certify that we reported in shorthand the proceedings
6 had at the hearing of the above-entitled cause and
7 that the foregoing Report of Proceedings, Pages 638
8 through 523, inclusive, is a true, correct, and
9 complete transcript of my shorthand notes taken at the
10 time and place aforesaid.

11 We further certify that we are not counsel for
12 nor in any way related to any of the parties to this
13 suit, nor are we in any way, directly or indirectly
14 interested in the outcome thereof.

15 This certification applies only to those
16 transcripts, original and copies, produced under our
17 direction and control; and we assume no responsibility
18 for the accuracy of any copies which are not so
19 produced.

20 IN WITNESS WHEREOF we have hereunto set my
21 hand this 3rd day of October, 2008.

22
 Certified Shorthand Reporter

23
24
 Certified Shorthand Reporter