

1 D-15146
 2 STATE OF ILLINOIS)
) SS:
 3 COUNTY OF KENDALL)
 4 BEFORE THE PUBLIC HEARING OFFICER
 5 In The Matter Of:
 6 APPLICATION FOR LOCAL SITING APPROVAL
 PROPOSED WILLOW RUN RECYCLING AND DISPOSAL FACILITY
 7 KENDALL LAND AND CATTLE, L.L.C.
 WASTE MANAGEMENT OF ILLINOIS, INC.
 8 KENDALL COUNTY, ILLINOIS
 9
 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 KAREN R. SHALES, CSR 084-004177, and
 19
 20 TIMI M. FULFS, CSR 084-003517, on Monday,
 21
 22 September 29, 2008 at 6:00 p.m., at 6617 Chicago
 23
 24 Road, Plattville, Illinois.

1 ALSO PRESENT: (Cont'd.)
 2 LAW OFFICES OF DANIEL J. KRAMER, by
 MS. KELLY A. KRAMER
 3 1107A S. Bridge Street
 Yorkville, Illinois 60560
 4 Appeared on behalf of Old Second
 National Bank of Aurora Trust 8932.
 5
 6 ALSO PRESENT:
 7 MS. RENNETTA MICKELSON, Kendall County Clerk;
 MR. ROBERT E. DAVIDSON, County Board Member;
 8 MS. JESSIE HAFENRICHTER, County Board Member;
 MS. NANCY MARTIN, County Board Member;
 9 MR. JOHN P. PURCELL, County Board Member;
 MS. ANNE VICKERY, County Board Member;
 10 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
 JEEP & BLAZER, LLC by
 7 MR. MICHAEL S. BLAZER, and
 MR. DEREK B. RIEMAN
 8 24 North Hillside Avenue, Suite A
 Hillside, Illinois 60162
 9
 KENDALL COUNTY STATE'S ATTORNEY, by
 10 MR. ERIC C. WEIS
 807 West John Street
 11 Yorkville, Illinois 60560
 Appeared on behalf of the County of
 12 Kendall;
 13 MR. DELBERT S. LYLE,
 2100 Manchester Road, Suite 945
 14 Wheaton, Illinois 60187
 Appeared on behalf of Lyle Enterprises,
 15 LLC;
 16 MUELLER & ANDERSON, P.C., by
 MR. GEORGE MUELLER,
 17 609 Etna Road
 Ottawa, Illinois 61350
 18 Appeared on behalf of Kankakee Regional
 Landfill, LLC;
 19
 LAW OFFICES OF DANIEL J. KRAMER, by
 20 MR. DANIEL J. KRAMER
 1107A S. Bridge Street
 21 Yorkville, Illinois 60560
 Appeared on behalf of Village of
 22 Minooka;
 23
 24

1 I N D E X
 2 WITNESS:
 3 JOHN BOGNAR
 4 EXAMINATION BY: DX CX RDX RCX EX
 5 Mr. Kramer 2027
 Mr. Moran 2076
 6 Board Member Davidson 2086
 7 Board Member Vickery 2112 2090
 8 Board Member Hafenrichter 2119 2092
 Board Member Purcell 2093
 9 Board Member Wehrli 2103
 Board Member Wykes 2110
 10 Mr. Blazer 2113
 Hearing Officer Kinnally 2120
 11 Mr. Milliron 2133
 Mr. Siegel 2139
 12
 13
 14 PUBLIC COMMENT PAGE
 Gary Karafiat 2145
 15
 16
 17 EXHIBITS: ID REC'D
 Village of Minooka Exhibit No. 3 2031
 18 Village of Minooka Exhibit Nos. 4-7 2076
 19
 20
 21
 22
 23
 24

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1 HEARING OFFICER KINNALLY: This is the
2 reconvened hearing of the Applicant Willow Run -- or
3 Kendall Land and Cattle Applicant for landfill
4 siting.
5 Would the County Board please
6 introduce themselves.
7 BOARD MEMBER DAVIDSON: Bob Davidson.
8 BOARD MEMBER VICKERY: Anne Vickery.
9 BOARD MEMBER MARTIN: Nancy Martin.
10 BOARD MEMBER HAFENRICHTER: Jessie
11 Hafenrichter.
12 BOARD MEMBER WEHRLI: Jeff Wehrli.
13 BOARD MEMBER WYKES: Bill Wykes.
14 HEARING OFFICER KINNALLY: Okay. We have a
15 quorum, and our State's Attorney Eric Weis is here.
16 I believe where we left off on
17 Thursday was public comment, and that will continue
18 tonight after we hear from the witness for the
19 Village of Minooka.
20 Is that correct, Mr. Kramer?
21 MR. KRAMER: It is, Mr. Kinnally. I don't
22 know if my mic is on, though.
23 HEARING OFFICER KINNALLY: I don't know
24 either.

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1 MR. KRAMER: Now it's on.
2 HEARING OFFICER KINNALLY: Okay. Do you want
3 to stand up and raise your right hand and state your
4 name?
5 THE WITNESS: John Bognar.
6 (Witness sworn.)
7 HEARING OFFICER KINNALLY: Okay. Have a
8 seat.
9 Okay, Mr. Kramer.
10 MR. KRAMER: Thank you, Mr. Kinnally.
11 JOHN BOGNAR
12 called as a witness herein, having been first duly
13 sworn, was examined and testified as follows:
14 DIRECT EXAMINATION
15 BY MR. KRAMER:
16 Q. Mr. Bognar, will you state your name and
17 your place of residence for the record, please?
18 A. My name is John Bognar. I live at 5970
19 Pennbrooke in St. Louis, Missouri.
20 Q. Mr. Bognar, where are you employed
21 currently?
22 A. By the firm of Leggette, Brashears &
23 Graham, Incorporated.
24 Q. And by education and training, can you

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1 tell us generally what you do, please?
2 A. By education, I have a degree -- I have
3 a bachelor of science degree in geology with an
4 emphasis in stratigraphy, and my experience is 29
5 years of mapping and interpreting subsurface fluid
6 flow.
7 Q. Mr. Bognar, in terms of your licensing,
8 are you a licensed geologist in the State of
9 Illinois?
10 A. Yes, I am.
11 Q. Are you a member of any professional
12 organizations?
13 A. Several of them. Notably, the American
14 Institute of Professional Geologists. I have a
15 certification from them.
16 Q. Do you hold any position or have you
17 been elected to any position nationally with them,
18 sir?
19 A. I am the president-elect. I will be
20 president starting January 1st. That is an elected
21 position, yes, sir.
22 Q. How big an organization is that and does
23 it cover the entire United States?
24 A. It's an organization of about 6,000

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1 members. It does cover the entire United States and
2 also have members from Europe and several other
3 continents as well.
4 Q. Are you also licensed and a member of
5 any professional organizations in the State of
6 Missouri?
7 A. I am licensed by the State of Missouri,
8 yes, as a registered geologist. And yes, I do
9 belong to other organizations; the Association of
10 Missouri Geologists, the Society of Mining
11 Engineers, and those types of things.
12 Q. And you are not an engineer by trade; is
13 that fair to say?
14 A. No, I'm not. I am distinctly a
15 geologist.
16 Q. With respect to what has been marked as
17 Village of Minooka Exhibit No. 3, your curriculum
18 vitae, is that a correct and accurate representation
19 of your training and experience?
20 A. Yes, it is.
21 Q. And your memberships and professional
22 organizations except with, perhaps, your recent
23 election?
24 A. Yes.

1 MR. KRAMER: I would ask that Exhibit 3 be
 2 admitted, Mr. Kinnally.
 3 HEARING OFFICER KINNALLY: That's fine. I
 4 just don't have one. Could I get one? I don't know
 5 if the County Board has one, but I don't have one.
 6 Okay. Thanks.
 7 All right. Is there any objection
 8 to -- this is Minooka Exhibit No. 3?
 9 Hearing none, that will be
 10 admitted.
 11 (Village of Minooka Exhibit No. 3
 12 admitted.)
 13 BY MR. KRAMER:
 14 Q. Have you had any publications or given
 15 any seminars in regard to geology or hydrogeology in
 16 relation to the siting of waste facilities?
 17 A. Yes, I have. In particular, I wrote a
 18 paper on the permeability of an overburden unit or
 19 an unconsolidated material for the siting of a
 20 nuclear waste disposal facility.
 21 Q. Mr. Bognar, with respect to serving in
 22 the capacity that you are today, have you ever been
 23 hired to render an opinion or help prepare a siting
 24 application for a solid waste landfill?

1 A. Yes, I have.
 2 Q. You personally yourself as opposed to
 3 your firm, how many times have you been so involved,
 4 sir?
 5 A. Approximately ten.
 6 Q. And with respect to your firm itself,
 7 has Leggette Brashears ever been involved, in
 8 addition to your personal experience, with other
 9 sitings for a petitioner?
 10 A. Yes, they have. Probably in the
 11 vicinity of 50.
 12 Q. Mr. Bognar, have you ever testified or
 13 been called upon to testify for any objector groups
 14 before in regard to the siting of a landfill
 15 facility?
 16 A. No, I have not.
 17 Q. Have you ever reviewed a solid waste
 18 siting facility application for any governmental
 19 bodies other than acting as a petitioner's
 20 representative?
 21 A. I have not.
 22 Q. With respect to the Village of Minooka,
 23 can you tell me approximately when you were retained
 24 and under what circumstances, please?

1 A. I was retained on or about August the
 2 4th, and under the circumstances that we
 3 specifically told the Village that we would not be
 4 hired to be in favor of or against any particular
 5 position, but we would be more -- we would be happy
 6 to be hired to look at the scientific body of
 7 evidence and the body of knowledge and make our
 8 interpretation of such.
 9 Q. Specifically with regard to you being
 10 retained, did the Village of Minooka indicate that
 11 their concern was water in terms of impact on their
 12 water supply and groundwater effects of the siting?
 13 A. That was -- that was part of it, but we
 14 made clear that our expertise lies in geology and
 15 hydrogeology, and that going beyond that would not
 16 be within our area of expertise.
 17 Q. Did you indicate that you would then
 18 only be prepared to evaluate the Application with
 19 regard to Criterion 2, and you're not being asked to
 20 review the Application in regard to any other
 21 criterion?
 22 A. That's true.
 23 Q. Thank you. Now, with respect to
 24 location of offices, does your firm have an office

1 in the State of Illinois?
 2 A. Yes, we do, in Freeport.
 3 Q. And in fact, in terms of their main
 4 focus of operation, do they do more water supply and
 5 subdivision review, that type of work?
 6 A. They do real estate transaction
 7 environmental related work more so than what my shop
 8 does.
 9 Q. And the reason they referred from the
 10 Freeport to your office was because of your
 11 familiarity with landfill applications?
 12 A. That's correct, and my expertise in
 13 hydrogeology.
 14 Q. Now, have you had a chance in rendering
 15 an opinion in this case to view the site?
 16 A. Yes, I have.
 17 Q. Have you also had an opportunity to
 18 review the entire 2008 filing by Waste Management
 19 and Kendall Land and Cattle Company?
 20 A. The staff at my office went through all
 21 of those -- all of the sections. I personally did
 22 not read every single page. I was notified by my
 23 staff of those that are pertinent to geology and
 24 hydrogeology, and those I did review in detail.

1 Q. Did you also review in preparation for
2 your examination of the Application the previous
3 2007 filing by the same Applicant, a bit different
4 confirmation of site, but with respect to Willow Run
5 2007?

6 A. I reviewed that in the same manner that
7 I did the 2008. We looked through it generally
8 speaking for those applicable portions, and then
9 those I reviewed in detail.

10 Q. And again, when you say the applicable
11 portions, that would be the Criterion 2 and things
12 that would affect geology and hydrogeology; would
13 that be fair to say?

14 A. Yes, it would be.

15 Q. Now, are you also familiar with the
16 Kendall County ordinance that affects the siting of
17 solid waste facilities, which is the restated
18 Kendall County Site Approval Ordinance for Pollution
19 Control Facilities, Ordinance No. 08-15?

20 A. I am.

21 Q. In arriving at your opinion about the
22 Criterion 2, did you take into account all of these
23 factors of review that we've just gone through?

24 A. Yes.

1 Q. Now, with respect to your report, did
2 you have occasion to look at the sections of the
3 report or Application in 2008 dealing with
4 unconsolidated overburden materials?

5 A. Yes.

6 Q. And could you tell me generally what
7 your examination of the Application in that regard
8 consisted of, Mr. Bogner?

9 A. Well, we looked at the -- we looked at
10 all of the data provided in both documents and began
11 with looking at the conceptual models to see if the
12 conceptual geologic models were possible.

13 And then we looked at the data set
14 to see if they were -- if the geologic model -- the
15 conceptual geologic model was, indeed, supported
16 adequately with the data.

17 Q. And you did find the conceptual model
18 prepared by Ms. Underwood, did you not, on behalf of
19 the Applicant?

20 A. Yes, we did.

21 Q. Again, when you as a professional with
22 your education, training, and experience with
23 landfill applications start out, what is the first
24 step that you do?

1 A. Well, if I myself was making the
2 Application, I would indeed develop the conceptual
3 geologic model. That's the very first step to do.

4 Q. And then would you go to the state
5 statutes governing it and look and see if all the
6 necessary information had been submitted?

7 A. For the Application, absolutely. That
8 would be a part of it.

9 Q. Now, with respect to your report, which
10 we've marked as Exhibit No. 4 for Village of
11 Minooka, other than the Notice of Filing and the
12 service list that I stapled to it, and on the
13 attachments that you had referenced in the report as
14 Attachments A, B, C, and D where I have actually
15 typed those and written them on the bottom so
16 they're identified as part of it, is that report in
17 the same condition now as at the time that you
18 originally prepared it on September 4th and filed
19 it?

20 A. Yes, it is.

21 Q. And is it a true and accurate statement
22 of your findings in this case?

23 A. Yes, it is.

24 Q. Now, with respect to Attachment A, could

1 you tell the County Board what that purports to be?

2 A. That's the IEPA location standards
3 checklist that we drew up. We went through the
4 code, the regulations, and looked to find -- those
5 are major categories required for submittal for the
6 Applicant.

7 Q. And with regard to Attachment A, you
8 found that the Applicant did provide answers to all
9 of those questions, did you not?

10 A. Yes, sir.

11 Q. Were your findings consistent, however,
12 with all of those answers?

13 A. No. We have some differing -- differing
14 findings.

15 Q. Now, with respect to the Kendall County
16 restated ordinance as we talked about, did you make
17 any examination of the Application to determine
18 whether the Applicant had complied with Article 4.4,
19 No. 6, in regard to a complete hydrological study
20 being submitted as to the site?

21 A. Specifically, I think Paragraph 3 in
22 that section, Subparagraph 3, asks for the
23 permeability laboratory and field test, and it's our
24 opinion that because the paragraph -- the section is

1 led off by seeking a complete analysis, it's our
 2 opinion that the ordinance was not met in regard to
 3 lab and field testing for the unconsolidated
 4 portion.
 5 HEARING OFFICER KINNALLY: Time out. Can you
 6 give me a reference to the ordinance because
 7 Paragraph 3 is not the one, so which one is it so
 8 the Board knows and I know.
 9 THE WITNESS: Sure.
 10 HEARING OFFICER KINNALLY: You're under site
 11 description 4.4?
 12 THE WITNESS: Yes, it is. It's site
 13 description 4.4, Paragraph 6.
 14 HEARING OFFICER KINNALLY: Okay.
 15 THE WITNESS: And then that would be D -- I'm
 16 sorry. I was mistaken when I said that. It would
 17 be 6d(3).
 18 HEARING OFFICER KINNALLY: Thank you. Sorry
 19 to interrupt, but I just wanted to know where we
 20 were at.
 21 THE WITNESS: For the record, get it right.
 22 BY MR. KRAMER:
 23 Q. And on what facts or lack of information
 24 do you base that conclusion, Mr. Bognar?

1 A. Well, we feel that the conceptual model
 2 was not proven when it says that the unconsolidated
 3 overburden, or in the case more specifically the
 4 quality in the Lemont undifferentiated formations,
 5 we feel that there is not enough information to
 6 determine the hydraulic conductivity of that
 7 formation, and therefore, understand if indeed it is
 8 a confined unit or not.
 9 Q. Now, I believe there is an exhibit
 10 called geologic layers that the Petitioner or
 11 Applicant introduced into evidence. That was about
 12 the third or fourth slide that we have marked as
 13 Exhibit 5.
 14 Mr. Kinnally, if I may approach and
 15 pass it out?
 16 HEARING OFFICER KINNALLY: Absolutely. Thank
 17 you. Thank you.
 18 BY MR. KRAMER:
 19 Q. Could you tell me what that exhibit
 20 purports to show?
 21 A. Well, this, in essence, is a conceptual
 22 model of the site that has the formation names, how
 23 they're grouped together, the type of material --
 24 the type of earth material of which they are made,

1 their thicknesses at the site. And the last column
 2 on the right is what is called a hydro -- excuse me,
 3 hydrostratigraphic unit.
 4 Q. Now, where it indicates on the top right
 5 of Village of Minooka Exhibit No. 5, it references
 6 the material of the top three -- or the top two
 7 layers, Mason and Wedron, as being an upper
 8 confining unit; is that correct?
 9 A. Yes, that's correct.
 10 Q. And is that the same area of the site
 11 that you're referring to as what?
 12 A. I refer to it as unconsolidated
 13 overburden.
 14 Q. And on what basis do you do that, sir?
 15 A. It's -- it's nomenclature that means --
 16 it's not lithified, it's not hard rock. It's loose.
 17 Typically, it can be loose grain sediments or
 18 semi-cemented sediments, but basically they are
 19 loose sediments, and they typically -- overburden is
 20 a term used by some, in this case me, to mean that
 21 material above hard bedrock.
 22 Q. And would it be fair to say that the
 23 three groups listed below the two unconsolidated
 24 material you, agree with the geologist from the

1 Applicant that the Galena, Platteville, and Ancell
 2 layers are, in fact, bedrock?
 3 A. Yes.
 4 Q. Now, what deficiency exists in
 5 quantifying the conceptual model made that leads you
 6 to believe that the Board does not have sufficient
 7 information to quantify the Applicant's theory?
 8 A. I would say that we need -- in order to
 9 quantify that this is a confining unit, you would
 10 need to conduct slug test or single well hydraulic
 11 conductivity tests within those units.
 12 As I recall, there is only one
 13 piezometer or well, using the terms interchangeably
 14 here, that was screened entirely within the
 15 unconsolidated overburden, and that was slug tested.
 16 So there was -- there is a number of other places --
 17 there are several acres of material there that
 18 simply was not tested that way.
 19 So we really don't have the
 20 quantification of its -- of its field permeability
 21 analysis. We have just one data spot.
 22 Q. Now, again, with respect to that one
 23 data spot, that was taken sometime in January of
 24 2008 and April of 2008, and that's what you're

1 calling unconsolidated material; is that correct?
2 A. Well, we're talking about two different
3 things here. The slug test is an event that I don't
4 know exactly when it happened. I don't know if it
5 happened in January or April, but I believe you may
6 be referring to reading of the water levels of that
7 particular piezometer.

8 Q. Correct.

9 A. That's a little bit different than what
10 I was talking about.

11 Q. But again, it was in that one piezometer
12 that was placed solely within the unconsolidated
13 material?

14 A. Yes. That's also true about that
15 piezometer, yeah.

16 Q. Now, when you place a piezometer in use,
17 whatever the layer it's in, is there any way to get
18 a continuous reading or multiple readings rather
19 than one or two snippets in time?

20 A. Sure. You could go out every day with a
21 hand recorder. There is devices that you can drop
22 down the piezometer that will send off an electric
23 signal that you've hit the water surface. You can
24 do that on an hourly or daily basis. You could --

1 Q. Is one of those that you referencing to
2 a device called the transducer?

3 A. Not yet, but that's where I was going to
4 go. I was going to say you could deploy a
5 transducer, which is an automatic data recording
6 device. You put it in the piezometer below the
7 water level, and it reacts to the barometric
8 pressure on the water column, and you can set these
9 things -- some of them to take 30,000 data points
10 over the period of one, two, three, four, five
11 years. You can set them up just about any way you
12 want to, so you can take thousands of data points by
13 deploying one transducer.

14 Q. And is that a particularly expensive
15 method to do?

16 A. No. The transducers are -- I think we
17 bought one for about \$700 in the last six months or
18 so at my office, and then the cost would be
19 calibrating the transducer and deploying it in the
20 piezometer, going back and taking it out after the
21 period that you have recorded your data, and then
22 downloading the information to see the information.

23 Q. Mr. Bognar, what's the significance of
24 having only one test as opposed to many in that

1 unconsolidated material?

2 A. Well, you don't know -- if you don't
3 have other tests, you don't know that that test is
4 representative statistically or if it's -- you don't
5 understand if it's statistically significant.

6 In other words, if you had a lot of
7 other tests that supported that one that were
8 similar or different, you would start to understand
9 the nature and character of the hydraulic
10 conductivity of that unit.

11 Q. You used the term in your report called
12 uppermost aquifer and you used the term aquifer as
13 well. Could you tell me what that purports to mean?

14 A. Well, we use the term the way the
15 Illinois code uses the term. The uppermost aquifer
16 is that hydrostratigraphic unit or layers of rock
17 that contain water, and it's the shallowest at that
18 particular site.

19 And the word aquifer in the code
20 essentially means a body of material that has
21 groundwater in it that can be economically extracted
22 for domestic or industrial uses. Essentially,
23 that's the definition.

24 Q. In reviewing the hydrological and the

1 geologic portions of the 2008 Application, in
2 particular the boring logs and all the exhibits
3 admitted into evidence here, did you find any
4 indication that there was saturation in the upper
5 confined units, either the Mason or Wedron, that
6 have been identified by Ms. Underwood?

7 A. Well, I do know for a fact that the
8 Wedron, which is on top of the first bedrock, she
9 has established in her documents that that is
10 saturated. What we don't know is about the
11 materials above that. It has not been adequately
12 characterized for me to know whether or not that
13 body is saturated.

14 Q. And again, is that because of lack of
15 boring logs or piezometers in that unconsolidated
16 material, that upper layer?

17 A. Well, there is several piezometers,
18 several borings that went through that material, but
19 only the one, possibly two that were actually
20 studied -- where they actually studied that
21 particular sequence of layers.

22 Q. Mr. Bognar, you're familiar again from a
23 review of the Application and your site visit that
24 there is farm drain tile at the site; is that

1 correct?
 2 A. Yes, sir.
 3 Q. And first of all, when you say site,
 4 what are you referencing, please?
 5 A. I'm referencing the property that the
 6 Applicant has applied for for a solid waste permit
 7 to this Board.
 8 Q. You're not including any borrow areas,
 9 you're including strictly the picture or description
 10 they've given as what's been applied for here?
 11 A. That's correct.
 12 Q. With respect to the presence of drain
 13 tiles, as a hydrogeologist, what, if anything, does
 14 that indicate to you, sir?
 15 A. Well, it tells me that the people
 16 operating the farm have a problem with water that
 17 they want to remove from the very shallow, and it
 18 tells me that they have analyzed it. It's quite a
 19 construction operation to put that in and make them
 20 work properly, so it tells me that they have a
 21 pretty good sense that water will infiltrate in
 22 through the top layers down to at least some area,
 23 at which they feel that they need these drain tiles
 24 to assist the natural system to drain its water

1 are communicative with each other. In other words,
 2 water could flow from one of these units to another.
 3 It could be -- it could be a loose sand formation or
 4 a tight sand formation or a limestone like we have
 5 at this site, or another sort of carbonate like a
 6 Dolomite.
 7 As long as those formations,
 8 although they are lithologically different, the rock
 9 types are different, as long as they are in
 10 hydraulic communication with each other, the
 11 hydrostratigrapher or the hydrogeologist can lump
 12 those into what's -- a group called one single
 13 hydrostratigraphic unit for mapping or analysis
 14 purpose.
 15 Q. Mr. Bognar, with respect to that
 16 geographic layer exhibit that we've marked as
 17 Village of Minooka No. 5, did you find sufficient
 18 cross checking or testing information to show
 19 whether that Wedron layer was actually part of the
 20 aquifer or was an upper confining unit as testified
 21 to by Ms. Woodward?
 22 HEARING OFFICER KINNALLY: Underwood.
 23 MR. KRAMER: I'm sorry.
 24 HEARING OFFICER KINNALLY: That's all right.

1 away. So it's accumulating somewhere at that level
 2 near the drain tile.
 3 Q. Does it indicate that the ground above
 4 the drain tile is permeable, otherwise the water
 5 wouldn't get to the tiles?
 6 A. Yes, it would.
 7 Q. Does it, in fact, conversely indicate
 8 the ground is not permeable under the drain tile?
 9 A. It does not necessarily indicate that
 10 the ground is impermeable beneath it.
 11 Permeability -- when you speak in terms of relative
 12 permeability, the permeability above the drain tile
 13 is less than the permeability below it, but that
 14 does not mean the permeability below it is
 15 impermeable. It means that it's more impermeable
 16 than the material above it.
 17 Q. Okay. With respect to this particular
 18 area, you also reference a term called bedrock
 19 hydrostratigraphic unit. Can you tell us what that
 20 is in your report?
 21 A. The bedrock hydrostratigraphic unit --
 22 again, let's talk about what a hydrostratigraphic
 23 unit is first. That is a body of -- layers of rock,
 24 and it can be unconsolidated materials as well that

1 BY THE WITNESS:
 2 A. There is strong evidence that the
 3 unconsolidated material right above the bedrock or
 4 the Galena aquifer has a hydraulic conductivity that
 5 would -- that would serve as -- well, it would be
 6 good enough for one to complete a well in that sort
 7 of hydraulic conductivity formation and extract
 8 water from it. I think that that's been proven.
 9 Q. You indicated in your report you used
 10 the word possibly. Why do you use the word possibly
 11 as opposed to with some certainty as a science?
 12 A. Well, again, it's a situation where
 13 there is data gaps that exist. We simply do not
 14 have enough information to know if all of that body
 15 that is referred to in the Applicant's conceptual
 16 model as the upper confining unit, we simply don't
 17 know where the -- where the low hydraulic
 18 conductivity or permeability material is versus the
 19 higher permeability material. We simply don't know
 20 that due to data gaps.
 21 Q. Mr. Bognar, have you heard of a firm
 22 abbreviated CECI with reference to this 2008 Willow
 23 Run Application?
 24 A. I think they worked on the 2007

1 Application, but I don't know that they worked on
 2 the 2008. Yes, I have heard of them.
 3 Q. And was some of the work of CECI from
 4 the 2007 Application, in fact, used in regard to the
 5 2008 Application by the Applicant?
 6 A. I believe it was. I believe the
 7 geologic samples were re-reviewed by people working
 8 for the Applicant.
 9 Q. And that would have been Earth Tech, the
 10 current environmental consultant; is that fair to
 11 say?
 12 A. Yes, that's correct.
 13 Q. Now, Mr. Bogнар, when CECI did their
 14 borings and whoever they had look at the boring
 15 material coming out of the ground with respect to
 16 the unconsolidated layers towards the top, did they
 17 find or disclose any materials other than clay?
 18 A. I'm not familiar enough with those
 19 boring logs to answer that question.
 20 Q. Okay. At anywhere in the report was it
 21 indicated, and that would be the 2008 Application,
 22 the presence of materials other than clay in the
 23 upper five feet of unconsolidated materials?
 24 A. Yes. There is several occasions of

1 materials other than clay.
 2 Q. What type of materials, for instance?
 3 A. There are sand, silts, and gravels.
 4 Q. And some of them called sand lenses?
 5 A. Yeah. The Applicant does refer to some
 6 of these materials, I believe, in her testimony as a
 7 sand lens.
 8 Q. What is a sand lens in geologic terms,
 9 if you would, sir?
 10 A. In this geologic setting, I would
 11 describe a sand lens as a -- it's a -- it's a subset
 12 of a glacial deposit that has the rock character of
 13 being a loose, unconsolidated sand that is housed
 14 within the rest of the glacial deposit in that it
 15 would not be laterally continuous. Well,
 16 essentially that's the definition.
 17 Q. When you say it would not be laterally
 18 continuous, does that mean there is faults and
 19 fissures and so on that prevents it from being a
 20 confining unit?
 21 A. That could be -- there could be faults,
 22 there could be fissures that truncate a body of
 23 sand, but typically this is more of a
 24 depositional -- a sand lens is more of a

1 depositional phenomena where the glacial simply laid
 2 down that sort of material at that particular place
 3 and it did not lay it down in a laterally extensive
 4 manner.
 5 Q. What effect does a higher degree of the
 6 presence of sand or gravel have on the issue of
 7 permeability of the soil?
 8 A. That depends upon how it's distributed
 9 within the soil. If it's distributed as a pure unit
 10 of gravel or a pure unit of sand, that portion will
 11 have a very high hydraulic conductivity or the
 12 ability to transmit water.
 13 If it's -- if it's distributed
 14 throughout a matrix of clay, the hydraulic
 15 conductivity or its ability to transmit water would
 16 be lessened. But to what degree, the only way you
 17 can find out is to conduct field tests.
 18 Q. Mr. Bogнар, based on your education,
 19 your training, your experience, your examination of
 20 this Application, do you believe that sufficient
 21 testing was done to render a professional opinion as
 22 to whether or not that unconsolidated material is an
 23 upper confining unit?
 24 A. Would you state it once more? I want to

1 make sure I understood it.
 2 MR. KRAMER: Sure. Mr. Kinnally, may I ask
 3 the reporter --
 4 HEARING OFFICER KINNALLY: Well, no, but I
 5 will.
 6 Can you tell him what the question
 7 is, please.
 8 (Record read.)
 9 BY THE WITNESS:
 10 A. There is not enough data for me to say
 11 that the upper confining unit is indeed a confining
 12 unit.
 13 BY MR. KRAMER:
 14 Q. Now, you indicated, I believe, there was
 15 one for sure and possibly two slug tests done in
 16 this unconsolidated material; correct?
 17 A. Yes, I did indicate that.
 18 Q. Are there any other tests that could
 19 have been done to confirm the fact that it was or
 20 was not an upper confining unit?
 21 A. Yes. When the Applicant was conducting
 22 its aquifer pumping test, which is a test where they
 23 have an -- install a water well into a subject
 24 formation, and in the vicinity of that water well

1 they install other wells that are typically called
 2 observation wells or monitoring wells, and they
 3 stress the aquifer by extracting water from what's
 4 called the pumping well.
 5 They measure the responses of those
 6 observation or monitoring wells, and then based upon
 7 those responses, one can quantify the aquifer
 8 characteristics such as hydraulic conductivity of
 9 the aquifer or storativity. Those are terms used --
 10 those are technical terms used in hydrogeology that
 11 lets one know about the performance or the potential
 12 performance of a rock body as an aquifer.
 13 What they could have done in our
 14 opinion to understand whether or not there was
 15 hydraulic communication in the unit that they called
 16 the upper confining unit was during that aquifer
 17 pumping test, they could have installed piezometers
 18 screened solely within those units and see whether
 19 or not when they took water from the Galena
 20 Formation --
 21 Q. Excuse me one second. The Galena is the
 22 top bedrock aquifer that's indicated in Village of
 23 Minooka 5; is that correct?
 24 A. Yes, it is. And that's the formation in

1 which the pumping well was extracting water from.
 2 Q. Pardon the interruption. Please go
 3 ahead.
 4 A. That's fine. So they could have -- they
 5 could have determined whether or not there was a
 6 response in those piezometers or not in reaction to
 7 pumping water from the Galena Formation.
 8 Additionally, they could have
 9 installed a piezometer or monitoring well in the
 10 lower confining unit, the Platteville, to
 11 demonstrate whether or not, indeed, that is a lower
 12 confining unit.
 13 From reading the testimonies, I
 14 understand there is some differences of opinion of
 15 whether the Platteville is a lower confining unit or
 16 it's still part of an aquifer. We put that together
 17 in -- I'm going to pull up a figure here.
 18 HEARING OFFICER KINNALLY: That's Exhibit D
 19 to your report?
 20 MR. KRAMER: Actually, we've marked this,
 21 Mr. Kinnally, as Subject Site Groundwater Flow
 22 System 6. Again, it's an Applicant's exhibit rather
 23 than one of ours.
 24 HEARING OFFICER KINNALLY: Okay.

1 BY THE WITNESS:
 2 A. We have superimposed on the Applicant's
 3 exhibit the red figures here and here. This area
 4 right here is the --
 5 HEARING OFFICER KINNALLY: Wait a minute.
 6 Let me get these passed out to the County Board.
 7 THE WITNESS: Sure.
 8 HEARING OFFICER KINNALLY: We're all not
 9 geologists here, so it takes us a little bit.
 10 Have you got one, Bill?
 11 BOARD MEMBER WYKES: Yes.
 12 HEARING OFFICER KINNALLY: Go ahead.
 13 BY THE WITNESS:
 14 A. This is a figure to support that which I
 15 just recently spoke. This is the installation of a
 16 pumping well within the Galena portion -- the Galena
 17 aquifer right here they're calling it, which is from
 18 here to here. So they installed a piezometer or the
 19 pumping well here, they installed a piezometer here,
 20 and they installed a piezometer here. And then they
 21 pumped this well here and observed what happened in
 22 this well and this well.
 23 And if you might recall from
 24 Ms. Underwood's testimony, she described that as

1 being typical of a -- the pumping test results is
 2 typical or the best fit was to the Theis equation,
 3 which is typical of a confined aquifer.
 4 And we're not arguing with those
 5 findings, but sometimes it's better to actually see
 6 the physical proof rather than the calculated
 7 theoretical evidence. And to see the physical
 8 proof, one could have installed these red -- these
 9 piezometers here and here in the area.
 10 And there is plenty of material.
 11 There is also some testimony that there wasn't
 12 enough material. There is 11, 12 feet of this
 13 consolidated material in the vicinity of the pumping
 14 test, so that wouldn't have been a problem at all.
 15 We could have seen if whether or
 16 not there was any water accumulated in these
 17 piezometers initially and whether or not they would
 18 react to the pumping of this well here; in other
 19 words, where the water levels fall in those
 20 piezometers. That was not done, so we don't know.
 21 Also, this gray unit here is the --
 22 what's called by the Applicant the lower bedrock
 23 confining unit. Again, you could have installed a
 24 piezometer in there, screen it only in that portion,

1 and again pumping on this particular well, we would
2 have or would not have seen a response in that well.

3 So those are things that are
4 physical undeniable evidence if you do those things,
5 and so what we are relying on, what the Applicant is
6 relying on is theoretical calculations that we're
7 not arguing with the calculations. We're just
8 saying that it wouldn't have been much trouble to
9 add these facilities to the pumping test.

10 HEARING OFFICER KINNALLY: Wait a minute.

11 With respect to this exhibit, which is 6 --

12 MR. KRAMER: Correct, Mr. Kinnally.

13 HEARING OFFICER KINNALLY: Tell me where on
14 that exhibit I would find the Wedron layer.

15 THE WITNESS: It would be somewhere in here.

16 HEARING OFFICER KINNALLY: Okay.

17 THE WITNESS: In the lower portion of the
18 brown coloring.

19 HEARING OFFICER KINNALLY: Where would the
20 Mason layer be, above that?

21 THE WITNESS: The Mason would be above that,
22 yes.

23 HEARING OFFICER KINNALLY: So that brown
24 stratograph there at the top is comprised of both

1 the Mason as well as the Wedron layer?

2 THE WITNESS: Yes, it would be. This is
3 their conceptual model, yeah.

4 HEARING OFFICER KINNALLY: And how many feet
5 is that, 12?

6 THE WITNESS: In the vicinity -- In the
7 vicinity of where they put the well, it's 12 -- 11
8 and 12 feet.

9 HEARING OFFICER KINNALLY: And that's not
10 laterally consistent throughout the site; fair
11 statement?

12 THE WITNESS: Fair statement.

13 HEARING OFFICER KINNALLY: Sorry to
14 interrupt.

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

16 BY MR. KRAMER:

17 Q. Mr. Bogner, in terms of that exhibit,
18 the parts you superimposed to explain your testimony
19 here are the two red wells at the top in the Mason
20 and Wedron unconsolidated material there; is that
21 fair to say?

22 A. That's correct.

23 Q. And again, the red well down in the
24 Platteville layer; is that correct?

1 A. That's correct.

2 Q. And the reason you added those was if
3 you were doing the Application, you would have
4 performed those tests to assure the hearing finders
5 of fact there is no communication between the water
6 permeability on a vertical basis from the brown to
7 the gray layer?

8 A. Well, I wouldn't have done it to assure
9 that. I would have done it to determine what the
10 situation is. That's -- I would not know whether or
11 not this material would react to pumping this well
12 unless I had a piezometer nearby within the radius
13 of influence of the pumping well. I wouldn't know
14 that, so I didn't do it to make that determination.
15 Well, I did it to make the determination. I didn't
16 do it to assure that one situation or another.

17 Q. With respect to the upper layer, the
18 brown layer that would be the Mason and Wedron, if
19 that -- those two strata are truly upper confining
20 units, what would happen to those red piezometers
21 you put on there or those wells with piezometers in
22 them if it's truly an upper confining unit as you're
23 pumping water out of the blue test well that you
24 indicated they did install?

1 A. Well, if there was -- if water did -- if
2 we installed a piezometer and we allowed water to
3 accumulate in that piezometer, and they pumped this
4 well here and they found -- and you have to pump it
5 for a sufficiently long period, and that may be more
6 than the 72 hours that's typical of a pumping test,
7 which is what they did. They did the minimum
8 72-hour pumping test.

9 If you pump it long enough and
10 there is hydraulic communication between this part
11 of the aquifer and the overburden material, you
12 would see a drawdown of water in those shallow
13 piezometers.

14 Q. And again, if the brown material in the
15 two layers that you're showing on the top are truly
16 an upper confining unit and there was no
17 permeability, then there would be no drawdown by
18 pumping the blue well?

19 A. If you found no drawdown and you
20 sufficiently pumped for a long enough period of time
21 and took enough water out of the aquifer, that would
22 be a true statement that you -- that you would
23 have -- you would have physical rather than
24 theoretical mathematical proof that that's confining

1 in that area.
 2 Q. Mr. Bognar, based again on your
 3 education, your training, your experience with
 4 landfill applications, your examination of the 2007
 5 report in relation to hydrology and hydrogeology,
 6 and your examination of the 2008 Application by
 7 Willow Run as to the hydrology and hydrogeology, is
 8 there sufficient enough data to render a scientific
 9 opinion that that brown demonstrative exhibit at the
 10 top is an upper confining unit?
 11 A. There is not enough data.
 12 Q. Now, you're familiar with what
 13 Criterion 2 involves in regard to local siting in
 14 the State of Illinois, are you not?
 15 A. Yes, I am.
 16 Q. And again, based on that lack of
 17 scientific data in your mind, based on the Kendall
 18 County Zoning Ordinance and Criterion 2, has the
 19 Applicant given enough scientific evidence to show
 20 that this siting is being located so as to protect
 21 the public health, safety, and welfare with respect
 22 to the aquifers in relation to this Application?
 23 A. I would say the answer is no, there's
 24 not enough data.

1 Q. Now, again, you've indicated that there
 2 were two slug tests or field tests done in that
 3 unconsolidated area. Would those have been at WT-06
 4 and WT-53?
 5 A. I remember with certainty that it was at
 6 WT-53, but the other one escapes my memory at the
 7 moment.
 8 Q. Is there anything that would help you
 9 refresh your recollection?
 10 A. Yes, there would be, but I don't know
 11 what that is at the moment.
 12 HEARING OFFICER KINNALLY: That's an honest
 13 answer.
 14 MR. KRAMER: We appreciate honesty in these
 15 hearings.
 16 BY MR. KRAMER:
 17 Q. Would you take a look at your
 18 attachment?
 19 HEARING OFFICER KINNALLY: Look at your
 20 report on page 4.
 21 BY MR. KRAMER:
 22 Q. Look at B and C and see if that would
 23 help.
 24 A. You said attachment B and C?

1 Q. Right. Would they help at all?
 2 A. Let's see here. Were you referring to
 3 slug testing specifically?
 4 Q. Yes.
 5 MR. KRAMER: Mr. Kinnally, may I approach
 6 with respect to Village of Minooka Exhibit No. 7?
 7 HEARING OFFICER KINNALLY: Sure. What is it?
 8 MR. KRAMER: It's Table -- it's Applicant's
 9 Table 5-3, the field hydraulic conductivity test
 10 results.
 11 HEARING OFFICER KINNALLY: Okay. Thanks.
 12 THE WITNESS: Table 5-3 is not in my
 13 document.
 14 MR. KRAMER: Just wait.
 15 BY MR. KRAMER:
 16 Q. Have you had a chance to look at
 17 Exhibit 7, which is Table 5-3?
 18 A. Yes.
 19 Q. And does that help at all?
 20 A. Yeah. I do see WT-06 as being screened
 21 within the lean or fat clays.
 22 Q. And about halfway down, WT-53?
 23 A. There we go. That is -- that one is
 24 screened in the overburden material, but it is --

1 it's a little different than WT-06 because it also
 2 has some sands and sand material in it.
 3 Q. Would it be fair to say then that there
 4 was only one test for field hydraulic conductivity
 5 taken that was screened solely within a clay
 6 lithology?
 7 A. According to this table, yes.
 8 Q. And in terms of the slug test result,
 9 that being at WT-06 on Village of Minooka Exhibit 7,
 10 what was the result of that test as far as the
 11 conductivity?
 12 A. The value is 1.1 times ten to the minus
 13 fourth, and the units are centimeters per second
 14 squared.
 15 Q. For us non-algebra people, was a similar
 16 lab test performed as to that same finding or same
 17 core at WT-06?
 18 A. There was a laboratory permeability test
 19 taken on WT-06.
 20 Q. And would it be fair to say in your
 21 review of the 2008 Application, that the only
 22 duplicate testing in this unconsolidated material
 23 that was done in the clay was the common one that
 24 was lab tested for WT-06, and it was field hydraulic

1 conductivity tested at WT-06?
 2 A. That's what I believe to be true.
 3 Q. Now, with respect to the lab result, was
 4 it the same as the field test with regard to WT-06?
 5 A. The lab result was significantly --
 6 showed a significantly lower permeability.
 7 Q. And when we say a lower permeability,
 8 does that mean that water is less likely to travel
 9 vertically or horizontally or both?
 10 A. Permeability is not necessarily
 11 dimensional from vertical or horizontal, but the lab
 12 permeability test showed a much, much lower ability
 13 for water to pass through that material than this
 14 field slug test.
 15 Q. Based again on your training, your
 16 experience, your education, and your familiarity
 17 with publications that have dealt with this subject
 18 about which tests are generally more accurate and
 19 show lower permeabilities, is it the lab test or the
 20 field test that shows lower permeability?
 21 A. Well, both tests can be accurate, but
 22 we're measuring a couple of different things. The
 23 field or the laboratory permeability test, I'm not
 24 saying those are inaccurate, but they are a certain

1 that term, permeability or hydraulic conductivity.
 2 In situ means that hydraulic
 3 conductivity or permeability that is naturally
 4 occurring in the field, if left undisturbed in an
 5 undisturbed state. So in other words, that's the
 6 real hydraulic conductivity. Once you take this
 7 material out of its natural environment and subject
 8 it to test, you will get the permeability as
 9 demonstrated by that particular test.
 10 The field test is one that will
 11 look at the influence of gravity or pressure on the
 12 aquifer material because you have not
 13 altered necessarily -- you have not altered the
 14 fracturing that might occur in a unconsolidated
 15 material or a soil structure or the grain size or
 16 the distribution of the grains.
 17 So it has more of a tendency to
 18 give you a -- especially in a horizontal component,
 19 a more realistic value, the single well or slug
 20 testing does.
 21 Q. Thank you, Mr. Bognar.
 22 Mr. Bognar, with regard to your
 23 Application, the final attachment you made was an
 24 attachment lettered as D; is that correct?

1 testing procedure that renders a certain
 2 permeability value.
 3 Q. And is it based on very, very small soil
 4 samples?
 5 A. Small is a relative term. It's --
 6 basically it's a tube that you take material from,
 7 what's called a Shelby tube. You grab your sample,
 8 and then they use a portion of that sample to insert
 9 into what's called the permeameter and then they run
 10 the fluids under pressure through that so-called
 11 small sample. And that would be less than the
 12 volume of the Shelby tube.
 13 A Shelby tube is -- typically it
 14 can be three or four inches in diameter and two feet
 15 in length, so you're dealing with a volume of
 16 material less than that Shelby tube.
 17 Q. Volume in terms of inches?
 18 A. It depends upon the testing apparatus.
 19 It can be. It can be a couple of inches to less
 20 than two feet.
 21 Q. And again, is it virtually impossible to
 22 replicate the on-site field condition?
 23 A. Yeah. That test is not -- that test is
 24 not designed to indicate in situ, and I will explain

1 HEARING OFFICER KINNALLY: What Application,
 2 you mean his report?
 3 MR. KRAMER: I'm sorry. His report. Thank
 4 you, Mr. Kinnally.
 5 HEARING OFFICER KINNALLY: That's all right.
 6 BY THE WITNESS:
 7 A. Yes, sir. That's Attachment D.
 8 BY MR. KRAMER:
 9 Q. Can you put that up on the screen,
 10 please?
 11 A. There it is.
 12 Q. Based on your review of the 2008
 13 Application by Willow Run, were you able to
 14 determine whether or not any portion of the clay
 15 liner as designed is located within the water table
 16 or aquifer?
 17 A. Using the Applicant's information, which
 18 is the map that was referred to as the water
 19 table --
 20 HEARING OFFICER KINNALLY: Time out a minute.
 21 Could you tell me whether you consider the water
 22 table to be the aquifer, because that's the implicit
 23 assumption in the question.
 24 Maybe you can ask a different

1 question.

2 MR. KRAMER: Sure. I will be happy to.

3 HEARING OFFICER KINNALLY: This is important

4 and I want to make sure we get this right.

5 MR. KRAMER: If I may, may I step back a

6 couple of questions and clarify that?

7 HEARING OFFICER KINNALLY: Absolutely.

8 BY MR. KRAMER:

9 Q. Mr. Bognar, can you tell us again in

10 your training, experience, and profession, how you

11 define water table?

12 A. Water table is the saturated surface of

13 an earth material body, of a body of earth material.

14 It's the water saturation and it is -- in an

15 unconfined condition, it is under atmospheric

16 pressure. In other words, it's the very first place

17 in which you encounter groundwater in an unconfined

18 aquifer at atmospheric or virtually zero pressure.

19 Q. And in terms of, again, the professional

20 or scientific term aquifer, is there a difference in

21 definition or are they synonymous in some respects?

22 A. Yeah. Water table is the top of the

23 unconsolidated uppermost aquifer.

24 Q. And I've noticed the term used

1 throughout the hearings sparingly, but we have also

2 heard the term aquitard used. Can you tell us what

3 that is, please?

4 A. An aquitard is a generally laterally

5 continuous unit that has a lower permeability that

6 will not allow water to pass through.

7 Q. Okay. Now, going back to your

8 Attachment Exhibit D to your report, could you tell

9 us where the water table is in regard to the site,

10 please?

11 A. Well, there is a little bit of a

12 difficulty in doing that. What this -- what this

13 diagram does --

14 Q. And let's refer -- when you say this

15 diagram for purposes of record, it's your

16 Attachment D, correct?

17 A. Yes, that's correct.

18 HEARING OFFICER KINNALLY: That's Exhibit 4.

19 That's your report. Go ahead.

20 BY THE WITNESS:

21 A. We constructed this Attachment D by

22 using the top of the liner map provided in the

23 Application, and that's the zigzag dark lines, and

24 we have elevations on those lines. We added -- In

1 this particular Attachment D, we added three feet

2 to -- the top of the map provided by the Applicant

3 was the top of the liner, so we added three feet

4 because the liner is designed to be three foot

5 thick. So now we have the elevation of the bottom

6 of this liner. Then we used the map called water

7 table map.

8 Q. And who -- Excuse me. We can't talk at

9 once, so I apologize for the interruption.

10 Whose water table map did you use?

11 A. The Applicant's water table map.

12 Q. Thank you, sir. Please go ahead.

13 A. The Applicant's water table map was

14 presented in five-foot contours that you see out

15 here. There is 585, 580 running right through here,

16 and 575 running through here. We added the one foot

17 increments so that one could see where the water

18 table would be between the major contour lines, the

19 five-foot contour lines that they provided.

20 Then we looked at the intersection

21 of those water table elevations and the elevation of

22 the bottom of the liner and came up with these red

23 dots here. And every place you see a red dot would

24 be a place where, in accordance with the map labeled

1 water table, if indeed that's a water table, water

2 would -- water would intersect the elevation of the

3 liner in all of those areas where the red dots are.

4 Q. And again, the Attachment D to your

5 Village of Minooka Exhibit 4, your report, clearly

6 shows a portion of the liner at the northeast

7 footprint being within that water table or aquifer

8 area?

9 A. Assuming the map that is called a water

10 table map is a water table map, water would be in

11 that liner.

12 Q. Mr. Bognar, with respect to what's been

13 so-called the borrow site south of the footprint of

14 the 2008 Application site, did you make any study or

15 determination of any -- of hydrological or

16 hydrogeological effects this Application would have

17 on this area?

18 A. For the borrow area, you said?

19 Q. Correct.

20 A. No.

21 Q. Why did you not do that?

22 A. There wasn't anything there, I don't

23 recall.

24 Q. With respect to on-site observations,

1 besides doing the limited number of testing that was
2 done in this unconsolidated material, what use would
3 you have made as a scientist based on your training
4 and experience of meteorological conditions, such as
5 precipitation at the site?

6 A. Well, when you want to understand the
7 impact that precipitation has on the area, you
8 measure it, and if you want to be precise, you
9 measure it on the site.

10 Q. Did you find any indication in the 2008
11 Application that a rain gauge was maintained
12 specifically on this site?

13 A. I did not see that indicated.

14 Q. Mr. Bognar, based again on your
15 education, your training, your experience, your
16 review of the 2007 and the 2008 Applications, also
17 based on your review of the site in person and a
18 review of the Kendall County restated ordinance that
19 we've talked about, do you have an opinion as to
20 whether the Applicant has provided sufficient enough
21 scientific data, particularly in the unconsolidated
22 soil area, to locate and site this facility in order
23 to protect the public health, safety, and welfare?

24 A. I think there's a number of data gaps

1 that -- that prevents me from saying that this site
2 would, in a geologic sense, be protective of the
3 aquifer.

4 MR. KRAMER: Thank you, Mr. Bognar.
5 No further questions, Mr. Kinnally.

6 HEARING OFFICER KINNALLY: I think we're
7 going to take a ten-minute break.

8 (Recess taken.)

9 HEARING OFFICER KINNALLY: All right. We've
10 got a quorum.

11 And you're completed, Mr. Kramer?

12 MR. KRAMER: Mr. Kinnally, if I may, I'd like
13 to move for admission of Village Of Minooka 4, 5, 6,
14 and 7. 3, I believe, has already been admitted.

15 HEARING OFFICER KINNALLY: All right. Are
16 there any objections to 4, 5, 6, and 7?

17 Hearing none, those would be
18 admitted.

19 (Village of Minooka Exhibit Nos. 4
20 through 7 admitted.)

21 MR. KRAMER: Thank you, Mr. Kinnally. That
22 concludes myself then.

23 HEARING OFFICER KINNALLY: Okay. Mr. Moran,
24 did you want to ask some questions?

1 MR. MORAN: Yes. Thank you, Mr. Hearing
2 Officer.

3 CROSS-EXAMINATION
4 BY MR. MORAN:

5 Q. Mr. Bognar, did you review all the
6 boring logs that are contained in this Application?

7 A. No.

8 Q. I believe you said you worked on this
9 review since August 4th -- from about August 4th to
10 maybe around September 4th?

11 A. That's what I said, yeah.

12 Q. How many hours did you work reviewing
13 any part of this Application?

14 A. Our staff put in about 200 hours as of
15 Friday afternoon.

16 Q. How much time did you put in?

17 A. I have a report. I can answer that very
18 specifically. I don't have the reports, so I can't
19 answer it very specifically, but I have a report in
20 that box over there.

21 HEARING OFFICER KINNALLY: Well, you can go
22 get it if you want.

23 THE WITNESS: Yeah, if you don't mind.

24 HEARING OFFICER KINNALLY: Why don't you tell

1 us what you're reading from.

2 THE WITNESS: I'm reading from a printout
3 from our accounting system.

4 HEARING OFFICER KINNALLY: Okay. Thank you.
5 What's the date on it?

6 THE WITNESS: Thursday, September 25th.

7 HEARING OFFICER KINNALLY: Go ahead.

8 THE WITNESS: And it was projected to Friday.

9 Let's see here. 21 -- It looks like 21 plus 16, so
10 37 hours up till Friday.

11 BY MR. MORAN:

12 Q. When you say through Friday, would that
13 be this Friday or last Friday?

14 A. Last Friday.

15 HEARING OFFICER KINNALLY: 37 hours he said
16 he spent on it up to last Friday.

17 BY MR. MORAN:

18 Q. Now, Mr. Bognar, in going through your
19 resume, I notice that much of your experience is
20 with sites in the State of Missouri; would that be
21 correct?

22 A. Yes, sir.

23 Q. And in fact, in looking through your
24 resume, I could only identify one siting application

1 in the State of Illinois that you worked on; would
 2 that be correct?
 3 A. Is that Perry County?
 4 Q. Yes.
 5 A. Yes, right.
 6 Q. And in that matter you worked for whom?
 7 A. I worked for -- I was hired by -- I'm
 8 trying to think of the name of the company. I don't
 9 recall offhand. It's been 15 years ago.
 10 Q. Okay. And isn't it true that with
 11 respect to that Application, there was a geologic
 12 condition at that site known as karst?
 13 A. I don't recall. I don't think so,
 14 though.
 15 Q. Well, in fact, in all the work that
 16 you've done in Missouri, you come across karst as a
 17 regular feature of many of those facilities; would
 18 that be right?
 19 A. Karst is present in some places and in
 20 other places it's not, so to say regularly is a
 21 mischaracterization.
 22 Q. But you've seen it before in the
 23 facilities you've worked on in Missouri?
 24 A. Karst, oh, absolutely.

1 Q. Did you make any kind of review at this
 2 site whether there was any karst located anywhere
 3 around the proposed Willow Run facility?
 4 A. I did not.
 5 Q. Now, you indicated in response to a
 6 question from Mr. Kinnally that the upper confining
 7 unit at this site was not laterally consistent; is
 8 that correct?
 9 A. I don't believe that was my intention.
 10 Q. Okay. Is it your testimony that the
 11 upper unit, the unconsolidated overburden that we've
 12 been talking about is, in fact, a laterally
 13 consistent unit across this site?
 14 A. Yes, it is.
 15 Q. You also mentioned that in your view --
 16 and I think I got this right -- the water table is
 17 the top of the unconfined uppermost aquifer?
 18 A. Yes.
 19 Q. Was that a correct statement?
 20 A. That would be correct.
 21 Q. Okay. What evidence or data do you have
 22 to support your claim that the water table and the
 23 uppermost aquifer are equivalent at this site?
 24 A. I have the -- I don't think there's

1 enough data that one can say that.
 2 Q. Okay.
 3 A. There's minor amounts of information,
 4 but there is -- there's -- part of my whole
 5 testimony indicates that there are severe data gaps
 6 that won't allow people to make those
 7 determinations.
 8 Q. So would it be accurate to say that your
 9 testimony is there is not sufficient data to
 10 conclude that the water table is, in fact, the same
 11 as the unconfined uppermost aquifer at the site?
 12 A. That's -- that is a portion of my
 13 testimony.
 14 Q. And in fact, you had indicated, I
 15 believe, previously in your testimony that sand or
 16 these sand and gravel pockets are a depositional
 17 phenomena, correct?
 18 A. Can be, right.
 19 Q. Well, is it your view that they are such
 20 at this site?
 21 A. Yes.
 22 Q. And when you say it's a depositional
 23 phenomena, what that means is that these materials
 24 and the clay materials that were also deposited at

1 the site by the glaciers were done in a uniform or
 2 continuous fashion; would that be correct?
 3 A. No. To say that is sheer speculation.
 4 Glaciers have many, many forces that result in many,
 5 many different depositional patterns as they retreat
 6 and/or advance. So to say that the forces or that
 7 they're uniform patterns, that sort of thing, no,
 8 you can't say that. That's exactly why you need a
 9 lot of characterization. That's why you need a lot
 10 of data to know what's going on.
 11 Q. And that's the reason you said at this
 12 site, the sand units that were found were
 13 discontinuous?
 14 A. I did not say that. I said that that's
 15 my definition of a sand lens.
 16 Q. Was there any evidence or data from this
 17 site that establishes that the sand units found at
 18 this site were, in fact, continuous across the
 19 facility?
 20 A. There's not enough information to make
 21 that statement or it's opposite statement that it is
 22 or it is not.
 23 Q. Do you have any experience in
 24 investigating Wisconsin aged glacial deposits?

1 A. I don't know. I don't typically -- when
2 I'm looking at glacial deposits, I don't necessarily
3 know or even care about the age of it. I just
4 simply know about its hydrologic properties. That's
5 all I'm concerned with.

6 Q. Now, Mr. Bognar, to the extent that you
7 did review this Application, is there any
8 information or data in this Application that
9 supports the fact that this unconsolidated
10 overburden, as you've described it, is, in fact, an
11 upper confining unit?

12 A. Repeat that, please.

13 Q. Is there any information or data in this
14 Application that supports the fact that this
15 unconsolidated overburden, as you've characterized
16 it, is, in fact, an upper confining unit?

17 A. Well, you described it as a fact in your
18 question, and I would say it's not a fact.

19 Q. Okay. Let me ask it this way. Is there
20 any information or data in this report which
21 supports the claim that the unconsolidated
22 overburden at this site is an upper confining unit?

23 A. Ms. Underwood's work is -- some of the
24 work is -- would support that, such as the

1 permeability testing, but that's only one portion of
2 it. You have to have hydraulic conductivity testing
3 from slug tests in order to confirm or refute that
4 data.

5 So yeah, there are aspects of it
6 that support that contention, but there's not a
7 complete package of data that make it a fact.

8 Q. Mr. Bognar, are you aware that there
9 were water table wells drilled at this site?

10 A. Would you define water table for the
11 purposes of me answering that particular question?

12 Q. Has the Application in any way
13 identified the fact that water table wells were
14 drilled at this site?

15 A. They have that opinion.

16 Q. And isn't it true that six of those
17 wells were drilled within the site?

18 A. I don't know the number.

19 Q. Okay. Now, were you aware that these
20 wells were drilled through the unconsolidated
21 overburden that you're referring to?

22 A. They would have to be, yeah.

23 Q. And that initially there was no water
24 that came up within those wells within the

1 overburden. Are you aware of that?

2 A. I'm aware that according to Joan's
3 testimony, that she claimed that water would not
4 come into those portions of the overburden. And the
5 dialogue went something like well, how much time did
6 you give it, over -- or which -- you know, how much
7 time would you give it and that sort of thing, but
8 Joan claimed that it would be impractical to wait
9 that long for water to come into those piezometers.

10 Q. Mr. Bognar, are you aware that once
11 those wells were drilled into the bedrock, the
12 groundwater rose in the borehole on top of the
13 bedrock?

14 A. Yes.

15 Q. What does that mean when that occurs?

16 A. That means it depends upon the well
17 construction. It depends upon the -- how the
18 various hydrostratigraphic units communicate with
19 each other. It depends upon what their
20 hydroconductivity data is, and because I don't have
21 horizontal hydraulic conductivity data in the
22 overburden, I can't answer that question.

23 Q. Well, in fact, because the water level
24 has risen above the top bedrock, isn't that evidence

1 that what we have creating the pressure on the
2 aquifer is an upper confining unit?

3 A. It can be, yes.

4 Q. Now, Mr. Bognar, are you in any way
5 stating here that the top of the uppermost aquifer,
6 as you have defined it, is at the top of the
7 saturated portion of that unconsolidated overburden?

8 A. No, I'm not stating that. I'm stating
9 there is not enough information for me to make that
10 determination.

11 Q. Are you stating here in any fashion that
12 that unconsolidated overburden is, in fact, not a
13 laterally extensive confining unit?

14 A. Repeat that, please.

15 Q. Are you stating here that in your
16 professional opinion, the unconsolidated overburden
17 is not a laterally extensive confining unit?

18 A. I'm not stating that either.

19 MR. MORAN: Thank you, sir. I have nothing
20 further.

21 HEARING OFFICER KINNALLY: Thank you,
22 Mr. Moran.

23 Mr. Mueller?

24 MR. MUELLER: No, thank you.

1 HEARING OFFICER KINNALLY: All right.
 2 Mr. Lyle?
 3 MR. LYLE: No questions.
 4 HEARING OFFICER KINNALLY: Ms. Kramer?
 5 MS. KRAMER: No questions.
 6 HEARING OFFICER KINNALLY: Anyone from the
 7 County Board have questions for this gentleman?
 8 BOARD MEMBER DAVIDSON: Bob Davidson.
 9 EXAMINATION
 10 BY BOARD MEMBER DAVIDSON:
 11 Q. There's been a lot of discussion on the
 12 boring samples that were taken in '07 were stored
 13 and basically reused in the lab in '08, and in that
 14 discussion of the value of those boring samples a
 15 year later, do they lose credibility in their test
 16 or would you explain a little of that to us?
 17 A. Well, again, that's a very -- that's a
 18 very complex set of questions you've given me there.
 19 If you are sampling -- if you are trying to
 20 determine permeability with a triaxial permeability
 21 test and you are using unconsolidated clayey
 22 materials, if those samples were preserved to such
 23 an extent that they essentially had the same
 24 moisture and were not disturbed throughout that

1 period, then I would imagine that you would be able
 2 to run a test sometime later, as long as the sample
 3 was preferred -- excuse me, preserved.
 4 If it was allowed to dry or shrink
 5 and crack, if it froze, if it went through
 6 freeze/thaw cycles, then it's probably going to not
 7 be representative of the actual conditions. And
 8 that's for unconsolidated loose material that has
 9 gravel in it.
 10 If this is pure rock core for a
 11 dolomite or limestone like we have at this site,
 12 then my guess is that that would be -- that those
 13 types of samples are -- you know, they virtually
 14 stay unaltered as long as you don't have freeze and
 15 thaw cracking and that sort of thing.
 16 Q. Okay. Thank you. Now, there's a lot of
 17 discussion over the leachate in the bottom of the
 18 landfill.
 19 Now, in your knowledge of this, how
 20 fast -- I mean, you've gone through the reports and
 21 stuff, and I realize that we all say they can't leak
 22 and they're supposed to be three feet of clay and
 23 there's all kinds of plastic barriers and bentonite,
 24 but how many -- do you know has there been any water

1 wells contaminated within a five-mile radius of a
 2 landfill, do you ever get any reports of such?
 3 A. I'm working on a landfill right now in
 4 southeast Missouri that has contamination a couple
 5 of thousand feet away from it, but we don't know if
 6 it's five miles away. I don't know that. We
 7 haven't gone that far.
 8 Q. Okay.
 9 A. But it does happen. But may I also say
 10 that I'm not an engineer, but it's my observation
 11 that with these engineering controls in place, these
 12 landfills are not supposed to leak, but given human
 13 interaction, sometimes they do.
 14 Q. Okay. Going back to your site
 15 groundwater flow system, and you're showing us the
 16 wells and the pumping scenario, how fast and how
 17 hard would you have to pump the one well to -- you
 18 know, I mean, how many gallons to make the other
 19 wells react? Do you have any idea? I mean, I'd
 20 like to --
 21 A. You make that determination first in
 22 your aquifer pumping test. You do what's called a
 23 step-drawdown test. And that test is a series of
 24 pumping rates at which you subject the well to until

1 you find out how much that aquifer can give up on a
 2 sustained period of time.
 3 In other words, you pump it at 10
 4 gallons per minute and see how it performs. If it
 5 does not dry out the well, then you pump it at
 6 20 gallons or 30 or 40 or 50, in some cases a
 7 hundred gallons per minute and even more. That
 8 gives you a sense for how much -- at what rate you
 9 should do your long 72-hour pumping test.
 10 That work was not done in this
 11 Application. There was not a step-drawdown test
 12 that we could see in the documents, so we don't know
 13 the answer to your question. Nor does the
 14 Applicant, I don't believe.
 15 HEARING OFFICER KINNALLY: Wait a minute.
 16 The long 72-hour pumping test? I thought you said
 17 that was a minimum.
 18 THE WITNESS: Yeah, that's the minimum.
 19 HEARING OFFICER KINNALLY: So it's not a long
 20 one.
 21 THE WITNESS: The step-drawdown is typically
 22 a 12-hour or 24-hour test.
 23 HEARING OFFICER KINNALLY: Sorry to interrupt
 24 you.

1 THE WITNESS: I was speaking to the
 2 step-drawdown.
 3 BOARD MEMBER DAVIDSON: No problem. I
 4 appreciate the clarification.
 5 I think that's all I have for right
 6 now. Thank you.
 7 EXAMINATION
 8 BY BOARD MEMBER VICKERY:
 9 Q. Hi, Mr. Bognar. My name is Anne
 10 Vickery. You mentioned -- Bob asked you a question
 11 about a landfill that might be leaking or impacting
 12 the groundwater, and you mentioned a landfill in
 13 Southeast Missouri that had some leakage into the
 14 groundwater 2,000 feet away from the landfill; is
 15 that correct?
 16 A. (Indicating.)
 17 Q. How long has that landfill been where
 18 it's at, do you know?
 19 A. It's been there for several years,
 20 probably a couple of decades, but the area that we
 21 suspect the leak is from is more from the modern
 22 era.
 23 Q. Uh-huh. Did that landfill have a liner?
 24 A. Yes. That's why I mentioned that it was

1 from the modern era.
 2 Q. Okay. Did that --
 3 A. Subtitle D era.
 4 Q. Did that landfill have a double
 5 composite liner?
 6 A. No.
 7 Q. Okay. How many landfills that you've
 8 worked on, and you've worked on a lot, I mean, you
 9 know --
 10 A. Yeah, probably less.
 11 Q. -- hydrology or geology or waste gas
 12 management. How many of those had double composite
 13 liners?
 14 A. I would say none.
 15 Q. None. Okay. And I have a question.
 16 Don't think I'm being smart by asking it, but since
 17 your testimony obviously for Minooka is very, very
 18 important --
 19 A. Sure.
 20 Q. How come then for somebody who was going
 21 to testify with the kind of importance that you
 22 would want people to have, how come you only did
 23 18 percent of the work?
 24 A. Because we were notified very, very late

1 in the game, and that's very typical of how
 2 consulting companies work. We have a staff that are
 3 highly trained, highly capable, highly educated, and
 4 they do the -- they do a lot of the legwork.
 5 And that's required for me to
 6 understand. They summarize things. They put it
 7 together. They show me the data. And then we all
 8 work together as a team. And my role is simply not
 9 one of those that's looking into the minutia until
 10 at such time it becomes important for me to look at
 11 the details.
 12 Q. Okay. But you haven't worked on any
 13 that's had double composite liners, is that what you
 14 said; right?
 15 A. I don't think so, ma'am.
 16 BOARD MEMBER VICKERY: Okay. That's it.
 17 BOARD MEMBER MARTIN: No questions.
 18 BOARD MEMBER HAFENRICHTER: Jessie
 19 Hafenrichter.
 20 EXAMINATION
 21 BY BOARD MEMBER HAFENRICHTER:
 22 Q. It would appear from your testimony that
 23 you don't feel there's enough data for you to make a
 24 determination of whether that is a proper setting or

1 not, is that in general?
 2 A. You know, in a nutshell, I would say
 3 that's a good phrase. Good way of putting it.
 4 BOARD MEMBER HAFENRICHTER: Thank you.
 5 BOARD MEMBER PURCELL: John Purcell.
 6 EXAMINATION
 7 BY BOARD MEMBER PURCELL:
 8 Q. Did I hear you say aquifer is defined
 9 roughly as something or an area where water can be
 10 economically extracted for commercial residential
 11 use?
 12 A. Yeah, that's a good portion of the
 13 definition of aquifer, yes, sir.
 14 Q. That's yours or that's Illinois Code
 15 or --
 16 A. Illinois Code defines it, and that's
 17 essentially what they say in there. That's not the
 18 exact words, but that's typical of the professional
 19 hydrogeologic community. They have a definition
 20 like that.
 21 Q. Okay. Thank you. There was some
 22 conversation or questions and answers regarding
 23 drain tiles in the farm fields. And that's just
 24 kind of rehashing what you said, the water

1 infiltrates to the drain tiles and then leaves the
2 ground.

3 At what level were the drain tiles
4 at this site, do you know?

5 A. I want to say three feet. I don't know
6 that I know that exactly.

7 Q. I missed something. We've gone over a
8 bunch here, but again, please define for me what is
9 a confining unit as it's been used in these
10 hearings?

11 A. A confining unit would be in the site
12 conceptual model that was put forth by the Applicant
13 is that the unconsolidated glacially originated
14 materials acts as a barrier to prevent the flow of
15 water under normal pressures, under atmospheric or
16 normal pressures. It prevents the flow of water.

17 Q. Okay. And did I hear you correctly
18 saying you don't believe there is enough information
19 presented by this Applicant to determine whether the
20 upper -- was it the two levels, the Mason and Wedron
21 are a confining or not a confining unit?

22 A. Yeah, you -- I don't think that they
23 have proven that fact. They have gone toward that.
24 They've conducted themselves well in looking at

1 permeability data in these -- from the Shelby tubes,
2 the laboratory work.

3 But, again, one of the big data
4 gaps is in the aquifer pumping test that we spent
5 some time on and in the horizontal hydraulic
6 conductivity testing. So we really -- we really
7 don't have, in my opinion, proof. So, therefore,
8 the answer to your question is that, yeah, I feel
9 that there are data gaps that will not allow me to
10 make the opinion that this site has a laterally
11 extensive confining unit.

12 Q. Okay.

13 A. Upper confining unit.

14 Q. You mentioned horizontal conductivity.
15 What about vertical conductivity?

16 A. Yeah.

17 Q. Is there enough information to
18 determine --

19 A. Yeah, I think so. There was a number of
20 tests done using the laboratory permeameters devices
21 and those typically give you a good handle on
22 vertical permeability.

23 Q. And what's your opinion regarding the
24 vertical permeability?

1 A. Well, any time you get a value of one
2 times ten to the minus seven centimeters per second,
3 that material, for practical purposes, is considered
4 impermeable.

5 Q. So put it in terms I can understand.
6 What is your opinion regarding the vertical
7 permeability, please?

8 A. Would you clarify the question?

9 Q. Well, you answered it in some technical
10 term that I don't quite understand. All I'm asking
11 is do you have an opinion as to whether there is
12 vertical permeability at the site or there is not
13 vertical permeability at this site?

14 A. Well, where the samples were taken and
15 where the samples had that certain value that I told
16 you about, the one times ten to the minus seven
17 centimeters per second, that, in other words, is a
18 theoretical amount. That's a theoretical flow rate
19 of a theoretical particle through that material. It
20 will travel -- Oh, boy. Putting that in feet per
21 year, that's tenths -- I mean, a fraction a very,
22 very small fraction of a foot per year. So that
23 means that it's quite impermeable material.

24 However, what you have to do is you

1 have to have those samples throughout the
2 stratigraphic column. In other words, you can take
3 a sample here, but if you don't take a sample down
4 here, I don't know anything about the vertical
5 permeability here, or if I don't take a sample down
6 here, I still don't know anything about the vertical
7 permeability of that particular part of the -- of
8 the unconsolidated material.

9 So I can't -- I can't give you an
10 answer that says this site has great vertical
11 permeability, or it has poor vertical permeability.
12 But what I can tell you is that in a large number of
13 the samples, they came back, where they sampled,
14 there is demonstrated good vertical permeability --
15 excuse me, impermeability.

16 Q. Good, meaning --

17 A. Meaning -- Yeah, let's get rid of that
18 word, good. Let's use the word that the tests
19 indicate that it would be very difficult to transmit
20 water through the material --

21 Q. So --

22 A. -- in those places that they sampled and
23 in those places that they had a one times ten to the
24 minus seventh value or lower.

1 Q. So that would mean very low
 2 permeability?
 3 A. Yeah, one times ten to the minus seven.
 4 Yeah, I think most people would -- most workers
 5 would say, yeah, that's very low permeability.
 6 Q. Thank you. Most workers.
 7 Are you familiar with the
 8 methodology of tritium levels, using tritium levels
 9 to determine whether there is vertical conductivity
 10 in a site?
 11 A. Yes, I am. We use that tool on
 12 occasion.
 13 Q. At your firm?
 14 A. Yes.
 15 Q. Are you familiar with the IEPA, what
 16 their standards are regarding tritium levels in
 17 groundwater --
 18 A. Standard.
 19 Q. -- as the status for permeability?
 20 A. Not specifically, no.
 21 Q. Okay. What levels do you determine or
 22 how do you -- what guides do you use?
 23 A. Well, what we do is -- It's kind of a
 24 general tool. Essentially, you probably have heard

1 originally had a pound of it, now I have a half a
 2 pound, that tritium had been in that water sample
 3 for 13 years.
 4 So it's kind of a relative -- you
 5 know, it is exact in a sense that it has a half
 6 life, but it's inexact in the sense that it's hard
 7 to know exactly how much parent material was there
 8 in the first place. You know, where were you -- You
 9 know, how much of that material in the atmosphere
 10 got to that particular recharge location. In other
 11 words, there was a tritium band in the atmosphere,
 12 and it rained, and it went into the aquifer because
 13 the rain pushed it in there. You know, what were
 14 those concentrations. That's where it becomes --
 15 that's where it becomes a little bit less
 16 scientific. So it's kind of a gross general tool to
 17 use.
 18 If you find tritium in an aquifer
 19 and it was -- and the sample was done correct so
 20 that the sample was never exposed to the current
 21 atmosphere, then you can say that the water is very,
 22 very young. It's less than 50 or 60 years. It's
 23 been there for less than 50 or 60 years.
 24 Q. Okay. I'm going to read something from

1 through testimony that the tritium was added to the
 2 atmosphere during the nuclear testing, mostly in
 3 Nevada and other places in this country and around
 4 the world in the late 1940s and '50s and up until
 5 the mid '60s actually.
 6 And that material was essentially
 7 not present in the atmosphere prior to that time.
 8 So if you take a sample of groundwater, properly
 9 take it so it's not exposed to atmospheric
 10 conditions, that it hasn't been ever exposed to any
 11 artificially charged atmosphere -- artificially
 12 charged with tritium, and you take that sample and
 13 you find no tritium in it, then at a minimum, you
 14 can say that that water has been in place
 15 since prior to the testing of nuclear devices in the
 16 United States and around the world. So that's just
 17 kind of a nutshell approach to it.
 18 Tritium has a half life. In other
 19 words, it decays at a certain -- if you have one
 20 pound of it, 12 and a half years later or 13 years
 21 later, you would have a half a pound of tritium, and
 22 a half a pound of its daughter product, its decay
 23 product.
 24 And so you would know that if I

1 the Illinois EPA Bureau of Water website, and I want
 2 you to just give me your opinion as to whether you
 3 feel this is valid or not.
 4 It says, in summary, tritium levels
 5 at or below one tritium unit are obtained from water
 6 supply wells which are, quote, not vulnerable to
 7 contamination. Do you feel that's accurate?
 8 A. Boy, I don't have enough information
 9 to --
 10 Q. So you -- You use tritium levels to
 11 evaluate whether you think a site is vulnerable or
 12 not, but yet you don't know what levels you use to
 13 determine whether they are vulnerable or not?
 14 A. That's correct.
 15 Q. Okay. That's interesting.
 16 A. I personally -- I was explaining in
 17 general terms how that is done. My firm does it,
 18 and I'm not an expert in the exact nature of
 19 tritium. That's why I used a general explanation of
 20 it. So I don't have an opinion on the EPA -- IEPA
 21 bulletin.
 22 Q. Okay. Have you reviewed all the
 23 testimony of Ms. Underwood and Mr. Norris here at
 24 this landfill?

1 A. Yes.
 2 Q. Okay. Now, I'm going to paraphrase what
 3 I think I've heard, and I want you tell me if you
 4 agree or disagree.
 5 A. Okay.
 6 Q. Ms. Underwood claims that the top, the
 7 Mason and Wedron layers are a confined unit or
 8 confining unit; is that fair?
 9 A. Yeah.
 10 Q. Okay. Now, Mr. Norris, he claims that
 11 they are not a confining unit; is that correct?
 12 A. Essentially.
 13 Q. Okay. And you say there's not enough
 14 information to determine whether there is a
 15 confining unit or nonconfining unit?
 16 A. That's my general opinion, yes, sir.
 17 Q. And y'all, at least in my opinion, seem
 18 to have good background, studied a lot, worked a lot
 19 in this field. I'm a little bit confused. If the
 20 other two who testified can form an opinion, and you
 21 cannot form an opinion, why should I believe you?
 22 A. I don't know why you should believe me
 23 other than the fact that I have credentials that are
 24 impeccable. I have been reviewed by reviewing

1 committees as to my honesty and ethics.
 2 I'm a member of the American
 3 Institute of Professional Geologists who
 4 investigated me before they let me in. I have a
 5 30-year track record in the community. I'm the --
 6 I've been appointed by the Governor of Missouri to
 7 the -- I'm the chairman of that Board of the
 8 Registered Geologists.
 9 You don't personally know me, so
 10 you may not have any reason to believe me, but my
 11 colleagues do believe me.
 12 Q. But two colleagues here --
 13 A. They believe that which -- that work
 14 that I do is my -- is my honest opinion.
 15 BOARD MEMBER PURCELL: Okay. Thank you.
 16 BOARD MEMBER WEHRLI: Mr. Bognar, Jeff
 17 Wehrli.
 18 EXAMINATION
 19 BY BOARD MEMBER WEHRLI:
 20 Q. From the other questions and from your
 21 testimony, I've learned that there is an accepted
 22 amount of flow that changes a layer from an upper
 23 confining unit to an upper layer of an aquifer. And
 24 that would be one times ten to the minus seventh

1 either horizontally or vertically. Are we in the
 2 ballpark there.
 3 A. Yeah, we're in the ballpark.
 4 Q. Okay. That's fine. Wouldn't a simple
 5 explanation of drain tile from a farmer's
 6 perspective being that it allows the water to leave
 7 an entrapped area in a quicker fashion?
 8 A. Sure.
 9 Q. Okay. And not necessarily have anything
 10 to do with aquifers or anything --
 11 A. Absolutely.
 12 Q. -- just basically drains the upper
 13 surface?
 14 A. Yeah, my testimony was that that's a
 15 relative -- the permeability is a relative thing
 16 that it at least stops temporarily at a particular
 17 place, and you need to get rid of it if it lasts too
 18 long there.
 19 Q. Sure. And you described the water table
 20 as the top of an aquifer. Can there be layers of
 21 clay under that that would separate a water table
 22 from the aquifer?
 23 A. Absolutely. There can be.
 24 Q. Okay. Once the soil sample has been

1 allowed to dry out, would its lab tests for
 2 hydraulic permeability necessarily show the same
 3 results if it was re -- I guess if it was wet again?
 4 A. Well, it depends upon what the material
 5 was.
 6 Q. Right.
 7 A. And if you knew what the moisture of
 8 that material was and the moisture stayed the same,
 9 and it did not go through freeze/thaw cycles, it's
 10 possible that the sample could be used again for the
 11 same test. Personally, I would not do that.
 12 Q. Okay.
 13 A. If it was a clayey material.
 14 Q. Were the samples that you -- your people
 15 examined, I'm assuming they examined, or did they
 16 just examine the results of the samples?
 17 A. Sir, we did not physically look at
 18 the -- We did not look at the physical samples. We
 19 read simply the reports provided in the Application.
 20 Q. And would the reports contain the way
 21 that the samples were stored, is that --
 22 A. I don't know about that.
 23 Q. Okay. So your knowledge, there is no --
 24 there's no record of how they were stored?

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1 A. Yeah. To my knowledge, there's not,
2 yeah.
3 Q. Okay. Basically, your testimony is that
4 there's not enough information to determine the
5 conductivity of that upper layer.
6 What level of certainty would you
7 be comfortable with versus what level of certainty
8 do you think was achieved?
9 A. Well, I think I demonstrated especially
10 on the slide that had the aquifer pumping test --
11 Again, that's -- In my opinion, that's physical
12 proof. That would help to -- that would help to
13 convince me if we didn't see any movement in the
14 upper -- in the -- in what the model calls the upper
15 confining unit, if we didn't see any movement, and
16 if the aquifer pumping test was done sufficiently
17 long and correctly, and you don't see that movement,
18 then you have a tendency to believe, yeah, this is
19 confined in this area.
20 The other thing that I think is a
21 major data gap is the lack of horizontal hydraulic
22 conductivity from slug testing in just that
23 material.
24 Part of the complaint, if I read

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1 the testimony -- if I'm remembering the testimony
2 correctly was that it's difficult to do that kind of
3 work because water doesn't accumulate at a very fast
4 pace in those types of materials, and that may be
5 very true, but there's other ways of going about it.
6 You can put water in the
7 piezometer. You can add water to it, a known
8 volume, and then watch it go into the formation and
9 get some readings and that sort of thing. And see
10 that sort of thing simply was not done, and that
11 prevents -- that prevents me from saying that
12 there's proof that this thing, indeed, is a
13 confining unit.
14 Q. Okay. And throughout the gist of the
15 testimony and the hydrogeological aspects of this
16 site, and I guess any site, it comes to me that
17 there is no set or accepted grid patterns that
18 Applicants and/or people who are opposing this are
19 required to check the different levels and the
20 different tests.
21 As simple as our zoning laws when
22 subdivisions come in for houses, we demand that they
23 have 200-foot grids to test for their septic fields.
24 It's fairly simple, and it's very common. What I'm

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1 led to believe is there's no accepted grid patterns
2 for any of the testing. Would that make our lives
3 and your lives a lot simpler if we had these
4 standards?
5 A. Well, I can tell you that having worked
6 in both states, that Illinois allows more
7 professional judgment in these cases. And
8 personally, I'm all in favor of that.
9 When you develop your conceptual
10 model, then you go about testing that conceptual
11 model and depending upon the attitude of -- the
12 physical attitude of the rock material, its
13 thickness, and that sort of thing, it's going to
14 demand a certain amount of physical investigation;
15 in other words, a certain amount of boreholes and to
16 be placed in certain places.
17 In the State of Missouri, they do
18 set up a rectangular grid and that, quite frankly,
19 is a big waste of money and a big waste of time.
20 Q. Interesting.
21 A. So in this particular case, no, it does
22 not make sense. I'm much more in favor of the
23 Illinois approach of best professional judgment.
24 Q. But in saying best professional

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1 judgment, unfortunately, it becomes up to
2 nonprofessionals in the field to judge its merits.
3 And without some type of leveling
4 the playing field, it makes it very difficult for us
5 to accept that a site has either been overanalyzed,
6 under-analyzed, or analyzed just enough, if you
7 understand what I'm saying?
8 A. Yes, I do, sir.
9 Q. If I was to draw down the water table by
10 removing the upper confining unit or clay layer near
11 the site and continually pumping that area, would
12 that change the hydrology of that site?
13 A. Well, your theory -- your theoretical
14 hypothetical situation is that you've removed the
15 overburden?
16 Q. Yep.
17 A. And you've drawn down --
18 Q. Near the site. I'm constantly keeping
19 that water table drawn down low.
20 A. Yeah.
21 Q. Is that going to change the hydrology of
22 that site?
23 A. Well, theoretically, the water will move
24 toward those devices that you've installed a well or

Page 2110

1 a series of wells to extract or dewater the system.
2 The water particles are going to flow to those
3 wells. And so if you have those wells deep enough,
4 you can -- you can -- yeah, you can dewater it. And
5 would that change the hydrodynamics of the site?
6 Absolutely, in a major way.
7 Q. Would it speed the amount of flow
8 through an area?
9 A. It depends upon the matrix of the
10 aquifer.
11 Q. Sure.
12 A. If it has a high hydraulic conductivity
13 and you can pass a lot of water through it under
14 pressure or from the pumped well, then, yeah, it
15 would speed it up.
16 Q. But it would create its own little cone
17 of depression?
18 A. It would create exactly that, sir, a
19 cone of depression.
20 BOARD MEMBER WEHRLI: Okay. Thank you.
21 BOARD MEMBER WYKES: Mr. Bognar, Bill Wykes.

EXAMINATION

BY BOARD MEMBER WYKES:

22 Q. I'd like to read from Page 1 of the Site

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1 Location Application for Willow Run. Third
2 paragraph starts out, says no part of Willow Run
3 will be constructed in the bedrock aquifer. In
4 fact, there will be a minimum five-foot thick low
5 permeability soil layer between the bottom of the
6 landfill liner and the top of the bedrock aquifer.
7 Do you agree with that statement?
8 A. Let's clarify what bedrock aquifer
9 means. That means the, essentially, the bedrock
10 portion. We had this discussion on the
11 hydrostratigraphic unit that could include
12 unconsolidated materials and bedrock, so -- So if
13 the statement were to say -- if the statement were
14 to say that there would be five feet of material, of
15 unconsolidated material, above the bedrock, I would
16 have a tendency to agree with that statement.
17 But because the statement includes
18 declarations about permeability, I don't have enough
19 information to agree or disagree with that statement
20 because I don't have the permeability data
21 throughout the site.
22 Q. Okay. Criterion 2 states the facility
23 is so designed, located, and prepared to be operated
24 that the public health, safety, and welfare will be

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1 protected.
2 In your professional opinion, has
3 that criterion been met?
4 A. No, because of the data gaps.
5 BOARD MEMBER WYKES: Thank you.
6 HEARING OFFICER KINNALLY: Okay.
7 BOARD MEMBER DAVIDSON: Bob Davidson. One
8 last question.
9 EXAMINATION
10 BY BOARD MEMBER DAVIDSON:
11 Q. In the testimony here, you reviewed the
12 '07 soils; correct?
13 A. Yes, sir.
14 Q. And some of those soils were taken in --
15 excuse me. You reviewed the '08 testing; correct?
16 A. Yes, sir. The results of it.
17 Q. The results of it?
18 A. Uh-huh.
19 Q. Some of those soils were taken in '07
20 and retested; am I correct, or they use the same
21 test?
22 A. I do not -- I cannot sit here and say
23 that I know what happened with the '07 samples
24 versus the '08 samples. I do not have that in my

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1 head.
2 Q. You did not review any of the '07
3 testing in comparison of the two?
4 A. We looked at the data that was presented
5 in the report. And as far as I know, we did not
6 understand until very late.
7 We read in some of the testimony
8 that some of them had been reworked, so I don't know
9 which ones have been reanalyzed. I personally don't
10 know that nor does my staff.
11 BOARD MEMBER DAVIDSON: Thank you very much.
12 Thank you, Mr. Chairman.
13 HEARING OFFICER KINNALLY: Mr. Blazer?
14 MR. BLAZER: Just a few, Mr. Kinnally. Thank
15 you.
16 CROSS-EXAMINATION
17 BY MR. BLAZER:
18 Q. Mr. Bognar, you had said in terms of the
19 relationship between the water table and the aquifer
20 or what may be the relationship that the water table
21 is the top of the unconsolidated uppermost aquifer.
22 That was your testimony. Did you mean to say the
23 top of the unconfined uppermost aquifer?
24 A. Yes, I did. Thank you for that

1 correction.

2 Q. Okay. So following up, I believe, on

3 what Mr. Wehrli asked you, if the aquifer were

4 confined, then the water table would be separate

5 from the aquifer; is that correct?

6 A. It can be.

7 Q. Okay.

8 A. It can be.

9 Q. All right. I just want to ask you a

10 couple of questions about some of your prior

11 landfill experience and your resume.

12 A. Sure.

13 Q. Mr. Moran mentioned this Perry County,

14 Illinois landfill siting. It's on Page 7 of your

15 resume. You say here in your resume, the siting was

16 strongly opposed by legal representatives of an

17 environmental action group.

18 Can you recall what the basis of

19 the opposition was?

20 A. They simply did not want a landfill in

21 their neighborhood.

22 Q. All right. Do you recall if that

23 landfill was proposed to be located either at or

24 near a groundwater aquifer?

1 A. The aquifer -- Yeah, I do recall the

2 hydrogeology of the site. It was a former coal --

3 surface coal mine that had been somewhat reclaimed.

4 And the aquifer was significantly beneath the level

5 of the -- of the proposed liner.

6 Q. But the liner -- so the liner was

7 proposed to be placed over a spent coal mine?

8 A. Yes.

9 Q. And in this one, you worked for the

10 Applicant?

11 A. Yes.

12 Q. And this one was approved?

13 A. Yes. The facility has been built.

14 Q. All right. Was that a Subtitle D

15 landfill?

16 A. Yes.

17 Q. All right. Then going forward to

18 Page 9. There's a discussion of a horizontal

19 expansion of a landfill in Cuba, Missouri?

20 A. Right.

21 Q. And here you state, managed a staff of

22 hydrogeologists to expand the landfill into an area

23 which has geologic features. There's a gap here.

24 I'm not quite sure what you meant to say, but it

1 says regulators and concerned citizen originally

2 said were detrimental to landfill expansion because

3 the environment would be impacted.

4 Can you recall what the basis of

5 that concern was in that matter?

6 A. Absolutely.

7 Q. Could you explain that, please?

8 A. The situation at that landfill is one of

9 paleokarst. And I know that that terminology has

10 come up in prior testimony related to this site.

11 The paleokarst features are ancient

12 cave systems that were developed during -- after, --

13 400 million years ago. The rocks were originally

14 laid down 400 million years ago. And then between

15 400 million and 300 million years ago, it turned

16 into a cave system.

17 Later on, as the oceans came back

18 across the continent in Pennsylvanian time, which is

19 225 million years ago, that's the -- they brought

20 with them sediments, and they filled in those caves.

21 So now what you see when you -- and those are all

22 fine grain, clayey sediments.

23 And as a matter of fact, those

24 things are mined throughout the State of Missouri

1 for firebrick and clay pottery and that sort of

2 thing. It's that type of a clay.

3 The concerned citizens and the

4 regulatory agency felt that these things could act

5 as conduits to direct any potential contaminated

6 water from a landfill, could direct it away, who

7 knows, several miles away not knowing exactly the

8 nature or the location of all of these things, which

9 way they may go, and which way they might not go.

10 They were concerned about that.

11 So what we did is we demonstrated

12 that these things actually had a higher

13 permeability -- excuse me -- had a lower

14 permeability than the surrounding bedrock had,

15 making them essentially innocuous, that the water

16 would have to flow around these things, and they

17 wouldn't flow through those things.

18 Q. Okay. Now, I think you testified early

19 on that you've worked on ten or so --

20 A. Yeah.

21 Q. -- landfill applications for applicants?

22 A. Right.

23 Q. The two I mentioned were two of them, I

24 assume?

1 A. Right.

2 Q. All right. As far as any of the other

3 eight, were any of those at or near aquifers?

4 A. Well, it depends on what you mean by at

5 or near.

6 Q. Let's start with on top of.

7 A. You mean, where the aquifer -- did the

8 aquifer touch the proposed liner?

9 Q. Let's say that there was a separation

10 between the bottom of the liner and the top of the

11 bedrock of between 5 and 25 feet?

12 A. Yeah, I would say that the ones in

13 Missouri, they all have that separation because

14 that's required by Missouri law. And the one in

15 Illinois, the Perry County one, I don't specifically

16 remember, but it definitely had a difference between

17 the top of the aquifer and the bottom of the liner.

18 Q. So the other eight or so that you worked

19 on, all of them were above an active aquifer?

20 A. Yes.

21 Q. And they were all Subtitle D landfills?

22 A. Couple of them were closed landfills

23 pre-Subtitle D.

24 Q. All right. And these were all ones that

1 only one that we know has a leak.

2 Q. So out of all the landfills you've

3 worked on, only two have been built without it and

4 only one has leaked that you've known of?

5 A. Yes.

6 Q. And none of them -- From your previous

7 testimony, and none of them have been built with a

8 double composite liner?

9 A. I believe the answer to that question is

10 yes.

11 I do want to re-emphasize the fact

12 that I'm not a landfill design engineer, but that is

13 my knowledge of those landfills. So talking about

14 leaking liners and composite systems are better

15 asked of people that are -- have expertise other

16 than myself, specifically, landfill engineers.

17 BOARD MEMBER VICKERY: That's all.

18 HEARING OFFICER KINNALLY: I've got a couple

19 of questions.

20 EXAMINATION

21 BY HEARING OFFICER KINNALLY:

22 Q. Can you pull your report out, which is

23 Exhibit No. 4?

24 A. I have it.

1 you worked for the Applicant?

2 A. The Applicant or the current owner,

3 right.

4 Q. All right. And to the extent you worked

5 for the Applicant in any of those, were all of those

6 approved?

7 A. Yes.

8 MR. BLAZER: That's all I have.

9 HEARING OFFICER KINNALLY: Okay.

10 BOARD MEMBER VICKERY: Just one question.

11 EXAMINATION

12 BY BOARD MEMBER VICKERY:

13 Q. Mr. Bognar, how many -- Oh, Anne

14 Vickery.

15 How many of the landfills that

16 you've worked on have had the actual liners built in

17 them?

18 A. I would say all but, well, two. All but

19 two. Two of them were pre-Subtitle D.

20 Q. Okay. And how many of them have leaked?

21 A. Well, the only one that I know that I

22 have personally worked on, and it was sited in the

23 19 -- late 1970s, that's the only one that leaks,

24 the one that I referred to this morning. That's the

1 Q. Okay. Now, if I understand your

2 testimony correctly, you made the statement that

3 based on your review of the Application, that the

4 Applicant haven't -- and I think I wrote this down

5 correctly, they haven't proven the fact.

6 Do you recall that?

7 A. Yeah.

8 Q. Okay. What is the fact in your mind

9 that they have to prove?

10 A. They have to prove that their conceptual

11 model is accurate. That's the broad statement.

12 Specifically --

13 Q. All right. Let me just analyze that.

14 Is that a -- In your mind, is that proof

15 quantitative or qualitative?

16 A. It is quantitative proof that we're

17 looking for. That's what scientists do. They

18 provide quantitative proof.

19 Q. So in determining the nature of the

20 proof, you are not offering any opinion with respect

21 to the nature of the proof as to its quality or

22 efficacy, just the quantity of the proof; is that a

23 fair statement?

24 A. I'm not sure if I understand. Would you

1 try that again?
 2 Q. Well, in my mind, and maybe I'm wrong,
 3 proof has two components. One is qualitative, and
 4 the other is quantitative; would you agree with
 5 that?
 6 A. Yes.
 7 Q. And is it your statement here tonight
 8 that the Applicant's deficiency, in your mind, is a
 9 lack of quantitative data to support proof of the
 10 fact they have to prove?
 11 A. Yes.
 12 Q. Okay. You're not offering any opinion
 13 as to the quality of the data that is supported
 14 other than the fact that it's not enough in terms of
 15 amount?
 16 A. That's correct, sir.
 17 Q. All right. Now, in this case, is it
 18 fair to say, Mr. Bognar, that if you had had the
 19 time, you would have done more testing to arrive at
 20 the opinions that you have shared with us tonight?
 21 You got into this late; right?
 22 A. Yeah.
 23 Q. And the amount of time that you spent on
 24 it, I believe you said with your team, was about

1 200 hours. You would have liked to have spent some
 2 more time; fair statement?
 3 A. That's the thing that people don't like
 4 about geologists, yes.
 5 Q. I didn't say I didn't like it. I just
 6 wanted to make sure I understand it.
 7 Now, if you'll look at your report
 8 for a minute, which is dated September 4th, 2008,
 9 and that is addressed to a man named James
 10 Grabowski. Do you see that?
 11 A. Yes.
 12 Q. Have you ever met him?
 13 A. Yes, I have.
 14 Q. Okay. And did you talk to him about
 15 this report?
 16 A. Yes, I have.
 17 Q. And is he the man who hired you?
 18 A. Yes.
 19 Q. And how did he find out about you?
 20 A. Through the attorney, Dan Kramer.
 21 Q. Okay. So the referral with respect to
 22 Mr. Grabowski's knowledge about your firm came
 23 through the lawyer; is that a fair statement?
 24 A. Yes. Yes.

1 Q. Okay. Now, what's your hourly rate, or
 2 how much money did your firm make with respect to
 3 the work that was performed, approximately, on this
 4 particular assignment?
 5 A. I believe we will have a bill total as
 6 of last Friday somewhere around \$19,000.
 7 Q. Okay. Now, if you would turn to your
 8 report, and on Page 3. Would you tell the Board in
 9 your mind what the function of a confining unit
 10 means to the Applicant in this Application?
 11 Obviously, there's a difference of
 12 opinion as to whether there is a confining unit or
 13 not a confining unit, and you've been able to say
 14 that you're not sure that it's a confining unit?
 15 What is the significance or the
 16 function of a confining unit in the Applicant's
 17 model presented to the Board? Please tell them.
 18 A. Sure. A confining unit would be
 19 essentially a last line of defense for a theoretical
 20 or hypothetical spill from a landfill beneath a
 21 landfill liner.
 22 If the landfill liner double
 23 composite, triple composite, what have you, were to
 24 fail, then you have that -- then you have that

1 natural system that would prevent that material from
 2 getting to the aquifer.
 3 Q. And assuming that there is a confining
 4 unit here, which I know you don't have enough
 5 information to make that determination, the
 6 confining unit will be the 12-foot thickness of the
 7 Wedron, Mason composition; fair statement?
 8 A. That's the conceptual model,
 9 essentially. It's the unsaturated portion of those
 10 two groups according to --
 11 Q. But according to the Applicant's model,
 12 that composition is 12 feet in depth at not
 13 necessarily across the site, but at the -- that's
 14 the most that it is?
 15 A. Generally speaking, yeah.
 16 Q. Okay. And that confining unit,
 17 depending on its permeability, is to be a barrier,
 18 if you will, to leachate being conducted down
 19 through it into the aquifer; fair statement?
 20 A. That's what the hope would be, yes, sir.
 21 Q. All right. What is a perched condition
 22 on Page 3 of your report? I don't know what that
 23 means.
 24 A. Yeah. Perched means that water can

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1 accumulate on -- within earth materials above the
2 general water table by -- There may be a clay layer
3 or a shale layer that rainwater has fallen, and it
4 stops -- it stops its vertical migration to the
5 general water table, and it stays there. It
6 accumulates on top of a ledge, if you will.
7 So that water body is called perch
8 because it's just like it says, it's perched above
9 the general water table.
10 Q. But isn't that largely a meteorological
11 event or a result of a meteorological event?
12 A. Perched water can be from what you just
13 described, or it can be locked up for hundreds of
14 thousands of years.
15 Q. So you don't know whether or not there's
16 a perched condition at this particular site?
17 A. Yeah, that's correct. We point that out
18 that we don't think anybody has demonstrated the
19 nature of the water --
20 Q. And if the Board, or if I wanted to find
21 out how to determine whether there was a perched
22 condition, what type of examination or investigation
23 would be undertaken to conclude that?
24 A. Well, if I found water in a body of sand

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1 that was above a general water table, then if I have
2 to know whether or not that's not communicating with
3 the water table in any place, there's several things
4 that I could do. I can conduct geophysical surveys
5 that measure the earth's resistivity, and that would
6 give me an indication of where the water begins and
7 ends, and where the sand layer may end and begin.
8 Or I can do a direct analysis by
9 drilling holes in several places to find out the
10 lateral extent of the earth material containing the
11 so-called perched water.
12 Q. No resistivity studies were done on this
13 particular --
14 A. I don't recall that there were.
15 Q. And you didn't review all the boring or
16 the well logs with respect to this particular site
17 personally?
18 A. Not personally, that's correct.
19 Q. And no report was made to you by any of
20 your team that this particular area was a perched
21 condition?
22 A. No, they --
23 Q. All right.
24 A. No.

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1 Q. Okay. Now, just one point on this
2 meteorological statement that you made. You didn't
3 do any studies with respect to the effect of rain
4 accumulation on this particular area; true? You
5 didn't do any rain gauge studies?
6 A. No, I did not, nor did anybody else.
7 Q. Right. And nowhere in your report,
8 Exhibit No. 4, is there any criticism of the
9 inclusion or exclusion of a rain study with respect
10 to the model given by the Applicant; true? It's not
11 there?
12 A. Yeah, that's true.
13 Q. Okay. Now, there's one other thing
14 that -- a couple other things I want to ask you
15 about.
16 A. Uh-huh.
17 Q. You made the opinion, or you have the
18 opinion, apparently, that sand percentages are as
19 much as 28 percent in units classified as clay.
20 Page 4 of your opinion. Do you want to look at
21 that?
22 A. Yeah.
23 Q. That determination was made by one of
24 your team; is that right?

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1 A. Yes.
2 Q. How many units did they classify?
3 A. Units?
4 Q. Uh-huh. Units classified as clay
5 contains 28 percent in a percentage of sand of those
6 units. And I wanted to know how many units were
7 classified as clay? It's not very many, is it?
8 A. I'm looking at Table 5-2 to answer that
9 question. Clay can be CL or CH.
10 Q. So that's Attachment B?
11 A. There's 25 --
12 Q. Of Exhibit 4?
13 A. It's Attachment B, yes, sir, which is
14 Table 5-2.
15 Q. Well, according to my arithmetic,
16 there's 32 classifications which are either CL or
17 CH. Are you saying that 28 percent of those
18 units --
19 A. No.
20 Q. What are you saying?
21 A. I'm saying that the intent -- the
22 message behind the statement is that even though a
23 grain size analysis, which is the test that was done
24 here --

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1 Q. Uh-huh.
2 A. -- would be categorized by the --
3 according to the Unified Soil Classification System,
4 it would be categorized as a clay, a CL or a CH, a
5 lean clay or a fat clay. That doesn't mean that
6 that sample has all clay size particles in it. And
7 we noticed that some of them have as much as -- at
8 least one sample, and I don't know all of the
9 details, but at least one of these samples had as
10 much as 28 percent either sand or gravel in it, but
11 it was still classified as a clay.
12 Q. Wouldn't it have been a lot more helpful
13 to us to give us not a high -- the high amount as
14 opposed to the average amount?
15 In other words, you're saying that
16 of these units, one of those units had 28 percent of
17 its deposition sand material; is that a fair
18 statement?
19 A. Yeah.
20 Q. Wouldn't it have been more helpful to
21 tell us what percentage of those units, what the --
22 had or what was the average percentage of sand in
23 those units as opposed to what the high one was?
24 A. That would be very useful data.

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1 Q. Okay.
2 A. We were scurrying to get this thing
3 done.
4 Q. That's fine. I understand. Let me ask
5 you. This is important to me.
6 Is there any way, in your
7 opinion -- You looked at the CEC opinions with
8 respect to this Wedron, Mason unit being a partially
9 confining unit, their opinion with respect to it.
10 Do you recall that?
11 A. Yeah.
12 Q. Is there any way, in your mind, to
13 harmonize that opinion and the opinion of Joan
14 Underwood that it's a confining unit?
15 Can you tell us that? Is there any
16 way to harmonize that? Tell us --
17 A. Given the existing data set in my
18 opinion, no.
19 Q. All right. You relied on two
20 publications in reaching your opinions, and I'd ask
21 that you file those with the Board. And those are
22 Hydraulic Conductivity Determinations in Unlithified
23 Glacial and Fluvial Materials?
24 A. Uh-huh.

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1 Q. A study done in 1990.
2 And also Ms. Herzog's study of Slug
3 Tests for Determining Hydraulic Conductivity of
4 Natural Geologic Deposits in 1994.
5 Could you give those to your lawyer
6 and have him file those, sir?
7 A. Yes, we will.
8 HEARING OFFICER KINNALLY: Thank you,
9 Mr. Bognar, for sharing the information you have.
10 Did you have any other questions,
11 Mr. Dan Kramer?
12 MR. KRAMER: I do not, Mr. Kinnally.
13 HEARING OFFICER KINNALLY: No.
14 MR. BLAZER: Mr. Kinnally, I don't recall you
15 opening cross up to participants.
16 HEARING OFFICER KINNALLY: Pardon me?
17 MR. BLAZER: I don't recall you opening cross
18 up to participants.
19 HEARING OFFICER KINNALLY: Okay. Well, they
20 can come on up and ask some questions too.
21 MR. MILLIRON: Todd Milliron, 61 Cotswold
22 Drive, Yorkville.
23
24

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1 CROSS-EXAMINATION
2 BY MR. MILLIRON:
3 Q. Would you put up the subject site
4 groundwater flow system that came out of the Waste
5 Management Application?
6 A. Is that the one?
7 Q. All right. You had discussed the wells
8 that were there, and some of them were put in red.
9 Can you highlight the ones that you said were in
10 red?
11 A. Yeah, they are the ones that appear as
12 red on the screen.
13 Q. Okay. The question is was those wells
14 actually drilled?
15 A. No. These are -- these are our opinion
16 of what might have been done during the aquifer
17 pumping test to provide data that would help one
18 make a decision as to whether or not the unit was
19 confined or not.
20 Q. Was there wells drilled around that
21 aquifer test well that could have been used for
22 that?
23 A. Not where they were placed. Don't get
24 me wrong. The work that they did was good -- was

1 good work, but it was -- it did not answer the
2 question of whether or not the unconsolidated
3 overburden material was -- is, indeed, confined nor
4 did it answer the question about the lower bedrock
5 confining unit. It did not prove either one of
6 those.

7 Q. And so -- All right.

8 A. It did not look to prove either one of
9 those. It was not included in the test.

10 Q. So another question I guess would be the
11 confining aquifer. We just talked about this upper
12 layer of the Wedron and Mason at the top?

13 A. Yes, sir.

14 Q. Is it also the bottom where -- I guess
15 there's the Galena that's down there, or the
16 Platteville?

17 A. Yes. The Galena is essentially from
18 this line here down to that line there. And that's
19 a carbonate rock consisting of limestones and
20 dolomites. And then below it, again, the conceptual
21 model is that the Platteville, which is this darker
22 gray layer here, is the bottom confining unit.
23 That's the conceptual --

24 Q. So there is a top confining unit and a

1 bottom confining unit?

2 A. That's what the conceptual model says.

3 Q. Okay. What is the depth of that
4 Platteville roughly on that site, do you remember?

5 A. I don't recall.

6 Q. Okay. That's okay. There was evidence
7 presented that they did find tritium at like
8 80 feet. Do you put any value on that?

9 A. Well, if tritium was found at 80 feet
10 deep in that aquifer, it's there for one of two
11 reasons, that it was transported -- it was
12 transported some distance or the sampling
13 methodology was incorrect or the laboratory data
14 were correct or incorrect.

15 So in other words, you can --
16 Tritium analysis is very delicate. It's a very
17 highly precise technique for grabbing that sample
18 and making sure that it's not contaminated with
19 current atmosphere. If it is, if it's done wrong,
20 then you will see tritium show up in the sample, and
21 it may not really be in the groundwater.

22 So you have to be cautious about
23 that. You have to really understand it. Not having
24 looked at the procedure, I don't have an opinion as

1 to whether or not that's a fact or not.

2 Q. Okay. Assuming it was done validly, and
3 we found tritium at that depth, that would indicate
4 vertical --

5 A. That means that water got there at that
6 depth in less than 60 years.

7 Q. Okay. And based upon those permeability
8 studies of ten to the minus seven and that type of
9 thing, is that a possibility?

10 A. It's a possibility, but it's not
11 documented.

12 Q. Okay.

13 A. There's a lot that's possible. But,
14 again, as a scientist, we need documentation and
15 quantification before we can render an opinion.

16 Q. Okay. If the rain gauge study was done
17 on this site, would that have been evidence of
18 possibly this site would have recharged -- or could
19 be a recharge area?

20 A. It's a tool. The rain gauge would tell
21 you how much precipitation fell on this specific
22 property. As you know, as all of us know just by
23 observing what happens during rain events, it rains
24 harder over there than it does over here. So you

1 need -- Again, if you want to quantify how much
2 precipitation was on the site, you set up a rain
3 gauge.

4 Q. Would that be reflected in the well
5 depths, too, as it soaked in?

6 A. Well, you would -- Typically, a
7 hydrogeologic analysis understands the impact that
8 that precipitation has on the aquifer at the site.
9 We don't have that luxury here because we only have
10 two data points at most -- or excuse me, four data
11 points at most, and two data points from most of the
12 wells throughout the year.

13 So if we had data points on a very
14 regular basis so that we could see the reaction of
15 the water level in these piezometers, as it relates
16 to the precipitation and/or drought or lack thereof,
17 then you can start making some observations about
18 how precipitation or lack thereof impacts the
19 aquifer. It also helps with determining whether or
20 not the unit is confined or not.

21 Q. Okay. And that would have been that
22 \$700 tool that could have taken tests at regular
23 intervals?

24 A. That's one way of doing it, yes, sir.

1 Q. Okay. Ms. Underwood had stated that the
2 aquifer moves horizontally, and there was -- There
3 was no recharge area on the site, and it had to
4 recharge for the water on this area because it was
5 apparently like an old lake bed, and that's where
6 this clay came from was the bottom of this lake?

7 A. Yes, sir.

8 Q. That had to come from a recharge area
9 offsite. Based upon the permeability factors they
10 put on there, do you have any idea based upon the
11 age of that water how far offsite that would have
12 been?

13 A. Well, to age date water, you would have
14 to have -- You would have to have a lot of data
15 points, and you would have to understand the
16 formations -- what's called the hydraulic
17 conductivity and transmissivity. Those are
18 technical terms for understanding how much water may
19 pass through a certain body of rock or of its host.

20 And you need a lot of data in order
21 to zoom in to be highly specific -- like you're
22 asking me a highly specific question, so you would
23 need a lot of information. But Ms. Underwood's
24 testimony was, essentially, she was presenting the

1 site conceptual model.

2 And the site conceptual model that
3 she gave in regard to where's the general recharge
4 in the vicinity in the region versus where's the
5 discharge, I think she did a very decent job of
6 doing that. But when you get down to very precise
7 questions like how long was this particular particle
8 of water in this aquifer, you need a different set
9 of data that we don't have.

10 Q. Okay. And so this gets back to that
11 incomplete data thing?

12 A. Yeah.

13 MR. MILLIRON: Okay.

14 HEARING OFFICER KINNALLY: All right. Anyone
15 else?

16 MR. SIEGEL: I'm Burton Siegel.

17 CROSS-EXAMINATION

18 BY MR. SIEGEL:

19 Q. Isn't it true that there's aquifer no
20 matter where you go?

21 A. In this part of the world if you drilled
22 deep enough, you'll find water, yes, sir.

23 Q. So the problem is we ain't got enough
24 clay here?

1 A. What problem? I'm not sure if I
2 understand.

3 Q. Well, to keep the aquifer to get
4 contamination for the wells?

5 A. Let me see if I can state your question
6 a little bit differently, if you don't mind.

7 Your question is, is there enough
8 unconsolidated impermeable material to protect the
9 aquifer?

10 Q. Right.

11 A. That's what my contention is, is that I
12 don't have enough information to formulate that
13 opinion.

14 Q. But it wouldn't be too hard to figure
15 that out if there was 50 foot of clay there; right?

16 A. There's certain things you can do to
17 quantify it. And again, that's what scientists do.
18 They create a conceptual model, then they go about
19 proving it by collecting data from various methods.

20 And if you don't -- If you have
21 concerns as to, well, the process would be, go out
22 and do your first round of information, if that does
23 not answer all of the questions, then you go out,
24 and you collect some more data and you fill in

1 what's called the data gaps.

2 And you do that until the data gaps
3 are filled to where a group of reasonable, qualified
4 scientists, no matter what the topic might be, that
5 they can come to a general consensus. That's when
6 you know that you have your data gaps filled.

7 Q. So every garbage dump is built on an
8 aquifer somewhere down there?

9 A. Well, yeah, just about anywhere on the
10 planet if you drilled deep enough, you will find
11 water.

12 Illinois is blessed with aquifers
13 all over the state. In other words, water-wise.
14 But in some places, the water quality is such that
15 it's so salty that it wouldn't be considered an
16 aquifer because of water quality. But you could
17 find, physically, the water present in virtually all
18 of the state.

19 MR. SIEGEL: Thank you.

20 HEARING OFFICER KINNALLY: Anyone else?
21 Okay.

22 You don't have any further
23 questions?

24 MR. KRAMER: No more witnesses, Mr. Kinnally.

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1 HEARING OFFICER KINNALLY: All right. So you
2 rest?
3 MR. KRAMER: I do.
4 HEARING OFFICER KINNALLY: You are excused.
5 Thank you for coming.
6 Okay. Now, Minooka has rested.
7 Grundy County has rested. And I think we're done
8 with all the witnesses other than rebuttal. And
9 you're not ready to go; right?
10 MR. MORAN: That is correct.
11 HEARING OFFICER KINNALLY: Okay. So anybody
12 want to make public comment, we'll do so after we
13 take a ten-minute break.
14 (Recess taken.)
15 HEARING OFFICER KINNALLY: All right. I'd
16 like to reconvene, please.
17 Okay. At this juncture, we will be
18 taking public -- further public comment, but I
19 wanted to give everyone the opportunity to see where
20 we're going. And we will not meet tomorrow night.
21 We will meet Wednesday night. And I firmly believe
22 that we will conclude the hearings on Wednesday
23 night.
24 The Applicant has indicated that

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1 they will have two rebuttal -- up to two rebuttal
2 witnesses; is that right?
3 MR. MORAN: (Indicating.)
4 HEARING OFFICER KINNALLY: Rebuttal is not
5 the same as direct testimony under our system, and
6 the rebuttal testimony only goes to issues that were
7 addressed by other witnesses, which the Applicant
8 has the right to rebut, so I do not expect those
9 witnesses to be very long, nor do I expect the
10 cross-examination, which, again, would be limited,
11 to take that long.
12 So the lawyers should be prepared,
13 and any participant, if they want to give a closing
14 statement. Some participants have already given
15 public comment, but under the ordinance as I read
16 it, a participant can give a closing statement.
17 They don't have to. It also can be in writing. So
18 the lawyers don't have to make a closing statement
19 either. That can be done in writing as well. It's
20 your choice or both. Mindful that the County Board
21 has heard a lot of testimony and -- up to this date.
22 Once the hearing is closed, there
23 will be a period of 30 days, and I'll remind
24 everybody of this on Wednesday, wherein any

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1 participant can file a memorandum, an argument, a
2 position they want to take with respect to the
3 siting or not siting the landfill, and they have to
4 file that with the County Clerk within that 30-day
5 period unless good cause can be shown that it can't
6 be filed in 30 days.
7 So -- And after that, the County
8 Board will meet. And the attorney for the County
9 Board, which is Mr. Blazer, has the opportunity to
10 write a memorandum, opinion, or opinion which is not
11 binding on the County Board.
12 I, as well, will make some
13 statement as to my view of the evidence. Again, the
14 County Board is not -- They can disregard my view of
15 the world as well as Mr. Blazer's and can make their
16 own decision. They can site it, site it with
17 conditions, or deny it.
18 So that's the program or the model
19 we're using for this proceeding. And so if anybody
20 has any questions, I'll be happy to answer them now.
21 We'll go over this again Wednesday if we have time,
22 which I assume we will, but if nobody has any
23 questions about that, then we'll hear public comment
24 from anyone who wants to make public comment.

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1 I know Mr. Karafiat -- I probably
2 mispronounced his name, but I know he wanted to make
3 public comment tonight.
4 Okay. Do you want to just public
5 comment, or do you want to be sworn?
6 MR. KARAFIAT: Just public comment.
7 HEARING OFFICER KINNALLY: All right. Just
8 state your name. Go ahead.
9 MR. KARAFIAT: Good evening. My name is Gary
10 Karafiat, and I live in DuPage County, which puts me
11 into the category of objective interested onlookers.
12 And just like other observers like Mr. Runyon and
13 Ms. Marcotte before me, it doesn't preclude me from
14 having an opinion on this proposal.
15 Let me start by saying that I am
16 against this landfill proposal for the basic reason
17 that Waste Management is gambling with human life,
18 pure and simple.
19 Who needs criteria numbers when you
20 are dealing with human life? You can pick any
21 criteria out of a hat at this point to determine
22 which criteria are not met because if constructed,
23 the scaled down Willow Run Landfill risks
24 contaminating drinking wells of neighboring

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1 residents, spoiling precious farmland of families
2 who have lived here for generations and rolls the
3 dice by putting Morris Airport users in danger.
4 When Mayor Kopczick of Morris
5 addressed the County Board last week, he said, and I
6 quote, as elected officials, we have the obligation
7 to plan for the future, look beyond tomorrow, and
8 consider the consequences of how our decisions today
9 will effect our children and future generations.
10 Powerful words, indeed.
11 Now, I know that you, the County
12 Board Members, take this responsibility very
13 seriously. There is no doubt in my mind. Your
14 attendance and participation in these hearings over
15 the last 18 months is evidence enough.
16 The public should also know that
17 your concern for public safety is always on your
18 plate, and you probably spend countless hours
19 reviewing and approving other development projects
20 within Kendall County.
21 When reviewing these plans, you
22 consider traffic flow issues as well as right-in,
23 right-out, egress, and ingress with new business
24 construction plans that impact driving safety.

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1 You might also approve the
2 placement of stop signs and traffic signals and the
3 expansion of county buildings that assist law
4 enforcement and fire protection personnel, for
5 example, in doing their jobs more efficiently and
6 productively. All of this careful consideration and
7 time is spent because you are concerned with the
8 public safety and welfare of your fellow county
9 neighbors.
10 So this may be just another day at
11 the office, except the stakes are even higher.
12 People's lives are at stake and future generations
13 are on the line.
14 While that hypothetical stoplight
15 near a school protects young students from being hit
16 by a car, so should this landfill avoid
17 contaminating the groundwater supply. If a traffic
18 engineer says to the Board that an intersection
19 needs to be reconfigured because it will lessen the
20 potential for vehicular crashes, so should the
21 landfill steer clear of putting aircraft in harm's
22 way.
23 I know that you are all sensible
24 people and that you can see that this plan is

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1 reckless, dangerous, and the leaders of the plan do
2 not inspire confidence.
3 I have some examples, or should I
4 say low lights pulled directly from the transcripts.
5 The first one is from September 12th. Mr. Kramer's
6 cross-examination of Mr. Nickodem. Mr. Kramer asked
7 Mr. Nickodem about his prior experience working with
8 the design of a landfill in Hillside, Illinois.
9 The Hillside Landfill, although
10 constructed before Subtitle D has experienced many
11 regulatory actions. Here's the excerpt.
12 "Question. And that's a facility
13 that's had numerous regulatory
14 actions and, in fact, has just
15 been closed after a long Cook
16 County court battle; has it not?
17 Answer. It has, yes.
18 Question, and again, it has had
19 failures?
20 Answer, I wouldn't call the
21 situation a failure, but there
22 have been some environmental
23 issues there, yes."
24 So what we heard is a landfill is closed

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1 after numerous regulatory actions, and it is not
2 considered a failure. So maybe this is a success.
3 That's pretty scary to me, and it should be of a
4 great concern to all of us.
5 Mr. Kramer further asked
6 Mr. Nickodem if he thought the design of the Willow
7 Run Landfill would eliminate risk to the aquifer.
8 In his answer, Mr. Nickodem avoided saying yes, but
9 said that he believed it would protect the health,
10 safety, and public welfare, as if he were crossing
11 his fingers in hope.
12 A direct, assertive yes would have
13 sufficed, but Mr. Nickodem knows that by saying yes,
14 he would have been lying. The design does not
15 eliminate risk to the aquifer, and we all know it.
16 But the bottom line is that the landfill developers
17 have a different standard of what is a success and
18 what is deemed a failure. And that, Folks, is what
19 should scare us right down to our socks.
20 Number two is from September 15th.
21 During Mr. Mueller's cross-examination of Ms.
22 Underwood, there was a lengthy discussion of
23 hydraulic conductivity, Darcy velocity, and other
24 hydrogeologic results. And he challenged Ms.

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1 Underwood's figures and conclusions. Ms. Underwood
2 seemed reluctant to be walked through a simple
3 calculation and was even provided a calculator to
4 help her with the math. Some of the exchanges were
5 enlightening, to say the least. Here's the
6 excerpts.
7 "Question. So basically what
8 we're talking about here is we
9 sampled a one-pound piece of soil
10 material that's two inches by
11 three inches; right?
12 Answer. Yes.
13 Question. And then if you go to
14 the actual test data, you'll see
15 something called top pressure.
16 What is that?
17 Answer. I'm actually not an
18 expert in the testing
19 methodology.
20 Question. Well, you're the one
21 that ordered these tests, aren't
22 you?
23 Answer. Yes.
24 And you interpret these tests,

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1 don't you?
2 Answer. Yes."
3 And then a bit further in the testimony.
4 "Question by Mr. Mueller. So
5 would you agree with me that
6 there are 144 square inches in a
7 square foot?
8 Answer. Yes.
9 Question. So if we multiply 144
10 times 75, we can convert to
11 pounds per square foot, can't we?
12 Answer. Mr. Mueller, I don't --
13 Just like I'm not an analytical
14 laboratory person that
15 understands all the
16 instrumentation in an analytical
17 lab, I don't deal with this
18 analytic or sampling equipment
19 all the time, so I don't really
20 look at all of this kind of
21 methods, the test methods that
22 they use in the lab. Now, I've
23 checked with the lab to make sure
24 that they are following the

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1 standard."
2 And then a bit later.
3 "Question. Okay. And so in this
4 case, they would have pressurized
5 it to about 10,800 pounds per
6 square foot; is that right?
7 Answer. I don't know.
8 Question. Well, they pressurized
9 it to 80 pounds per square inch,
10 you do know that, don't you?
11 Answer. 80 pounds per square
12 inch is what's shown for the cell
13 pressure."
14 What we hear in this testimony are
15 phrases such as I'm not an expert; I don't
16 understand; and I don't know. In fact, I think
17 we've heard those phrases far too frequently to
18 instill our confidence in the Waste Management team
19 of experts. And this, again, is a huge
20 consideration in determining approval versus denial.
21 When we're gambling with people's
22 lives, our confidence level rises or lowers based on
23 the competency of the company doing the work and the
24 obvious data gaps in the Application.

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1 My final example is actually a
2 highlight and it comes from Mr. Belt's questioning
3 of Mr. Vogen on September 23rd. And what we learned
4 during this questioning is that Waste Management is
5 adding a bird attractant to the air space that the
6 Morris Airport uses for most of its approach
7 landings and takeoffs. In summary, Mr. Belt asked
8 Mr. Vogen.
9 "Question. Lastly, Mr. Vogen, do
10 you have an opinion as to whether
11 this landfill is proposed to be
12 operated so as to protect the
13 health, safety, and welfare of
14 the public?
15 Answer from Mr. Vogen.
16 Absolutely not. There has been
17 absolutely no consideration given
18 to the flying public. Again, the
19 reason I'm here is for safety. I
20 don't want to lose another friend
21 due to an offsite airport
22 problem. That's just
23 unacceptable."
24 Yes, this is unacceptable, and we

1 should all be here for safety. People are arrested
 2 for reckless endangerment when they do something
 3 stupid like leave an unattended child in their car.
 4 This is just as reckless and the entire plan should
 5 be rejected on the airport issue alone.
 6 So in conclusion, I want to recall
 7 the opening statement of Mr. Moran and the Waste
 8 Management team when he began by telling us that
 9 they have been busy listening, hearing,
 10 understanding, considering, and reflecting on
 11 statements, views, and expressions.
 12 Well, so have I. And so have the
 13 people of Kendall County and the honest hard-working
 14 residents who would have this -- who would have this
 15 calamity placed in their backyards.
 16 My message to you, the Kendall
 17 County Board, is that you must sort through what you
 18 have heard and make the mother of all decisions as
 19 it pertains to safety and the protection of life and
 20 property. You can choose to listen to me as someone
 21 with a level of objectivity or it is your right to
 22 blow off my opinion as an outsider altogether.
 23 But do not discount the Moss
 24 family, for instance, who want to protect a 150-year

1 old family farm. Or Cheryl Wallin, who says that
 2 this is a site God did not intend for a landfill.
 3 Or Beverly Anderson, who pleaded to your common
 4 sense. Or Bob and Sharon Friestad, whose emotional
 5 comments were too poignant to ignore.
 6 Please do not forget the historical
 7 perspective of Ron Severson and his eloquent
 8 explanation of the precious significance of this
 9 land.
 10 Remember, too, Daniel Shepherd's
 11 recounting of his days operating heavy machinery for
 12 a landfill construction company.
 13 There were also important
 14 perspectives about the owner of this project and
 15 alternative energy inspection options that were
 16 provided by Chris Vineyard, George Gilson, and Todd
 17 Milliron. And residents Jim Birch, Alice Edmondson,
 18 Lee Schultz, Jean Fletcher, and Jim Feeley, who are
 19 your Kendall County neighbors. They deserve to have
 20 your A game when you deliberate on this. And they
 21 should know that they will get it from you.
 22 Risk taking may fit in perfect in
 23 Las Vegas at the craps and blackjack tables, but
 24 let's keep your record of safety and sound judgment

1 intact, and let's not gamble with people's lives and
 2 vote to reject this plan a second time. Thank you.
 3 HEARING OFFICER KINNALLY: Okay. Thank you,
 4 sir. You want to file those with --
 5 MR. KARAFIAT: Yeah.
 6 HEARING OFFICER KINNALLY: Or you can send it
 7 in, whatever you want to do.
 8 MR. KARAFIAT: I got some changes that I
 9 made.
 10 HEARING OFFICER KINNALLY: If you want to do
 11 that, you can do that. Anyone else want to make a
 12 public comment?
 13 MR. PERNA: I would like to say something.
 14 HEARING OFFICER KINNALLY: Are you a
 15 participant?
 16 MR. PERNA: What do you mean by that?
 17 HEARING OFFICER KINNALLY: Well, what I mean
 18 by that is --
 19 MR. PERNA: I'm a resident of Kendall County,
 20 and I live in Plattville.
 21 HEARING OFFICER KINNALLY: Okay. Okay.
 22 MR. PERNA: Is that okay?
 23 HEARING OFFICER KINNALLY: Well, look. I
 24 don't make the rules, okay.

1 MR. PERNA: Okay.
 2 HEARING OFFICER KINNALLY: All I wanted to
 3 know is whether you're a participant. Did you sign
 4 up as a participant? I'm not here to argue with
 5 you.
 6 MR. PERNA: I came a little late, sir.
 7 HEARING OFFICER KINNALLY: Okay. So you
 8 didn't sign up?
 9 MR. PERNA: I didn't know there was a sign up
 10 sheet. I'll excuse myself.
 11 HEARING OFFICER KINNALLY: No, that's all
 12 right. Go ahead. We'll listen to you. Go ahead.
 13 MR. PERNA: I just have a question to the
 14 Board.
 15 HEARING OFFICER KINNALLY: First of all, can
 16 you tell us your name?
 17 MR. PERNA: Dominick Perna.
 18 HEARING OFFICER KINNALLY: Okay.
 19 MR. PERNA: I live in Plattville on Fletcher.
 20 HEARING OFFICER KINNALLY: Okay.
 21 MR. PERNA: My question is, has anybody
 22 asked -- Now, I'm Johnny-Come-Lately. I haven't
 23 been at previous meetings.
 24 But how many acres is the landfill,

1 and how many counties and municipalities are going
 2 to come and use the landfill? Has that question
 3 ever been brought up?
 4 HEARING OFFICER KINNALLY: Yes, it has.
 5 MR. PERNA: It has?
 6 HEARING OFFICER KINNALLY: Uh-huh.
 7 134 acres. And the service area, I believe, covers
 8 11 or 10 counties, including Kendall County.
 9 MR. PERNA: Okay.
 10 HEARING OFFICER KINNALLY: So that means that
 11 if the landfill were sited, there would be trucks
 12 that would come from 11 different counties, which
 13 are basically concentrically around Kendall County,
 14 all the way to Indiana and the Wisconsin border.
 15 MR. PERNA: Okay. Is there any push for more
 16 land further south?
 17 HEARING OFFICER KINNALLY: What do you mean
 18 by that?
 19 MR. PERNA: By the Waste Management Company?
 20 I understand they are looking at some other
 21 property.
 22 HEARING OFFICER KINNALLY: I don't know about
 23 that. That didn't come up.
 24 MR. PERNA: Okay. Thank you.

1 HEARING OFFICER KINNALLY: Okay. You bet.
 2 Anyone else?
 3 Okay. Hearing none, the public
 4 comment period -- unless somebody comes up with
 5 something on Wednesday night, I'm going to close
 6 now, but I can open it up again.
 7 And on Wednesday, we'll start with
 8 the rebuttal testimony of the Applicant. We expect
 9 to conclude Wednesday night.
 10 So thanks again for coming, and
 11 we'll see you on Wednesday.
 12 * * * * *
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1 STATE OF ILLINOIS.)
) SS.
 2 COUNTY OF DU PAGE)
 3 I, KAREN R. SHALES, CSR. No. 84-004177, and
 4 TIMI M. FULFS, CSR No. 84-003517, do hereby certify
 5 that we reported in shorthand the proceedings had at
 6 the hearing of the above-entitled cause and that the
 7 foregoing Report of Proceedings, Pages 2022 through
 8 2159, inclusive, is a true, correct, and complete
 9 transcript of my shorthand notes taken at the time
 10 and place aforesaid.
 11 We further certify that we are not counsel
 12 for nor in any way related to any of the parties to
 13 this suit, nor are we in any way, directly or
 14 indirectly 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
 18 responsibility for the accuracy of any copies which
 19 are not so produced.
 20 IN WITNESS WHEREOF we have hereunto set my
 21 hand this 30th day of September, 2008.
 22
 23 Certified Shorthand Reporter
 24 Certified Shorthand Reporter