

1 D-15090
 2
 3 STATE OF ILLINOIS)
 4) SS:
 5 COUNTY OF KENDALL)
 6
 7 BEFORE THE PUBLIC HEARING OFFICER
 8
 9 In The Matter Of:
 10
 11 APPLICATION FOR LOCAL SITING APPROVAL
 12 PROPOSED WILLOW RUN RECYCLING AND DISPOSAL FACILITY
 13 KENDALL LAND & CATTLE, L.L.C.
 14 WASTE MANAGEMENT OF ILLINOIS, INC.
 15 KENDALL COUNTY, ILLINOIS
 16
 17 REPORT OF PROCEEDINGS had and
 18 testimony taken at the hearing of the above-entitled
 19 matter before PATRICK M. KINNALLY, Hearing Officer,
 20 taken by Janet L. Galasso, CSR No. 84-002176, and
 21 Kathleen M. Grove, CSR 84-002197, on Friday,
 22 September 12, 2008 at 6:00 p.m., at 6617 Chicago Road,
 23 Plattville, Illinois.
 24

1 ALSO PRESENT: (Cont'd.)
 2
 3 LAW OFFICES OF DANIEL J. KRAMER, by
 4 MR. DANIEL J. KRAMER
 5 1107A S. Bridge Street
 6 Yorkville, Illinois 60560
 7 Appeared on behalf of Village of Minooka;
 8
 9 LAW OFFICES OF DANIEL J. KRAMER, by
 10 MS. KELLY A. KRAMER
 11 1107A S. Bridge Street
 12 Yorkville, Illinois 60560
 13 Appeared on behalf of Old Second National
 14 Bank of Aurora Trust 8932.
 15 ALSO PRESENT:
 16 MS. RENNETTA MICKELSON, Kendall County Clerk;
 17 MR. ROBERT E. DAVIDSON, County Board Member;
 18 MS. JESSIE HAFENRICHTER, County Board Member;
 19 MS. NANCY MARTIN; County Board Member;
 20 MS. PAM PARR, County Board Member;
 21 MR. JOHN P. PURCELL, County Board Member;
 22 MS. ANNE VICKERY, County Board Member.
 23
 24

1 PRESENT:
 2 MR. PATRICK M. KINNALLY, Hearing Officer;
 3 PEDERSON & HOUP, by
 4 MR. DONALD J. MORAN
 5 161 North Clark Street, Suite 3100
 6 Chicago, Illinois 60601-3242
 7 Appeared on behalf of Waste Management of
 8 Illinois, Inc.
 9
 10 JEEP & BLAZER, LLC by
 11 MR. MICHAEL S. BLAZER and
 12 MR. DEREK B. RIEBMAN
 13 24 North Hillside Avenue, Suite A
 14 Hillside, Illinois 60162
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 16 KENDALL COUNTY STATE'S ATTORNEY, by
 17 MR. ERIC C. WEIS and
 18 MR. BRIAN LABARDI,
 19 807 West John Street
 20 Yorkville, Illinois 60560
 21 Appeared on behalf of the County of Kendall;
 22 HINSHAW & CULBERTSON, LLP, by
 23 MR. CHARLES F. HELSTEN
 24 100 Park Avenue, P.O. Box 1389
 Rockford, Illinois 61105
 Appeared on behalf of the County of Grundy;
 SCOTT M. BELT & ASSOCIATES, P.C., by
 MR. SCOTT M. BELT
 105 East Main Street, Suite 206
 Morris, Illinois 60450
 Appeared on behalf of City of Morris;
 MR. DELBERT S. LYLE
 2100 Manchester Road, Suite 945
 Wheaton, Illinois 60187
 Appeared on behalf of Lyle Enterprises,
 LLC;
 MUELLER & ANDERSON, P.C., by
 MR. GEORGE MUELLER
 609 Etna Road
 Ottawa, Illinois 61350
 Appeared on behalf of Kankakee Regional
 Landfill, LLC;

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1 HEARING OFFICER KINNALLY: All right. I'd like
2 to get started so if you could take your places.
3 All right. This is the reconvened
4 hearing of the Willow Run Recycling Disposal Facility.
5 Will the County Board please
6 introduce themselves.
7 BOARD MEMBER DAVIDSON: Bob Davidson.
8 BOARD MEMBER VICKERY: Anne Vickery.
9 BOARD MEMBER PURCELL: John Purcell.
10 BOARD MEMBER MARTIN: Nancy Martin.
11 BOARD MEMBER HAFENRICHTER: Jessie
12 Hafenrichter.
13 BOARD MEMBER PARR: Pam Parr.
14 HEARING OFFICER KINNALLY: Okay. We have a
15 quorum. And I believe where we left off was with
16 Mr. Nickodem, and Mr. Mueller, you were
17 cross-examining Mr. Nickodem.
18 Mr. Nickodem, you're still under
19 oath.
20 MR. MUELLER: Thank you.
21
22
23
24

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1 ANDY NICKODEM
2 called as a witness herein, having been previously
3 sworn, was examined and testified further as
4 follows:
5 CROSS-EXAMINATION (cont'd)
6 BY: MR MUELLER:
7 Q. Mr. Nickodem, going back to Page K-1-5
8 that we were on last night where you did the interface
9 shear strength testing of the liner system, you
10 identified 3,260 pounds as the critical interface; is
11 that correct?
12 A. Yes.
13 Q. What factor of safety is that?
14 A. The 3,260 pounds?
15 Q. Yes.
16 A. That number doesn't represent a factor of
17 safety. That number is used in the other stability
18 analyses to obtain a factor of safety. That number in
19 itself doesn't have a factor of safety.
20 Q. Okay. We talked about the Setco-Bentamack
21 GCL's.
22 Have you had a chance to look at the
23 specs on those since we talked about them?
24 A. Yes. And actually we are not using that

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1 particular product on this site. We're actually using
2 a GCL. It's called BentoLiner NW, and that's actually
3 in our test results. It's similar but it's a little
4 bit different product.
5 Q. Okay. And you would agree that the GCL's
6 offered by Setco have an internal shear strength of
7 500 pounds per square foot?
8 A. At a normal load much lower than the
9 normal loads that we tested for. So it's not really
10 comparing apples to apples.
11 You're correct, I think it's 500 psf
12 at a 200 pound-per-square-foot normal load, which is
13 really a final cover situation, not a base liner
14 situation.
15 Q. How would a higher load change the
16 internal shear strength?
17 A. Oh, it increases the strength of any
18 material. Shear strength is a function of normal
19 stress, which is your normal load, you know, the
20 weight of the waste on the landfill, and the friction
21 angle that's obtained from either the internal
22 friction angle of a soil material or an interface
23 friction angle. So it would -- as the normal load
24 increases, the shear strength actually increases in a

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1 GCL.
2 Q. Now, part of this GCL is going to be on
3 the side four-to-one -- excuse me -- three-to-one
4 sideslope inside the landfill; correct?
5 A. Yes.
6 Q. And have you calculated what the load will
7 be on the GCL on those sideslopes?
8 A. We have actually during construction.
9 Q. What is the load that will be on that GCL?
10 A. I believe we looked at two scenarios in
11 our test results, one at 500 psf at one at 1,000 psf,
12 two different scenarios in our test results.
13 Q. When you say test results, what is it that
14 you tested?
15 A. We did interface friction testing on these
16 materials. And that's a big key. You know, any
17 time -- actually, all manufacturers will tell you that
18 you need to do site-specific testing of these
19 materials as part of your design in construction; and
20 we, in fact, did that, and it shows that the materials
21 will be applicable and stable for this Application.
22 Q. Where in the Application is the shear
23 strength testing for the GCL -- the internal shear
24 strength testing for the GCL reported?

1 A. Well, it's all in Attachment 1, and I
2 think you're misconstruing how shear testing works.
3 There's -- what we do is we place materials in what's
4 called a shear box, and we'll place two adjacent
5 materials, place a load on them, and then the shearing
6 is the two materials sliding against each other, and
7 you get a force from that.

8 Either the two materials, in this
9 case GCL and the 60-mil textured HDPE, either that
10 interface can shear or internally the internal -- you
11 know, the GCL could fail.

12 The GCL did not fail in any of our
13 test results. And, in fact, I talked with the testing
14 company, TRI, who did all of our tests, and I asked
15 them how common it is for the internal, you know,
16 shear of a GCL to occur versus the other interfaces,
17 and, you know, he said it's very rare. And they run,
18 you know, thousands and thousands of tests a year.

19 So -- in fact, the internal shear
20 strength -- if you look at it based on normal load,
21 the internal shear strength of a GCL is much higher
22 than the interface shear strength which we selected as
23 the critical interface.

24 I mean, if we -- if we took that

1 500 psf internal shear strength and actually applied
2 that to a correct normal load based on our site, that
3 total shear strength for that GCL would be much higher
4 than the 3,260 that we've determined as the critical
5 interface for the site.

6 Q. Do you have those calculations anywhere in
7 the Application?

8 A. It's all supported, yes. In Attachment 1
9 is our -- is all the test results, and it clearly
10 shows that the GCL itself did not fail prior to the
11 interface of the 60-mil HDP and the GCL. So it's
12 clear that that is -- the internal friction angle is
13 much more -- a higher shear strength.

14 And then we support that in the
15 calculations when we determine what the critical shear
16 strength is.

17 Q. Mr. Nickodem, did you at any time test
18 exclusively for the internal shear strength of the GCL
19 by applying a load to each side of it?

20 A. Yes. As part of the testing, we -- again,
21 we tested that interface, and the GCL did not fail.

22 Did we test just the GCL? No,
23 because it wasn't necessary. If we would have ran
24 this interface test with the liner and the GCL

1 material and the GCL would have failed, then, yes, we
2 would have went back and maybe ran some more tests,
3 maybe selected a different material, but in none of
4 the tests did that GCL fail so it's -- it's really not
5 necessary.

6 Q. But you agree that the manufacturers spec
7 these GCL's at 500 pounds per square foot internal
8 shear strength under a 200-pound load?

9 A. Which is, yes, a much lower load than what
10 we're anticipating for -- I mean, we're anticipating
11 well over 10,000 psf, which will generate a very, very
12 high shear strength, yeah.

13 Q. Going back for a second to your -- your
14 soil deficit, how many acres of land is it going to
15 take to produce three-plus million cubic yards of soil
16 that you need?

17 A. I don't recall the exact acreage. I mean,
18 I could -- I could find that out.

19 HEARING OFFICER KINNALLY: That's all right.
20 If you don't recall, that's fine.

21 BY MR. MUELLER:

22 Q. All right. Well, you indicated that you
23 did that testing this summer; right?

24 A. Yes.

1 Q. What did that testing consist of?

2 A. Doing borings in the area to assess the
3 depth and types of soils that were available in that
4 area.

5 Q. And I take it, then, that somebody had to
6 analyze those borings?

7 A. Yes. And, in fact, I was involved to
8 ensure that we had adequate samples for geotechnical
9 testing, really to ensure that those soils were the
10 same as the soils that were just north of the borrow
11 area on the site so that they'd be the same materials.

12 Q. So if you just did this testing this
13 summer, how big is this borrow area going to be?

14 A. Again, I don't remember the exact acreage.

15 Q. Is it going to be like 600 acres?

16 A. No, no, not that big. Uh-uh, nowhere near
17 that big.

18 Q. Well, I did some rough calculations, and
19 if you pulled six feet of Equality Formation soil out
20 of the ground uniformly, you'd need about 300 acres to
21 make up 3 million cubic yards. And so are we talking
22 about something like 300 acres, you know, half a
23 section?

24 A. Nowhere near that. Nowhere near that big,

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1 no.

2 And in this area there are several

3 areas that -- where you can get, you know, much

4 deeper, 10 to 15 feet of Equality soil.

5 So no, it's -- it's definitely --

6 it's smaller than the footprint of the landfill, I can

7 tell you that, but I just don't recall the exact

8 acreage right now.

9 Q. And how close is this borrow area to

10 Church Road?

11 A. It's right adjacent to Church Road.

12 Q. So it's contiguous with Church Road?

13 A. Yes.

14 Q. And it's contiguous with your landfill

15 facility boundary?

16 A. No. It's actually south of the Prairie

17 Parkway right-of-way because we wanted to make sure

18 that we didn't end crotch on to the Prairie Parkway

19 right-of-way. So it's south of the facility boundary

20 the amount of distance that the Prairie Parkway

21 right-of-way is.

22 Q. Does the area go all the way down to

23 Sherrill Road so that there's a road frontage there?

24 A. No.

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1 Q. How close does it get to Sherrill Road?

2 A. I don't know that exact distance.

3 Q. Is it going to require any internal roads

4 to be built to access Church Road?

5 A. I mean, there may be some temporary haul

6 roads from the borrow areas themselves to Church Road,

7 yes.

8 Q. And who is going to provide those?

9 A. Waste Management.

10 Q. Is this area going to require stormwater

11 management system?

12 A. They'll actually end up to be detention

13 areas. So, I mean, they would be detention ponds.

14 Q. Has that been designed yet?

15 A. I'm not sure what you mean by designed.

16 Q. Well, you know, the location, depth and

17 size of the necessary detention ponds.

18 A. Well, we've designed the size of the

19 borrow area that we need, so in that way, yes, it's

20 been designed.

21 It really doesn't require any

22 stormwater management calculations because we're

23 really not -- there's no runoff from those areas.

24 It's just running into those borrow areas and then it

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1 will remain there.

2 Q. Now, who's designing these borrow areas

3 and the detention ponds?

4 A. I was the principal designer on that.

5 Q. Do you have an end-use plan in mind for

6 this area after you take the necessary soils?

7 A. It would be very similar to what I showed

8 on the east sedimentation basin that has, you know,

9 some wetland vegetation, the detention basins were

10 designed to, you know, meet the Kendall County

11 stormwater regulations with safety benches, things

12 like that. But it would be very similar with those

13 sustainable features that conservation design form

14 will discuss.

15 Q. Has that been designed yet?

16 A. Yeah, the pond areas --

17 Q. No. I mean the end-use plan for the

18 borrow areas.

19 A. Not specifically, no, but they would be

20 very similar to the east basin.

21 Q. Mr. Nickodem, if you could turn to page

22 5-1 of Volume I of the Application.

23 A. Okay.

24 Q. All right. Now, yesterday you testified

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1 to the fact that for calculating your runoff of

2 stormwater, you used the soil type that had medium

3 infiltration and medium runoff.

4 A. Yes, yes.

5 Q. And are you aware that Ms. Underwood in

6 describing these soils, says that they are primarily

7 fine-grained low permeability soils that are not

8 aquifers. They limit the infiltration of rainfall,

9 promote surface runoff, and confine the underlying

10 bedrock?

11 A. She's talking about subsurface soil, so

12 not surface soils that we're concerned about in

13 stormwater management. I mean, she's talking about,

14 for instance, the Equality Formation under the topsoil

15 that our fine-grain soils and do not promote runoff.

16 Q. Well, how much topsoil do you have at this

17 site?

18 A. It varies, but, you know, say one foot.

19 Q. And for stormwater purposes you are only

20 concerned about the topsoil; is that correct?

21 A. Yes.

22 Q. It does make any difference whether the

23 clay underneath them is highly permeable or not?

24 A. Not for surface runoff. We're only

1 concerned about the surface conditions.
 2 Q. Well, if you have a low permeability clay
 3 underneath 12 inches of topsoil, that top -- the water
 4 in that topsoil has no place to go downward; correct?
 5 A. Correct. Yes.
 6 Q. And so ultimately it will sit and then it
 7 will runoff after the topsoil becomes saturated;
 8 right?
 9 A. Yes.
 10 Q. Now, the rain gardens that you proposed,
 11 can you explain whether those are intended to have
 12 infiltration of water?
 13 A. Infiltration into the ground?
 14 Q. Yeah.
 15 A. They could through -- yes, it would be
 16 similar to a created wetland where you'd have, you
 17 know, wetland vegetation that would filter, hold some
 18 of the rainwater, and, yes, there could be some
 19 infiltration in those areas.
 20 Q. How deep are you going to excavate to
 21 build these rain gardens?
 22 A. They're generally not very deep. You
 23 know, a foot to two feet deep, something in that area.
 24 Q. A foot to two feet means that we're now

1 below the topsoil; right?
 2 A. Yes.
 3 Q. And we're into that area that does not
 4 allow infiltration; right?
 5 A. Well, to create these, of course, we
 6 need -- we need to have wetland vegetation and other,
 7 you know, native plants and vegetation. We would be
 8 placing topsoil back in there and amending the surface
 9 of those rain gardens to ensure that -- because we
 10 want to establish good vegetation in there. So we
 11 wouldn't just go down to the clay and -- in the equal
 12 formation and place vegetation. Try to.
 13 Q. In the Application are there any details
 14 for the size and construction of the rain gardens?
 15 A. No, there are not. Not the size. But,
 16 you know, it talks about the method of constructing
 17 rain gardens in the Conservation Design Form Report.
 18 Q. Well, does it say in talking about the
 19 method for constructing them that you backfill the
 20 excavation with topsoil?
 21 A. No, but actually the discussion -- a
 22 future discussion by Conservation Design Form in this
 23 hearing, they will discuss those types of features and
 24 how to construct these rain gardens.

1 Q. When you designed the stormwater system,
 2 you designed for the 100-year 24-hour flood; correct?
 3 A. Yes.
 4 Q. How many inches of precipitation is that?
 5 A. I don't recall offhand. I can look here
 6 because we have that.
 7 We actually designed for that, but we
 8 evaluated many different storm events, including some
 9 that actually we didn't put in the Application. We
 10 even evaluated the 17-inch or 17.6-inch rain event
 11 from 1996 when a lot of areas flooded in northeast
 12 Illinois.
 13 Q. You're getting ahead of me here because I
 14 was going to get there. But would it be fair to say
 15 that the 24-hour 100-year storm is roughly five-plus
 16 inches?
 17 A. Yeah. It's, I think, 5.2, if I remember
 18 correctly.
 19 Q. Okay. And that's the size storm that was
 20 designed -- that the stormwater system was designed
 21 for; correct?
 22 A. Yes. Yes.
 23 Q. Now, you mentioned the 17-inch rainfall in
 24 1996. I believe it's also mentioned in the executive

1 summary.
 2 Does the Application contain any
 3 calculations showing what the stormwater impact with
 4 your designed system would be from a 17-inch
 5 precipitation event?
 6 A. No. I mean, that storm event is such an
 7 outlier, something that doesn't happen on a daily
 8 basis, monthly basis, typically, you know, yearly
 9 basis.
 10 I mean, we evaluated it just because
 11 it had occurred in this area and we wanted to see the
 12 effect on the structures.
 13 Q. That's my question. Where in the
 14 Application is the statistical evaluation of that
 15 rainfall event found?
 16 A. Well, we're not really required to
 17 evaluate for that event.
 18 Q. Well, you just said you did, though, so
 19 I'm asking where in the Application --
 20 HEARING OFFICER KINNALLY: Well, it's real
 21 simple. Is it in the Application or isn't it?
 22 THE WITNESS: No, it's not.
 23 HEARING OFFICER KINNALLY: Next question.
 24 MR. MUELLER: Thank you.

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1 BY MR. MUELLER:
2 Q. Mr. Nickodem, you proposed some interim
3 horizontal gas collectors; correct?
4 A. Yes.
5 Q. When the final gas management system gets
6 in, what happens to the horizontal gas collectors?
7 A. Well, they can be operated, you know, even
8 when there are close -- in close proximity to other
9 wells, depending on if they're, you know, too close
10 that you can get air intrusion between the two. But
11 they can be operated for quite a long time.
12 Typically, though, when you put in
13 permanent gas extraction wells in an area, that would
14 be the primary method of control and you generally
15 would not use the horizontal collectors anymore.
16 Q. So you would abandon them?
17 A. Again, you could, or you could continue
18 operating them. It depends on the area and what's
19 necessary in that area to control gas.
20 Q. Well, which is it in this Application? Do
21 you plan to abandon them? Do you plan to keep using
22 them?
23 A. It's some of both. They would be used as
24 long as they are useful for extracting gas, but they

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1 are -- they are a temporary or interim control. So at
2 some point, yes, they will be abandoned.
3 Q. Does the Application contain any detail as
4 to when or how they would be abandoned?
5 A. No. I mean, they would be abandoned as
6 their useful life is complete.
7 Q. What would be the methodology of
8 abandonment? What would you do to them?
9 A. Really just leave them in place. There's
10 no need to do anything else. They're in the waste
11 mass. You just leave them in place.
12 Q. Lastly, if you turn to Page 7.7 of the
13 Application.
14 A. 7.7?
15 Q. 7-7.
16 A. 7-7. Okay.
17 Q. Do you see the section at the bottom
18 entitled "Hydrostatic Uplift Analysis"?
19 A. Yes.
20 Q. I'm confused here, because doesn't
21 hydrostatic uplift require an inward gradient to even
22 take place?
23 A. No, not necessarily. You know, there's a
24 piezometric surface or water table that can provide

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1 pressure, of course, that since we have a
2 low-permeability soil layer underneath the liner which
3 confines the aquifer, there's actually pressure on
4 that aquifer; and, therefore, water -- you know, when
5 you put a well in, water will rise above the level of
6 that aquifer providing pressure on the upper layers.
7 So you don't necessarily need to be
8 an inward gradient design to have hydrostatic uplift.
9 Q. Well, isn't it inward gradient a situation
10 where the piezometric surface of the materials outside
11 the liner is higher than the surface inside the liner?
12 A. Yes.
13 Q. So based upon piezometric surface, in
14 fact, this is still an inward gradient; correct?
15 A. No, it's not.
16 MR. MUELLER: I have no further questions.
17 HEARING OFFICER KINNALLY: Okay. Thank you,
18 Mr. Mueller.
19 Mr. Kramer?
20 MR. KRAMER: Thank you, Mr. Kinnally.
21 CROSS-EXAMINATION
22 BY MR. KRAMER:
23 Q. Mr. Nickodem, you've used a term
24 throughout your testimony low-permeability soil.

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1 Could you tell the Board and the
2 audience what that term means, please.
3 A. Yes. I mean, it's a soil where it's
4 difficult for water to migrate through so it doesn't
5 drain through that soil. And in our case usually our
6 standard -- actually, I should say usually the
7 standard for liner is to have one times 10 to the
8 minus seven centimeters per second permeability for
9 those soils. So it's a soil that doesn't allow
10 drainage through it.
11 Q. Now, with respect to another term you
12 used quite frequently last night, it was in situ or
13 in situate soil.
14 Again, could you tell the Board and
15 the audience what you mean by that term, please.
16 A. That's existing soil or soil that's
17 already in place that we do not plan to move or alter.
18 Q. When you did your 2007 engineering
19 analysis, I understood from reviewing the Application
20 that you showed a minimum of six inches of clay liner
21 under the single membrane liner you proposed to use
22 for the footprint of the landfill; is that correct?
23 MR. MORAN: Objection; mischaracterizes that
24 testimony and that liner system. Also relevance.

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1 HEARING OFFICER KINNALLY: Well, that's
2 overruled.
3 Do you understand the question?
4 THE WITNESS: Not really, no.
5 MR. KRAMER: I'll be happy to rephrase it.
6 HEARING OFFICER KINNALLY: Okay.
7 BY MR. KRAMER:
8 Q. Let's refer to your summary on Page 1 of
9 the Application.
10 You indicate that protective soil
11 layer that you in propose this current Application is
12 going to be a minimum of five feet, and in your
13 earlier 2007 application you indicated a minimum of
14 six inches of protective layer; is that correct?
15 A. No.
16 Q. Please look at Page 1 on your summary,
17 then.
18 A. Okay.
19 Q. And look at the protective soil layer for
20 the 2007.
21 A. Okay.
22 Q. And does the second-to-the-bottom line of
23 the 2007 indicate that the protective soil layer would
24 be a minimum of six inches beneath 65 percent of the

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1 liner?
2 A. Yes, it does.
3 Q. And now your 2008 Application indicates
4 five feet beneath that hundred percent of the liner?
5 A. Yes.
6 Q. Now, with respect to -- if we could go to
7 slide, I believe it's 13 of the slides you showed last
8 night. If we could beam that up, please.
9 A. 13?
10 Q. It's called double composite liner,
11 Page 13.
12 THE WITNESS: No, the other one, Bruce.
13 MR. KRAMER: There we go.
14 BY MR. KRAMER:
15 Q. Now, does that slide indicate that you're
16 going to have a three-foot compacted low-permeability
17 soil liner?
18 A. Yes.
19 Q. And is that made up of in situ material
20 or these materials you're going to bring onsite?
21 A. That is not in situ material. It would be
22 constructed from either on-site material that's
23 excavated or from the borrow area to the south of the
24 site.

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1 Q. Okay. So that isn't any part,
2 necessarily, of that five-foot layer that's there now?
3 A. It's above that. It is not part of the
4 five-foot layer.
5 Q. Okay. Now, does any part of that
6 three-foot compacted low permeability liner sit within
7 the aquifer?
8 A. No.
9 Q. Does any part of the lower textured HDPE
10 geometric liner sit within the aquifer at any point
11 within the 134-acre landfill footprint?
12 A. No.
13 Q. In terms of your testimony last night, I
14 believe you indicated that you've got three systems
15 you're proposing that protect the general public,
16 health, and safety in terms of the landfill design;
17 that being your double composite liner, your leachate
18 management system and then ultimately the cover, is
19 that a fair statement?
20 A. Yes.
21 Q. And I believe you further indicated that
22 the underlying geology isn't important to you.
23 A. Not in an engineering sense, no. No.
24 Q. And in terms of Illinois EPA regs, are

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1 there any regulations saying at a minimum how thick
2 that compacted low-permeability soil liner needs to
3 be?
4 A. Yes, there are.
5 Q. And what is the minimum regulation from
6 the Illinois EPA?
7 A. Three foot.
8 Q. And knowing that, did you propose a
9 three-foot liner the last go-around, the 2007
10 petition?
11 A. Yes, we did.
12 Q. In terms of having the at least minimum
13 three-foot protection of the low permeability liner,
14 do you know the reason that the EPA requires a certain
15 number of feet?
16 A. You know, part of it's the permeability,
17 the ability of, say, leachate, if it got through the
18 liner, to move through there. They want it a certain
19 thickness. Each state determines, you know, a
20 different thickness. For instance, Wisconsin is four
21 feet.
22 You know, I don't know how Illinois
23 determined that, but they determined that that was
24 adequate for the State.

1 Q. So the goal is generally recognized to
 2 be to have a barrier so there's slow migration because
 3 of low permeability if there were a leak?
 4 A. Yes.
 5 Q. And I -- I would suggest, or is it fair
 6 that the reason you don't care so much about the
 7 geology from an engineering point of view is that if
 8 your design is proper and the installation is proper,
 9 then you don't believe there's going to be a leak?
 10 A. That's correct, yes.
 11 Q. But if there is a leak, then the larger
 12 that low permeability barrier is, the better
 13 protection there is to general public, health, and
 14 safety?
 15 A. Well, and, again, it's not just that
 16 layer; it's the other three layers in that liner
 17 system. But as the system is combined, yeah, that --
 18 Q. I understand you've got these other safety
 19 mechanisms, but they are all installed by humans and
 20 require proper design, proper execution.
 21 A. Yes.
 22 Q. I notice in your curriculum vitae
 23 basically about six-and-a-half pages worth of
 24 different landfill projects you've worked on, either

1 design, construction, consulting, and so on?
 2 A. Yes.
 3 Q. One of them I noticed, in particular, was
 4 a Congress facility here in Illinois?
 5 A. Yes.
 6 Q. And it indicated you did some of the
 7 construction and design in that?
 8 A. Mainly construction. I worked for the
 9 operating company.
 10 Q. And that might be better known to members
 11 of the audience or the Board as the Hillside facility
 12 on the north side of the Congress Expressway or
 13 Eisenhower Expressway?
 14 A. Yes.
 15 Q. And that's a facility that's had numerous
 16 regulatory actions and, in fact, has just been closed
 17 after a long Cook County court battle, has it not?
 18 A. It has, yes.
 19 Q. And, again, it has had failures?
 20 A. I wouldn't call the situation a failure,
 21 but there have been some environmental issues there,
 22 yes.
 23 Q. Just from a laymen's point of view driving
 24 by, it had an odor problem?

1 A. Yes. It can at times, yes.
 2 Q. And, again, that wasn't built under the
 3 current rules, in all fairness?
 4 A. No. It was all constructed, the base of
 5 that, prior to federal Subtitle D regulations, which
 6 are the basis for the current Illinois regulations
 7 that are in place. In fact, the base of the landfill
 8 was all constructed when I began my employment at
 9 Sexton.
 10 Q. In terms of, again, your professional
 11 training and experience, you've never had a situation,
 12 have you, that an engineer designed a landfill or
 13 waste facility and intentionally tried to not do it
 14 properly?
 15 A. No.
 16 Q. But the fact is they do fail at times?
 17 A. I'm not aware of -- and I've said this
 18 before, I'm not aware of any composite-lined system
 19 such as this that I've ever been involved with having
 20 any leak or fail.
 21 Q. As of these new regulations?
 22 A. Right.
 23 Q. Fair enough. Now, with respect to the
 24 talk that we had about the materials -- could you put

1 up the -- I believe it was No. 16 or Page 16 of the
 2 slides -- or, I'm sorry, I think it was actually the
 3 second one where you did the comparison between the
 4 '07 footprint and '08, if you would, please.
 5 That would work. Thank you very
 6 much.
 7 With respect to the area that you're
 8 talking about borrowing soils, if we're dealing on a
 9 horizontal plane, would it be fair to say that it's
 10 the rectangle that's at the bottom of the screen next
 11 to the screen next to the 2008 box?
 12 A. That's part of it.
 13 Q. Okay.
 14 A. It actually includes an area approximately
 15 like this. (Indicating.) So it does include this
 16 rectangle, but it also -- it actually starts about
 17 right here where our new facility line is, extends
 18 down to here, a little further south in this boundary,
 19 and then up here. (Indicating.)
 20 Q. So it actually goes west of Walley Run
 21 Creek; is that fair to say?
 22 A. No, it's actually east of Walley Run,
 23 because Walley Run runs down this way to the south.
 24 (Indicating.) This is -- it's actually east of Walley

1 Run.
 2 Q. Okay. You were on the top of the line for
 3 a while, so you had me confused.
 4 So, again, it's the area east of
 5 Walley Run Creek, the north-to-south blue line that
 6 you're showing on this slide?
 7 A. Yes.
 8 Q. And then if we drew the line to Walley
 9 Run -- keep going south with it, if you would, with
 10 your laser.
 11 A. Yeah, it flows kind of to the southwest
 12 somewhat. It curves in here, but...
 13 Q. So, again, the borrow area not only
 14 includes that rectangle we've talked about but the
 15 area west of it but east of Walley Run Creek?
 16 A. Yes.
 17 Q. And in terms of the borrow areas, when you
 18 did your analysis and your soil testing, how many soil
 19 tests did you run total down in those areas?
 20 A. I don't recall offhand. I mean, there was
 21 quite a few. I want to say there was at least 25, you
 22 know, borings, maybe more. Quite a few in that area.
 23 I don't recall the exact number, but...
 24 Q. And, again, this design you've talked

1 about, there's no exhibit of it within your
 2 Application here?
 3 A. No.
 4 Q. And is it scraping off the soil and going
 5 down a certain number of feet on that entire acreage
 6 or some other method, if you know?
 7 A. It's not the entire -- I mean, we're not
 8 going right out to the limits of this. I mean, we've
 9 created kind of an interesting -- two shapes. There's
 10 a borrow area here, and then there's a borrow area
 11 here; because one of the other considerations, there's
 12 actually a gas pipeline that comes through here and
 13 kinds of comes at an angle and then continues east.
 14 (Indicating.) So we needed to avoid that.
 15 But there -- you know, similarly to
 16 like how you see our east sedimentation basin, it's
 17 not a regular, you know, straight line channel. To
 18 make it a little more interesting we created the
 19 basins here to be -- have not straight lines. They're
 20 kind of a meandering line around the borrow area.
 21 Q. Okay. With regard to accessing those
 22 areas, you indicated that your belief is because
 23 Prairie Parkway may or could be a long way off, you'll
 24 be able to always use Church Road north and south to

1 do that; is that correct?
 2 A. That's what we believe, yes.
 3 Q. Landfill sitings have, over your
 4 experience, taken a while to get approved, have they
 5 not?
 6 A. Yes. From start to finish, yes.
 7 Q. Could be as much as eight to 10 years?
 8 A. I don't expect it to be that much.
 9 Q. Have you seen them take that long in some
 10 of your experience?
 11 A. Not recently. I mean, maybe five years,
 12 you know. But we don't expect it to even take that
 13 long. Maybe three years, something of that nature.
 14 Q. Have you included in your Application any
 15 alternative method to access these borrow areas if
 16 Prairie Parkway is, in fact, built, and it, of course,
 17 as the plans are now with the State, does not include
 18 any access for Church Road being vacated?
 19 A. No. But as I mentioned yesterday, you
 20 know, we would have some notice for when -- I think a
 21 couple years, at least, for -- to know that Prairie
 22 Parkway was going to be built there in, say, a certain
 23 year.
 24 If that occurred before we were going

1 to get all the soils off of there, we would then
 2 accelerate the taking of those soils and use them
 3 on-site.
 4 Because we're also -- you know, we're
 5 going to use soils excavated from here for
 6 construction of the whole site. (Indicating.)
 7 If we needed to get soils from the
 8 borrow area sooner, instead of excavating from future
 9 cell areas here, we'd excavate from the borrow area
 10 and accelerate that. (Indicating.)
 11 And as a last resort if we needed to,
 12 you know, we would excavate the soils and stockpile
 13 them over here prior to Prairie Parkway being
 14 constructed. (Indicating.)
 15 Q. With respect to, again, the current
 16 Application you filed, I believe in response to
 17 Mr. Mueller's questions, you've indicated you've made
 18 a number of changes; in other words, the thicker
 19 low-soil permeability liner, the double liner, for
 20 instance, but you didn't consider them as a matter of
 21 engineering necessary, is that correct?
 22 A. That's correct.
 23 Q. And, again, neither of those features were
 24 present in the 2007 version?

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1 A. I'm not sure --
2 Q. The double liner and the additional soil.
3 A. No, they were both present. The double
4 liner was present in the 2007, and there was a minimum
5 six inches of soil. So there was -- there was a
6 double liner, and there was some -- a reduced amount
7 of soil underneath that.
8 Q. And you felt very comfortable with that?
9 A. Yes.
10 Q. The aquifer hasn't changed. You still
11 believe there's an aquifer there?
12 A. Yes.
13 Q. And, again, you're designing and believe
14 this new design will lessen the risk, but it doesn't
15 eliminate the risk, does it, to that aquifer?
16 A. Yeah, we're -- it's really to protect the
17 public health, safety, and welfare. I mean, that's
18 what we're designing for. And, again, I believe that
19 this design will. I know that it will, actually.
20 Q. But, again, you beefed it up considerably
21 from the first one, and wasn't your goal the same, to
22 protect the health and safety of the public in the
23 first application?
24 MR. MORAN: Objection; duplicative. We've

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1 heard this before.
2 HEARING OFFICER KINNALLY: Well, we have heard
3 it before. I think we have, so I'm going to sustain
4 the objection.
5 BY MR. KRAMER:
6 Q. Does the current design eliminate all risk
7 to the aquifer or does it simply reduce it?
8 A. I don't believe the site is going to leak
9 at all with this design, I can tell you that. I mean,
10 I have not in my experience, 20-plus years in
11 designing landfills with composite liners, I'm not
12 aware of one that leaks or has an issue.
13 You mentioned the older landfills,
14 prior designs, some of them do have issues, but not
15 designs -- liner designs like we have proposed for
16 Willow Run.
17 Q. Let me ask it maybe in a different fashion
18 one more time.
19 Does it eliminate any risk to that
20 aquifer?
21 MR. MORAN: Objection. He's answered the
22 question.
23 HEARING OFFICER KINNALLY: Sustained.
24 MR. KRAMER: I have no further questions.

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1 Thanks, Mr. Kinnally.
2 HEARING OFFICER KINNALLY: Thank, Mr. Kramer.
3 Miss Kramer, do you have any
4 questions?
5 MS. KRAMER: Just briefly.
6 CROSS-EXAMINATION
7 BY MS. KRAMER:
8 Q. Could you please direct your attention to
9 the surface water management slide that was in your
10 presentation from last night.
11 Can you please show me on this
12 particular slide the exact location of surface water
13 discharge from the southeastern portion of the site?
14 A. From this area? (Indicating.)
15 Q. Correct.
16 A. It's actually right in this area.
17 (Indicating.) We actually are creating kind of a long
18 rain garden that will take runoff from these two
19 discharge points from these two ponds. So it will
20 discharge at this point. (Indicating.)
21 Q. And is it discharging, then, on property
22 owned by Kendall Land & Cattle L.L.C. or Waste
23 Management?
24 A. Yes. Initially, yes, it would be. Well,

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1 it would be crossing the Prairie Parkway corridor,
2 and, yes, and then it's on the Kendall Land & Cattle
3 piece that's down here, yes. (Indicating.)
4 Q. Do you know approximately how far, it
5 would be southeast, the boundary of the property line
6 for Kendall Land & Cattle is?
7 A. How far -- I'm sorry. Can you ask the
8 question again?
9 Q. Do you know approximately how far the
10 boundary extends on the southeast corner of that
11 particular site?
12 A. I don't know the exact distance, no.
13 Q. In compiling the surface water management
14 plan, are there going to be any mechanical restriction
15 mechanisms in place at this discharge point?
16 A. Yes, there will be outlet structures that
17 will -- that manage the flow from those ponds and
18 retain a lot of the water that is coming into the
19 pond, yes.
20 Q. And did you, in compiling your
21 Application, complete what the flow rate would be in
22 this particular case with --
23 A. Yes.
24 Q. And what would that be?

1 A. Well, I can look it up. I don't remember
 2 it offhand, but it is noted in the Application.
 3 That actually comes from
 4 Table 10-2 -- and you specifically want to know the
 5 discharge from this point? (Indicating.)
 6 Q. Correct.
 7 A. That's actually what we call Ditch N in
 8 table 10-2. That channel is kind of natural and flows
 9 toward Brisbin and Sherrill Roads, and the discharge
 10 at that point after the landfill is developed is 791
 11 cfs for 100-year 24-hour storm.
 12 Q. And you stated last night during your
 13 testimony that you conducted an aerial predevelopment
 14 topography study of the Applicant site; correct?
 15 A. Yes.
 16 Q. And what were the contoured intervals that
 17 that study was conducted?
 18 A. It was a two-foot contour interval on that
 19 topographic map.
 20 Q. And what time of year did you conduct the
 21 aerial study?
 22 A. It was flown March 29th of 2008.
 23 Q. And with compiling the Application, did
 24 you have an opportunity to conduct an on-ground

1 investigation of the predevelopment topography?
 2 A. Yes, I went -- I personally went around
 3 the entire site and looked at all the structures. I
 4 was there, as I mentioned, during some rain events,
 5 you know, to see what actually was flowing. Yes, I
 6 did that.
 7 Q. And at what contour intervals was this
 8 done?
 9 A. A survey?
 10 Q. Correct.
 11 A. We didn't do any further survey. We
 12 relied on the topographic map, which is generally the
 13 most accurate, you know, of any survey.
 14 Q. And last night you testified that the
 15 natural flow of the stormwater in a predevelopment
 16 stage is generally from northwest to southeast;
 17 correct?
 18 A. Yes, that's the general flow through the
 19 site.
 20 Q. And isn't it true that the natural flow of
 21 the surface water stormwater as it exists in the
 22 predevelopment stage is going to be altered by the
 23 development of this particular site?
 24 A. It will be, yes.

1 Q. And you stated earlier on
 2 cross-examination that you have not fully completed
 3 the surface water management plan for the borrowed
 4 areas; correct?
 5 A. There's really no plan, I don't believe,
 6 that will be necessary for that area. It's not going
 7 to be generating any additional runoff.
 8 Q. In its predevelopment stage is there any
 9 stormwater runoff currently occurring?
 10 A. There is, yes.
 11 Q. And is it safe to say that that flows from
 12 northwest to southeast in its predevelopment stage?
 13 A. Yes.
 14 Q. And did you have an opportunity to conduct
 15 any investigations as to the type of flow or the rate
 16 of flow of the surface water to the borrowed areas?
 17 A. Yes. I mean that was part of our
 18 predevelopment flow analysis, so we understand how
 19 much predevelopment flow is going through there.
 20 You know, those -- so the borrow
 21 areas are just going to be ponds after there -- the
 22 soil is excavated out of there. So the reality is any
 23 surface water that was currently going through those
 24 fields is going to be detained by those ponds. So the

1 amount of flow is going to be less.
 2 Q. Is it going to be nonexistent with the
 3 ponds being there, or will there still be some surface
 4 water?
 5 A. There will still be some going through
 6 that area but it will be less, yes.
 7 Q. Is it safe to say that productivity on an
 8 adjoining landowner's site could be harmed by the lack
 9 of stormwater flowing over?
 10 A. You're talking about farmland
 11 productivity?
 12 Q. Correct.
 13 A. Well, we're not going to shut off all the
 14 water going to there. I mean, there's still go to be
 15 water flowing through there.
 16 And really these -- this surface
 17 water flows in defined channels. It doesn't disperse
 18 across a farm field to provide, you know, flow. I
 19 mean, that -- that's going to be provided by rainwater
 20 really.
 21 Q. But isn't an important mechanism for
 22 groundwater recharge and topsoil recharge surface
 23 water?
 24 A. Some. Some, yes.

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1 Q. So is it possible that the -- creating a
2 captive system in this borrow area could harm the crop
3 productivity on the adjoining landowner southeast of
4 the site?
5 A. I really don't think that's going to
6 happen. I mean, I can show you the flow patterns.
7 This ditch coming out of this southeastern part of the
8 site is fairly well-defined through the field. The
9 water stays in that one ditch. It doesn't disperse
10 across these fields and provide recharge.
11 Q. If I can direct your attention to the
12 slide in your presentation titled "Tile Drain Location
13 and Rerouting."
14 A. Okay.
15 Q. There currently exists farm tiles across
16 the -- and throughout the Applicant site; correct?
17 A. Yes.
18 Q. And is it safe to say that there are
19 approximately 10 to 20 lateral tiles connecting to the
20 main north and south tile on that eastern portion of
21 the Applicant site?
22 A. Yeah. I don't know the exact number, but
23 that's fair to say, yes.
24 Q. More than two?

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1 A. Yes.
2 Q. The current plan that you have compiled
3 depicts the removal of these existing farm tiles and
4 the rerouting of the stormwater in somewhat of a
5 captive system as shown in the blue line on this
6 slide; correct?
7 A. I'm not sure what you mean by a captive
8 system.
9 MS. KRAMER: If I could please rephrase it.
10 HEARING OFFICER KINNALLY: Sure. Go ahead.
11 BY MS. KRAMER:
12 Q. Your plan is to remove the existing farm
13 tiles located within the landfill footprint; correct?
14 A. Yes.
15 Q. And in lieu of those existing farm tiles
16 and removing these existing farm tiles, your
17 stormwater management plan creates that blue line that
18 runs on the -- it would be the north -- runs on the
19 north line, makes a right-hand turn, and then
20 discharges along the southeast section of the
21 property; correct?
22 A. That's actually going to be a new tile
23 constructed just the same as any farm tile would be
24 constructed. It's not going to be any different than

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1 that. But, yes, we'd connect to the existing tile and
2 put a new tile in along that line that's shown.
3 Q. And remove the existing tiles?
4 A. And remove the existing tiles, yes.
5 Q. Are there any written recorded easements
6 in place allowing for the discharge of the stormwater
7 onto adjacent properties, if you can answer that?
8 A. No, I'm not sure that -- I mean, the
9 adjacent property is actually Waste Management's, and
10 we're really not changing the amount of flow and the
11 type of flow; in fact, maybe reducing it some. But
12 the goal is to maintain tile drainage from the fields
13 to the north.
14 Q. So there's nothing written that you're
15 aware of?
16 A. Not from an easement standpoint, no.
17 MS. KRAMER: I have no further questions.
18 HEARING OFFICER KINNALLY: Okay. Thank you
19 Ms. Kramer.
20 Mr. Helsten, I've think you've got
21 the floor.
22 MR. HELSTEN: Okay. Thank you, Mr. Hearing
23 Officer.
24

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1 CROSS-EXAMINATION
2 BY MR. HELSTEN:
3 Q. Good evening, Mr. Nickodem.
4 The first area of questioning real
5 quickly, Mr. Nickodem, I want to follow-up briefly on
6 some questions asked about this borrow area.
7 As I understand it, we can't find
8 these borrow areas if we refer to the Application as
9 they're not within the boundaries of the facility that
10 are the subject of this siting hearing; correct?
11 A. Correct.
12 Q. Okay. Nonetheless, it's my understanding,
13 just so we're clear, that this land is owned or
14 controlled by Waste Management, and Waste Management
15 will ensure that those lands are made available to
16 address the soil shortfall that exists on the site
17 that's the subject of this Application; correct?
18 A. Yes.
19 Q. Okay. And as I understand it, those
20 off-site borrow areas will be the -- an ongoing source
21 of soil for both landfill development and
22 construction, any needs during operation, final cover,
23 and closure/post-closure phases of this landfill;
24 correct?

1 A. Yes.
 2 Q. Okay. When your direct examination
 3 started, you talked about soliciting concerns from the
 4 interested public or people here about the design and
 5 other aspects of the Application; correct?
 6 Do you recall that?
 7 A. I don't know if I said soliciting but --
 8 Q. What did you say? I don't want to
 9 misrepresent or misphrase what you said.
 10 A. Well, obviously I was at the last hearing
 11 and, you know, worked on the last design, and there
 12 were a number of concerns that were raised, and we,
 13 you know, took those into account from -- from the
 14 concerns that were raised.
 15 Q. Okay. So you mean concerns that were
 16 raised during the hearing?
 17 A. Yes, I would say.
 18 MR. HELSTEN: All right. I'm eliminating
 19 questions, Mr. Kinnally, so that should maybe
 20 everybody happy.
 21 HEARING OFFICER KINNALLY: I'm sure, it does,
 22 Mr. Helsten. Much appreciated.
 23 MR. HELSTEN: Okay.
 24

1 BY MR. HELSTEN:
 2 Q. Now, Mr. Nickodem, in response to some
 3 questions that Mr. Kramer asked about the double
 4 composite liner system, I believe you said that there
 5 haven't, to your knowledge, been any problems that
 6 have arisen with any double composite liner system
 7 that you've been involved with; is that correct?
 8 A. Correct.
 9 Q. Okay. I want to go a little bit beyond
 10 that to other systems that you haven't been involved
 11 in the design of or the construction of.
 12 Are you aware of any problems that
 13 have historically arisen with double composite liner
 14 systems that have been designed and put in place other
 15 than the ones you've been involved with?
 16 A. Not that I'm aware of, no.
 17 Q. You're not aware of any studies either by
 18 WDNR or IEPA or any experts in the field that -- case
 19 studies that have focused upon the number of landfills
 20 in the United States that have had double composite
 21 liner systems installed over the last two decades and
 22 what percentage of failures or other problems there
 23 have been in those systems?
 24 A. I mean, I'm aware of some studies, but I

1 don't believe the case -- any case studies really bear
 2 that out, that I'm aware of. I don't know if -- I
 3 think there are a lot of theoretical studies on the
 4 merits of double composite liners, but from an actual
 5 standpoint, you know, when you're actually working out
 6 there in the field, I'm not aware of any problems.
 7 Q. What studies are you aware of? Can you
 8 just tell me briefly what studies you're aware of?
 9 A. I don't know specifically studies. I
 10 think the IEPA has either done a study or commissioned
 11 a study a few years ago. DNR -- certainly Wisconsin
 12 DNR has looked at composite liners also, double
 13 composite liners. I don't remember the exact study
 14 dates, though.
 15 Q. Okay. Do you remember the -- I think -- I
 16 believe the WDNR study was in 1997.
 17 Do you recall any concerns raised in
 18 that WDNR study about the difficulty of constructing
 19 double composite liner systems or difficulty in
 20 monitoring leak detection because of the multiple
 21 layers?
 22 A. I don't recall that specifically,
 23 Mr. Helsten. But, you know, there's been a lot of
 24 different ways to construct double liners. I mean,

1 you mentioned leak detection. That's a layer in
 2 between the two liners. So we don't have that here.
 3 You know, I'm not sure specifically what would be an
 4 issue there.
 5 Again, I've been involved with
 6 constructing these for almost my entire career, and I
 7 haven't seen any issue.
 8 Q. They've been constructed essentially over
 9 the past two decades; correct?
 10 A. A little -- actually, earlier than that.
 11 They started in the really early '80s, even before
 12 Subtitle D came out, mainly in the northeastern states
 13 they started --
 14 Q. Why did they employ them in the
 15 northeastern states? Can you tell me why they're
 16 employed there?
 17 A. A lot of it's regulation. The regulations
 18 have required that. They have -- typically in the
 19 northeastern states they have a lot of these
 20 facilities just because of the density of population,
 21 and -- although I --
 22 Q. Any other reasons? Any other
 23 hydrogeologic reasons?
 24 A. I don't know about that. No, not that I'm

1 aware of.
 2 Q. Okay. The double composite liner system
 3 that you proposed for this facility, is there another
 4 one that I could go look that you can point to in the
 5 State of Illinois?
 6 A. Not that I've worked on.
 7 Q. Okay. Are you aware of any other one?
 8 A. No, I'm not aware of any other ones.
 9 Q. Okay. So this would be the first one of
 10 this type in the State of Illinois of all the
 11 landfills in the State of Illinois; correct?
 12 A. As far as I'm aware of, I guess that would
 13 be the case.
 14 Q. Okay. How far away would I have to go to
 15 your knowledge, to find a landfill that's been
 16 constructed -- that's been approved and been
 17 constructed and permitted that has this same type of
 18 double composite design that you're proposing here?
 19 A. Right around the lake to southwestern
 20 Michigan. They require double composites. And
 21 there's a Republic Industries site that I've worked on
 22 there that has a double composite liner.
 23 Q. Why is a double composite liner required
 24 there?

1 A. That's what the State of Michigan
 2 requires.
 3 Q. Why do they require it? Certainly there's
 4 a reason -- there's always a reason for a design
 5 requirement, isn't there?
 6 A. I don't know. I didn't -- I didn't write
 7 the regulation, so I'm not sure why they required it.
 8 Q. Okay. If you're not sure the purpose of
 9 those regulations, that's fine.
 10 Now, I believe Mr. Moran, if I'm not
 11 mistaken, in his opening statement said that the
 12 proposed design for this landfill exceeds all state
 13 and federal standards for Subtitle D landfills.
 14 Do you recall that?
 15 A. Yes.
 16 Q. Okay. Can you tell me in what respects
 17 this facility, in your opinion, exceeds state and
 18 federal standards for Subtitle D landfills?
 19 A. Well, let's start with federal
 20 regulations. Federal regulations require two feet of
 21 low-permeability soil and a -- not necessarily even a
 22 60-mil liner but an impermeable liner. So we exceed
 23 that. We actually have three feet of material and a
 24 double composite liner.

1 Similarly, Illinois regulations --
 2 actually their base liner is a five-foot
 3 low-permeability soil liner, but the alternative is a
 4 single composite liner of three feet of clay -- or
 5 three feet of low-permeability soil and a 60-mil HDPE
 6 geomembrane. So we exceed that by our design of a
 7 composite liner.
 8 Q. Any other aspects in which you exceed the
 9 state or federal requirements?
 10 A. You know, I think in our -- certainly in
 11 our surface water control systems. I mean, we went
 12 above and beyond --
 13 Q. No, I mean with respect to the liner
 14 system.
 15 A. Oh, the liner system itself? Yeah, in
 16 terms of construction, specifically with construction
 17 quality assurance. The State of Illinois does not
 18 require the leak detection after it's constructed.
 19 They require a normal CQA plan and --
 20 where, you know, a third-party CQA firm would be out
 21 there to check out the aspects of the liner. But they
 22 don't require that electrical resistivity testing of
 23 the liner after it's constructed. So that exceeds the
 24 regulations.

1 Q. Okay. Is it fair, then, to say that the
 2 double composite liner system design that you're
 3 proposing here is essentially the same as prescribed
 4 for Subtitle C hazardous waste landfills?
 5 A. I don't work a lot with Subtitle C.
 6 Q. You work with them, though?
 7 A. I have on occasion. They're not very
 8 common facilities anywhere in the U.S.
 9 Q. But you're familiar with the design
 10 components there as opposed to the design components
 11 in the Subtitle D landfill like here?
 12 A. It's similar.
 13 Q. It's similar?
 14 A. Yes. I mean, there are aspects that may
 15 be different, but it's similar.
 16 Q. Is it substantially similar?
 17 A. I don't recall the specific regulations,
 18 you know, for that, but it's similar. That's all I
 19 can say right now.
 20 Q. So the double composite liner system that
 21 you're -- that you're proposing here is similar to one
 22 that's proposed for a hazardous waste landfill under
 23 Subtitle C?
 24 MR. MORAN: Objection; asked and answered.

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1 HEARING OFFICER KINNALLY: Sustained.
2 MR. HELSTEN: Basis for the sustaining it,
3 Mr. --
4 HEARING OFFICER KINNALLY: He said it. Asked
5 and answered. It was.
6 MR. HELSTEN: Okay.
7 Crossing them off, Mr. Kinnally.
8 BY MR. HELSTEN:
9 Q. Mr. Nickodem, with any composite liner
10 system, it's important that all the liner layers
11 maintain their integrity and are properly constructed
12 and seep properly; is that correct?
13 A. Yes.
14 Q. And it's no easy task even to construct a
15 single composite liner system, is it?
16 A. I'm sorry. What did you say?
17 Q. It's no easy task to even construct a
18 single composite liner system, is it?
19 A. It's actually fairly routine now.
20 Q. But it takes a certain amount of precision
21 and care, doesn't it?
22 A. Yes.
23 Q. Okay. And it would be even more difficult
24 with a double composite liner system, wouldn't it,

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1 because you're overlaying and integrating one
2 composite liner system on another one?
3 A. The system we designed is not going to
4 have any constructability issues.
5 Q. And why is that?
6 A. It's actually a very straightforward,
7 simple design where after we place the
8 low-permeability soil layer, the other three layers
9 are laid out on top of one another. It's a fairly
10 easy operation.
11 I mean, I was just on a construction
12 site about a month-and-a-half ago in Lockport where
13 similarly we had a GCL and a 60-mil liner, and it all
14 goes down very nice, very easily.
15 Q. Let's go to the landfill design here, the
16 capacity.
17 Can you tell me why the design life
18 of this landfill capacity is 14.5 years as opposed to
19 something more, say 17, 18 or 19 years?
20 A. That's just what the capacity is. I mean,
21 if --
22 Q. All right. Let me put it a different way.
23 Is the design life here, the 14.5
24 years' capacity driven by physical constraints

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1 presented by the site or by some other consideration
2 such as perhaps alternative technologies may be in
3 place 13, 14 years from now to treat waste and dispose
4 of waste?
5 A. It's -- I mean, there were no constraints.
6 You know, we designed it the way we did, and it ended
7 up with the volume that it is at 14-and-a-half
8 million.
9 I will say that, you know, if we look
10 at the final cover, we did not, you know, peak this
11 final cover out. We provided for, you know, an
12 undulating surface on the site, you know, to allow for
13 a nice feature as an end use as opposed to some
14 landfills that go straight up on the sides.
15 We could have actually -- if we would
16 have done that, we would have got more volume, but we
17 wanted to make sure that esthetically it looked better
18 when it was completed.
19 Q. Let's talk a little bit about the potable
20 private well survey you did.
21 Just so I'm clear, how many private
22 potable private wells did you identify in that study
23 that you and Mr. Moran talked about?
24 HEARING OFFICER KINNALLY: 1,003.

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1 MR. HELSTEN: Pardon?
2 HEARING OFFICER KINNALLY: 1,003, wasn't it?
3 THE WITNESS: Yes.
4 BY MR. HELSTEN:
5 Q. And that was within what area of the site
6 bounders?
7 HEARING OFFICER KINNALLY: Five miles.
8 THE WITNESS: Five files.
9 MR. HELSTEN: You guys all have better memories
10 than I do.
11 MR. BLAZER: If you want, we can take a break
12 and go through all this stuff.
13 HEARING OFFICER KINNALLY: Take it easy,
14 Mr. Blazer.
15 MR. HELSTEN: I just ignore him, Mr. Kinnally.
16 BY MR. HELSTEN:
17 Q. Did you conduct this same study in
18 connection with the 2007 application?
19 A. I didn't, no, at that time.
20 Q. Okay.
21 A. But I did -- they did in this Application.
22 Q. In this one they did; correct?
23 A. I'm sorry. What?
24 HEARING OFFICER KINNALLY: No, they didn't do

<p style="text-align: right;">Page 283</p> <p>1 one the last time. 2 BY MR. HELSTEN: 3 Q. They didn't do one the last time but you 4 did one this time? 5 HEARING OFFICER KINNALLY: That's right. Next 6 question. 7 BY MR. HELSTEN: 8 Q. Okay. What was the significance or the 9 purpose in doing the study this time around? 10 HEARING OFFICER KINNALLY: Well, the ordinance 11 requires it. 12 MR. HELSTEN: Okay. Well, I'm just wondering. 13 Okay. All right. 14 BY MR. HELSTEN: 15 Q. Let's go -- let's talk a little bit about 16 some of the site location standards that you and 17 Mr. Moran discussed. 18 As I understand it, you haven't 19 received a regulatory clearance yet on the historical 20 and archeological site issues yet; correct? 21 A. No. I've actually had some correspondence 22 with the IHPA. I received one letter where they 23 requested some more photographs. But the report that 24 was done shows that there are no archeological</p>	<p style="text-align: right;">Page 285</p> <p>1 determine if there were any quarries in this area that 2 engage in blasting operations and whether that -- 3 whether there were any seismic consequences that may 4 impact this facility? 5 A. I am aware of the quarries in the area, 6 although I have not visited them. And, yes, they do 7 blasting, but that's a different issue than having a 8 seismic impact zone where you could have, you know, 9 earth moving from an earthquake. 10 Q. So your answer is no, you didn't do any 11 study or any evaluation of whether the blasting 12 activities there may affect the -- the location of 13 this landfill; correct? 14 A. Yeah. But I don't believe it's going to 15 affect it at all, yeah. 16 Q. You don't believe it but you didn't 17 conduct any study; correct? 18 A. That's correct, yes. 19 Q. Okay. How far away are those quarries? 20 A. I don't know offhand how far away they 21 are. 22 Q. Mr. Nickodem, just briefly following up 23 on a line of questioning that Mr. Mueller and you 24 engaged in last night, is it my understanding that</p>
<p style="text-align: right;">Page 284</p> <p>1 resources on the site. 2 Q. But you haven't received regulatory 3 sign-off and approval yet; correct? 4 MR. MORAN: Objection. This is not a permit 5 application process before the agency. 6 HEARING OFFICER KINNALLY: He already said that 7 he hadn't received approval on his direct examination 8 so overruled. 9 You didn't get the approval yet. 10 THE WITNESS: No. 11 HEARING OFFICER KINNALLY: Okay. Next 12 question. 13 BY MR. HELSTEN: 14 Q. Same with the Army Corps of Engineers 15 review? You haven't got that approval yet? 16 MR. MORAN: Same objection. 17 HEARING OFFICER KINNALLY: Well, he said he did 18 get it so, you know... 19 I'm going to sustain it. I don't see 20 how it has any probative value. 21 BY MR. HELSTEN: 22 Q. Let's talk a little bit, Mr. Nickodem, 23 about your seismic impact study. 24 In conducting that study, did you</p>	<p style="text-align: right;">Page 286</p> <p>1 you -- you are of the opinion that all waste 2 decomposes within 50 years of being placed in a 3 landfill? 4 A. No, I said that's a general time frame, 5 you know, for waste decomposition. That's accepted or 6 somewhat accepted as designers, and that's somewhat 7 the reason for our 30-, or in some states, 40-year 8 post-closure periods. 9 Q. Okay. Now, the waste may decompose but 10 the contaminants or constituents within that waste 11 don't necessarily decompose, do they? 12 A. Well, actually it's shown as part of 13 decomposition that over time a lot of those 14 constituents, in fact, are cleaned up and are much 15 less over time as the waste decomposes. 16 Q. Some are, but some don't lose their toxic 17 nature, do they, or their harmful nature? 18 A. The majority of them do. Some may not. 19 Q. Some don't; correct? 20 HEARING OFFICER KINNALLY: He just said, yes, 21 some may not. 22 BY MR. HELSTEN: 23 Q. Well, Mr. Nickodem, if all of the 24 constituents -- I guess I'm curious, if all these</p>

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1 constituents or contaminates within the waste break
2 down within 50 years or 60 years, why are we cleaning
3 up all the Superfunds sites that we are across the
4 country that are 60, 70, 80, 90 years old that contain
5 this type of waste?
6 A. I don't think you're comparing apples to
7 apples there. I mean, you know, Superfund sites may
8 be industrial sites taking hazardous waste. This site
9 is not going to take hazardous waste.
10 And, in fact, over the years the
11 types of waste that have been disposed in municipal
12 solid waste landfills has definitely changed. You
13 know, there's more regulation on special waste and
14 things like that, where in past years before Subtitle
15 D or even before that, sites were allowed to take
16 municipal land -- municipal landfill sites were
17 allowed to take other waste that may be toxic, but
18 that's just not the case anymore.
19 Q. But they still contain hazardous
20 substances? The wastes that are received still
21 contain the same hazardous substances in some level;
22 correct?
23 A. Very minute, you know, non-regulated
24 quantities, yes.

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1 MR. HELSTEN: That's all.
2 HEARING OFFICER KINNALLY: Okay. Thank you,
3 Mr. Helsten.
4 Mr. Belt?
5 MR. BELT: Thank you, Mr. Kinnally, and good
6 evening, Mr. Nickodem.
7 THE WITNESS: Good evening.
8 CROSS-EXAMINATION
9 BY MR. BELT:
10 Q. Mr. Nickodem, have you sited any other
11 landfills near airports?
12 A. I don't recall specifically. I mean, I'm
13 sure there are some in the, you know, more than
14 hundred sites I worked for, but I don't recall
15 specifically which ones those would be. I guess I
16 could look at my list but...
17 Q. So your answer is that you may have some
18 experience in siting landfills near airports?
19 A. Well, every site that I've worked on we
20 need to look at that criteria and we need to look at
21 the proximity of airports. Every single landfill I
22 work on we need to do that.
23 Q. Okay. Fair enough. Would that lead me to
24 believe, then, that it would be fair to say that

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1 you're familiar with the statutes and regulations that
2 pertain to siting landfills near airports?
3 A. Yes.
4 Q. Okay. Out of the landfills that you've
5 worked on near airports, have any of those landfills
6 been located directly beneath any of the approach
7 surfaces, specifically instrument approach surfaces?
8 A. There are some sites that I've worked on,
9 yes, that have been in those approaches, yes.
10 Q. And when -- in those circumstances, did
11 you consult with the FAA at all?
12 A. Yeah. There are cases where, depending on
13 the site, that we asked the FAA for guidance on
14 development of the landfill, yes.
15 Q. And did they provide you guidance?
16 A. Yes. In the cases that I can recall, yes.
17 Q. And did you find it helpful in terms of
18 engineering -- engineering whatever sites you were
19 working on?
20 A. Yes.
21 Q. Had you also -- or have you consulted also
22 with the Illinois Division of Aeronautics?
23 A. No. I have not consulted with them, no.
24 Q. Okay. How about the USDA?

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1 A. I don't recall a site where we consulted
2 with USEPA, no.
3 Q. Okay. In dealing with the FAA, are you
4 familiar with the publications from the FAA that are
5 typically entitled advisory circulars?
6 A. Yes.
7 Q. Have you relied on information contained
8 in FAA advisory circulars in your past experiences
9 with other landfills?
10 A. Yes. Specifically they have an advisory
11 circular in regards to developing landfills near
12 airports, and we do rely on that, yes.
13 Q. Okay. And I believe that would be
14 advisory circular 150/5200/33B entitled "Hazardous
15 Wildlife Attractants on or Near Airports."
16 A. I don't recall the number, but I am
17 familiar with that advisory, yes.
18 Q. Fair enough. Are you also familiar with a
19 separate advisory circular that's somewhat related
20 entitled "Construction or Establishment of Landfills
21 near Public Airports"?
22 A. Yes.
23 Q. And have you relied on information in both
24 of these circulars in your past?

1 A. Yes.

2 Q. During your direct testimony you suggested

3 to this Board, if I understood your testimony

4 correctly, that because of the fact that the Morris

5 Airport is located more than 10,000 feet away from the

6 landfill footprint, that it's not an affected airport.

7 Did I understand your testimony

8 correctly?

9 A. Yes.

10 Q. Okay. And is that 10,000-foot

11 calculation, does that come from Part 258 of Title 40

12 of the Code of Federal Regulations?

13 A. Yeah. That would be from there, and it's

14 also in the Illinois landfill regulations, yes.

15 Q. Okay. There are -- well, strike that.

16 Are you familiar with any other

17 regulations, whether they be state or federal

18 regulations, that pertain to siting landfills within a

19 relatively close proximity to airports?

20 A. No, we rely on the federal regulation that

21 you mentioned, 40 CFR Part 258 and 811 Illinois

22 regulations. No, I'm not familiar with any others.

23 Q. Well, let's talk about 40 CFR 258 for a

24 moment.

1 There we actually have three

2 different distances that are identified in that

3 section, and you're correct, one of them does indicate

4 a 10,000-foot distance from the end of an airport

5 runway which is used by turbojet aircraft; correct?

6 A. Yes.

7 Q. And I think that was the basis of your

8 10,000 foot comment on direct yesterday?

9 A. Yes.

10 Q. Okay. And there's a 5,000-foot reference

11 which is connected into piston-type aircraft?

12 A. Yes.

13 Q. Okay. Now, there's also a five-mile

14 radius which is included in the regulations.

15 Are you familiar with the five-mile

16 radius and its purpose?

17 A. Actually I believe it's six miles is the

18 other criteria.

19 Q. I'm going to get to the six-mile radius in

20 just a moment.

21 The five-mile -- are you familiar

22 with the five-mile radius as it relates to --

23 A. No, I'm not sure what -- which regulation

24 you'd be citing for five miles.

1 Q. Okay. So you're not familiar with a

2 five -- I'll take your answer, you're not familiar

3 with a five-mile radius --

4 A. No.

5 Q. -- in 40 CFR 258.

6 Let's talk about a six-mile radius.

7 HEARING OFFICER KINNALLY: Wait a minute. Is

8 there two questions here or one question? He said he

9 wasn't -- you're not familiar with the five-mile?

10 THE WITNESS: No.

11 HEARING OFFICER KINNALLY: Okay. So the record

12 is clear. Next question. Sorry.

13 BY MR. BELT:

14 Q. And I'm assuming you're talking about the

15 Wendell Ford Aviation Reform Act found at

16 489 USC 447?

17 A. Yes.

18 Q. And that's basically a rule obviously

19 adopted by Congress which the general rule is that no

20 new landfills may be located within six miles of a

21 public airport; is that correct?

22 A. Yes.

23 Q. And you have -- there is a reference on

24 the one page in the siting Application that does

1 reference this six-mile radius; correct?

2 A. Yes.

3 Q. And as it relates to the airport and the

4 siting Application, have I missed anything or is there

5 only one page in the nine volumes that addresses

6 airports?

7 A. Well, actually I think it's two pages.

8 There's the text and then there's a figure showing the

9 distance from the landfill to the airport.

10 Q. Okay. So one page consisting of text and

11 the other one would be an exhibit.

12 A. Yes.

13 Q. Okay. Thank you. In the Act that

14 implements the six-mile rule, do you -- well, strike

15 that.

16 There are some Congressional

17 declarations that are contained in that legislation,

18 and I want to ask you, do you agree with the

19 Congressional finding that collision between aircraft

20 and birds have resulted in fatal accidents?

21 MR. MORAN: Objection. We've now gone on for

22 quite some time regarding the whole question of the

23 airport regulations as it applies to this landfill.

24 That consideration and that issue is

1 clearly beyond the proper scope of a siting
2 application and siting hearing.
3 The Illinois Environmental Protection
4 Agency will review these location standards and make
5 any appropriate determination at the time a permit
6 application is submitted. It's simply not a proper
7 inquiry at this siting hearing.

8 MR. BELT: If I may respond. It is relevant,
9 and it's relevant based on the fact to my knowledge
10 there's been no contact with the FAA, Illinois
11 Division of Aeronautics, or the USDA, at least as of
12 today's date.

13 So I think that with his familiarity
14 with this legislation that we're discussing and his
15 testimony right now and the various Congressional
16 findings that directly relate to bird strikes as it
17 relates to small aircraft and public airports is
18 clearly relevant.

19 HEARING OFFICER KINNALLY: Well, does anybody
20 else want to be heard on this?

21 MR. MUELLER: Actually, yes.

22 HEARING OFFICER KINNALLY: Okay.

23 MR. MUELLER: I thought Mr. Nickodem referenced
24 compliance with location standards in his direct

1 testimony. So if it wasn't relevant, it became
2 relevant when he introduced it.

3 HEARING OFFICER KINNALLY: Well, it may be
4 relevant.

5 Anybody else want to be heard on
6 this?

7 MR. HELSTEN: I would just join in what
8 Mr. Mueller just said. If it wasn't relevant, I'm
9 surprised that Mr. Moran went through it with
10 Mr. Nickodem in direct examination.

11 I wouldn't imagine that Mr. Moran
12 would go through anything that isn't relevant or
13 doesn't deal with public health, safety, and welfare.

14 HEARING OFFICER KINNALLY: Okay. Anybody else?

15 Well, here's the issue: He did go
16 into location standards in his direct examination, so
17 he opened it up. But it seems to me that the statute,
18 as I understand it, is very clear, and that the
19 witness has already testified that the siting of this
20 particular landfill complies with state law with
21 respect to this location standard.

22 So I'll give you a little leeway
23 here, but, you know, at this particular point, I don't
24 see how it's a great -- there's a great deal of

1 relevance to this particular Application.
2 Whether or not they comply with
3 federal law I don't even think is relevant at this
4 particular point. The issue here is whether it
5 complies with state law and the ordinance, and he's
6 already testified that it complies with state law.

7 But you did open it up, so we'll give
8 you a little bit of leeway. You can bring your own
9 witnesses to testify on this, Mr. Belt.

10 MR. BELT: I understand.

11 HEARING OFFICER KINNALLY: And we're going to
12 let you put those on.

13 MR. BELT: I understand that.

14 HEARING OFFICER KINNALLY: I don't think
15 there's a whole lot of relevance here, but go ahead.

16 MR. BELT: Thank you.

17 BY MR. BELT:

18 Q. Mr. Nickodem, do you agree with the
19 proposition that bird strikes pose a special danger to
20 smaller aircraft?

21 A. Can you ask that again? I'm sorry.

22 Q. Do you agree with the proposition that
23 bird strikes pose a special danger to smaller
24 aircraft?

1 A. Yeah. I'm aware that they pose a danger,
2 yes. Yes.

3 Q. And do you also agree with the proposition
4 that landfills near airports pose a potential hazard
5 to aircraft operating in the area because the
6 landfills attract birds?

7 A. It is one of just many attractants to, you
8 know, birds.

9 Q. Is that a yes?

10 A. Yes, it's one of many types of
11 attractants, yes.

12 Q. Okay. Mr. Nickodem, when did you
13 originally come to the realization that this proposed
14 facility was located beneath an instrument approach
15 surface to the Morris Airport?

16 A. Is that the alternate -- there's two --
17 aren't there two approaches to the airport? There's a
18 primary one and an alternate, that I understand.

19 Q. Well, let me withdraw that and let me ask
20 this question: Are you familiar with the fact that
21 there are three types of instrument approach surfaces
22 to the Morris Airport; precision instrument, GPS
23 non-precision and VOR non-precision?

24 Are you familiar with any of those

<p style="text-align: right;">Page 299</p> <p>1 three?</p> <p>2 MR. MORAN: Objection; relevance.</p> <p>3 HEARING OFFICER KINNALLY: I really don't see</p> <p>4 the relevance of this. That's sustained.</p> <p>5 BY MR. BELT:</p> <p>6 Q. I'd like to return, then, to the original</p> <p>7 question that I had and just ask it a different way.</p> <p>8 Are you aware as you sit here today</p> <p>9 whether or not this landfill footprint is proposed to</p> <p>10 be located beneath an instrument approach surface?</p> <p>11 MR. MORAN: Objection; relevance.</p> <p>12 HEARING OFFICER KINNALLY: Sustained.</p> <p>13 MR. MUELLER: Mr. Kinnally, if I could be heard</p> <p>14 for --</p> <p>15 HEARING OFFICER KINNALLY: Sure. You can be</p> <p>16 heard, Mr. Mueller, but I'd like to hear from Mr. Belt</p> <p>17 first, and then you can say whatever you want. Go</p> <p>18 ahead, Mr. Belt.</p> <p>19 MR. BELT: Mr. Kinnally, I think it's important</p> <p>20 in terms of when Mr. Nickodem became aware, if he has</p> <p>21 become aware at all, as to when this landfill -- when</p> <p>22 he learned that this landfill is located beneath what</p> <p>23 is, you're going to hear from our witnesses, is a</p> <p>24 sensitive instrument approach surface.</p>	<p style="text-align: right;">Page 301</p> <p>1 on the question of location.</p> <p>2 So I think Mr. Belt's inquiry is as</p> <p>3 relevant as it can be in terms of the Criterion 2</p> <p>4 question that the County Board is required to decide</p> <p>5 independent of whether or not we've met a state</p> <p>6 location standard.</p> <p>7 HEARING OFFICER KINNALLY: Well, I disagree</p> <p>8 with that, but go ahead, you can ask the question.</p> <p>9 But you're going to have your own witnesses to testify</p> <p>10 about this.</p> <p>11 MR. BELT: I understand.</p> <p>12 HEARING OFFICER KINNALLY: That's your best</p> <p>13 case.</p> <p>14 BY MR. BELT:</p> <p>15 Q. Mr. Nickodem, I'll repeat my question.</p> <p>16 As you sit here tonight, are you</p> <p>17 aware as to whether or not this landfill footprint is</p> <p>18 located beneath an instrument approach surface to the</p> <p>19 Morris Airport?</p> <p>20 HEARING OFFICER KINNALLY: No, that's not the</p> <p>21 question you asked before. The question you asked</p> <p>22 before is when did he learn about it. That was the</p> <p>23 question that the objection was based.</p> <p>24 Is that the question you want to ask,</p>
<p style="text-align: right;">Page 300</p> <p>1 HEARING OFFICER KINNALLY: Why is it important</p> <p>2 as to when he learned it? Tell me why -- I know it's</p> <p>3 important to you. I know it's important to your</p> <p>4 client. I'm not trying to discount that. But why is</p> <p>5 it material to when he knew -- or relevant as to when</p> <p>6 he learned about it?</p> <p>7 MR. BELT: I think it's relevant as to whether</p> <p>8 or not that knowledge was utilized in designing this</p> <p>9 facility.</p> <p>10 HEARING OFFICER KINNALLY: Mr. Mueller, you</p> <p>11 wanted to say something?</p> <p>12 MR. MUELLER: Yeah, very briefly, Mr. Kinnally.</p> <p>13 If the inquiry is whether or not we</p> <p>14 have met state location standards or are in compliance</p> <p>15 with some federal setbacks and other regulations, then</p> <p>16 we wouldn't be having this siting hearing.</p> <p>17 Section 39.2 requires the County</p> <p>18 Board to make a determination as to whether the</p> <p>19 facility is so located as to protect the public,</p> <p>20 health, safety, and welfare.</p> <p>21 The likelihood or non-likelihood of</p> <p>22 bird strikes on low-flying aircraft when those bird</p> <p>23 strikes may be related to a landfill is a public</p> <p>24 health, safety, and welfare issue that bears directly</p>	<p style="text-align: right;">Page 302</p> <p>1 because now we have a different question.</p> <p>2 MR. BELT: Then I will return to my first</p> <p>3 question.</p> <p>4 BY MR. BELT:</p> <p>5 Q. When did you learn that fact?</p> <p>6 A. Well, let me just say first, I'm not a</p> <p>7 pilot, and I don't understand all the terms that you</p> <p>8 talk about. But in the last application in 2007, well</p> <p>9 before the hearing, I mean I reviewed the FAA website</p> <p>10 to see where planes would approach to the Morris</p> <p>11 Airport. So it was -- it was before the last hearing</p> <p>12 that I was aware of the way planes approach the</p> <p>13 airport.</p> <p>14 Q. Okay. Prior to the last hearing, meaning</p> <p>15 not the Soave hearing, but the Waste Management 1?</p> <p>16 A. Correct, the Waste Management 1.</p> <p>17 Q. Have you consulted with the FAA on this</p> <p>18 facility?</p> <p>19 MR. MORAN: Objection; relevance.</p> <p>20 MR. BLAZER: Objection.</p> <p>21 HEARING OFFICER KINNALLY: I think he already</p> <p>22 said he hadn't.</p> <p>23 Didn't you? Didn't you say you</p> <p>24 hadn't talked to the FAA yet?</p>

<p style="text-align: right;">Page 303</p> <p>1 THE WITNESS: Yes.</p> <p>2 HEARING OFFICER KINNALLY: Okay. Next</p> <p>3 question. Objection sustained by Mr. Blazer, because</p> <p>4 it was asked and answered.</p> <p>5 BY MR. BELT:</p> <p>6 Q. Mr. Nickodem, did you have any</p> <p>7 responsibility in preparing the bird control plan</p> <p>8 which is contained in the Application?</p> <p>9 A. I reviewed the plan. I did not prepare</p> <p>10 the plan.</p> <p>11 Q. Okay. Are you aware of whether or not</p> <p>12 there were any site-specific studies that were done</p> <p>13 related to bird control?</p> <p>14 A. I am not. I don't recall in that specific</p> <p>15 plan.</p> <p>16 Q. I'd like to talk with you for a moment on</p> <p>17 stormwater management.</p> <p>18 If I understood your testimony, the</p> <p>19 sedimentation basin which you testified to was</p> <p>20 designed to hold water; is that correct?</p> <p>21 A. Yes.</p> <p>22 Q. And then there were two other ponds that</p> <p>23 were noted on the -- within the facility boundary.</p> <p>24 Are those also intended to hold</p>	<p style="text-align: right;">Page 305</p> <p>1 Q. Can you estimate it any more accurate than</p> <p>2 less than the footprint of the landfill?</p> <p>3 A. I don't know the exact acreage, no.</p> <p>4 Q. Do you know whether or not the borrow</p> <p>5 areas once they are created will hold water?</p> <p>6 A. Yes, they will.</p> <p>7 Q. Is there any design whatsoever that will</p> <p>8 allow them to discharge water to another location at</p> <p>9 some designed rate?</p> <p>10 A. No. They're solely as detention basins,</p> <p>11 detention ponds.</p> <p>12 MR. BELT: Okay. Very good. That's all I</p> <p>13 have. Thank you.</p> <p>14 HEARING OFFICER KINNALLY: Mr. Lyle?</p> <p>15 MR. LYLE: I have no questions.</p> <p>16 HEARING OFFICER KINNALLY: We're going to take</p> <p>17 a break now, and then we'll have some questions, if</p> <p>18 the County Board has any questions and Mr. Blazer, any</p> <p>19 of the other participants.</p> <p>20 I want to remind everybody that</p> <p>21 Mr. Nickodem has now been testifying for approximately</p> <p>22 five hours, so I'd like to move this along a little</p> <p>23 bit if we can.</p> <p>24 (Recess taken.)</p>
<p style="text-align: right;">Page 304</p> <p>1 water?</p> <p>2 A. Yes, they will.</p> <p>3 Q. Okay. In -- returning to the advisory</p> <p>4 circulars that we discussed a moment ago, are you</p> <p>5 familiar with an FAA requirement that requires a</p> <p>6 stormwater management system located within five miles</p> <p>7 of an airport be designed and operated so there's no</p> <p>8 standing water?</p> <p>9 A. I'm not familiar with that requirement,</p> <p>10 no.</p> <p>11 Q. Okay. Do you know the approximate acreage</p> <p>12 of the standing water that will be located within the</p> <p>13 facility boundary?</p> <p>14 A. I can check. I don't recall offhand, but</p> <p>15 I can check.</p> <p>16 Q. Okay.</p> <p>17 A. If you'd like.</p> <p>18 Q. Okay. And if I understand your testimony</p> <p>19 earlier this evening, you indicated that the off-site</p> <p>20 areas where the borrows areas have been identified</p> <p>21 will have less than 134 acres, I think your testimony</p> <p>22 was smaller than the footprint of the landfill; is</p> <p>23 that accurate?</p> <p>24 A. Yes.</p>	<p style="text-align: right;">Page 306</p> <p>1 HEARING OFFICER KINNALLY: All right. Let's</p> <p>2 get started.</p> <p>3 Okay. Mr. Nickodem, you're still</p> <p>4 under oath.</p> <p>5 Does any of the County Board members</p> <p>6 have any questions? Make sure you talk into the mics,</p> <p>7 okay.</p> <p>8 BOARD MEMBER DAVIDSON: Bob Davidson.</p> <p>9 EXAMINATION</p> <p>10 BOARD MEMBER DAVIDSON:</p> <p>11 Q. Going back to your tile slide where you're</p> <p>12 showing all the field tile coming into the site, if we</p> <p>13 can put that back up there. I think it was 13.</p> <p>14 MR. BLAZER: 16.</p> <p>15 THE WITNESS: He has it.</p> <p>16 BOARD MEMBER DAVIDSON: We have a computer</p> <p>17 breakdown. Wonderful.</p> <p>18 MR. LE ROY: It will be just be a second.</p> <p>19 BY BOARD MEMBER DAVIDSON:</p> <p>20 Q. Now, two questions.</p> <p>21 What is the size of the tile leaving</p> <p>22 the site in the southeast corner?</p> <p>23 You said you've done a survey or</p> <p>24 whatever of the tile and maps. Do you have the size</p>

1 of that main line to the east of your black line or
 2 your line coming down there? I mean, how big a tile
 3 are you dumping back into and how big are the two tile
 4 you're showing to the north of the landfill site?
 5 A. Let me just check. I believe it's either
 6 eight- or ten-inch.
 7 The main tiles here, here, are all
 8 eight-inch. (Indicating.)
 9 Q. All eight-inch?
 10 A. Yes.
 11 Q. So the two tile coming in from the north
 12 are how big?
 13 A. These tiles here? (Indicating.)
 14 Q. Yeah.
 15 A. This one is a six-inch. (Indicating.)
 16 Q. Okay.
 17 A. And this one is actually a five-inch.
 18 Q. All right. Now, my question is, you're
 19 going to eliminate the tile where the landfill is
 20 showing. What are you going to do with all the tile
 21 where you're going to put the pond to the east of
 22 that? And, you know, what are you going to -- how are
 23 you going to structure that tile or that drainage out
 24 of there that you're going to put the pond?

1 A. We would take that tile out, also, in this
 2 area. (Indicating.)
 3 Q. Okay. What are you going to do with the
 4 tile still -- there's runs that come in from the
 5 north.
 6 A. These are the -- these are actually the
 7 only two that cross Whitewillow Road. There are some
 8 up in here. (Indicating.)
 9 Q. Okay.
 10 A. But they're all on-site. These are the
 11 only two that actually cross Whitewillow Road.
 12 Q. All right. Then -- you're telling us,
 13 also, that to the south of your site and on the other
 14 side of Prairie Parkway is a borrow site; correct?
 15 A. Correct.
 16 Q. Will that main feed and that main tile be
 17 dug up again in that area?
 18 A. Well, Prairie Parkway is right here.
 19 (Indicating.)
 20 Q. True, but the tile goes south or southeast
 21 yet somewhere.
 22 A. Yeah, it goes south/southeast toward --
 23 there is kind of this drainage way here. The main
 24 tile goes along that drainage way and, in some cases,

1 outlets into that drainage way.
 2 You know, there may be some rerouting
 3 of that tile, again, around those borrow areas. I
 4 don't believe so, though, but if there was, you know,
 5 we would just run another tile around there.
 6 Q. Okay. Now, your decomposing of the
 7 landfill, you said 40, 50 years.
 8 Once the landfill is installed or the
 9 top liner is installed, what is the past history of
 10 the -- some decay, it shrinks. You take and fill a
 11 ditch up or whatever, I don't care how much you
 12 compact it -- we've all driven across roads -- it
 13 settles.
 14 How much of that 130 feet or 38 feet,
 15 how much of that is going to settle over the lifetime
 16 of the landfill?
 17 A. At the final elevation, we've calculated
 18 that it will settle over the life of that about eight
 19 feet.
 20 Q. Now, that will not affect the top liner at
 21 all? It won't disrupt it of, you know, being out of
 22 balance?
 23 A. No. You know, we've done calculations to
 24 show that that -- because it all kind of settles at

1 once, you know. There may be a little bit of
 2 differential settlement, but that all kind of settles.
 3 Say the edges aren't going to settle as much because
 4 they don't have as much waste. You know, the middle
 5 where the largest thickness is, that's going to settle
 6 the most. So it kind of settles like this, you know.
 7 (Indicating.)
 8 That eight feet would be pretty much
 9 right in the center. And, no, we took that into
 10 account the -- that material for the final cover, as I
 11 mentioned, that LLDPE is a little bit more flexible
 12 than HDPE, and we did that purposely because of
 13 settlement.
 14 Q. Okay. How long does it take usually
 15 before gas -- the garbage starts creating gas?
 16 A. Fairly early on, you know, as it --
 17 there's two stages. There's an aerobic stage;
 18 basically when it's exposed to air, it produces some
 19 gas. But the methane is really produced in anaerobic
 20 stage after it's covered and it begins decomposing
 21 without oxygen.
 22 So, but, yeah, fairly early on in
 23 operations it will start generating gas.
 24 Q. You basically explained to us that the

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1 limestone is -- or the water aquifer is five feet
2 below your liner?
3 A. Yes.
4 Q. Correct?
5 A. Yeah, at minimum.
6 Q. Minimum. Now, where is at the bottom --
7 in your detention ponds? Are we going to be a foot
8 above it? Are we going to be three feet above it?
9 Are we going to be in it?
10 A. The detention pond is -- it's not in it at
11 all. It's about three feet, I believe, separation
12 from the aquifer.
13 Q. With your water wells that you identified,
14 did you identify any hand-dug wells within the
15 proximity of the site itself?
16 A. You know, I don't recall specifically any
17 hand-dug wells. Actually, all of them that I saw --
18 there may have been some, but all of them that I saw
19 were drilled wells.
20 Q. Okay. In phase -- in Phase 8 I believe
21 that you're showing us a small detention area.
22 Now, when you restructure that, make
23 that to fill that in, that's going to meet all the
24 requirements -- I mean, I guess my question -- let me

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1 restate this question so I get it right.
2 That detention area, then, would not
3 be -- would not disturb the three-foot area above the
4 water -- in other words, it would be three feet above
5 the bottom of that -- that pond would be three feet
6 above the aquifer?
7 A. Yes, a minimum. I think that one's a
8 little higher. So it would probably be more than
9 three feet. That one's not as deep.
10 Q. All right. But, I mean, that three foot
11 would not be disturbed --
12 A. No, no.
13 Q. -- one way or the other?
14 A. No.
15 COUNTY BOARD DAVIDSON: Thank you very much.
16 That's all I have.
17 HEARING OFFICER KINNALLY: Okay. Thank you,
18 Mr. Davidson.
19 Anyone else from the County Board?
20 BOARD MEMBER VICKERY: Hi, Andy, my name is
21 Anne Vickery.
22 EXAMINATION
23 BY BOARD MEMBER VICKERY:
24 Q. I have some questions. I hope I'm not

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1 redundant but maybe -- is there any way to keep a
2 landfill from creating leachate?
3 A. I don't know about keeping it from
4 creating -- you know, you can't really keep all the
5 water out of there. As I mentioned, you know, the
6 garbage that we throw out already has some moisture in
7 it.
8 Q. Right.
9 A. You know, if we throw out a rotten carton
10 of milk or something like that --
11 Q. It's just there?
12 A. -- it already has some stuff in there. So
13 there will be some leachate, yeah.
14 Q. Okay. When the landfill starts to begin
15 to emit the gas, the methane, based on the number of
16 acres that you have for your landfill -- about how
17 much flares would be out there? Do you have any idea
18 how that works?
19 A. There's only going to -- well, there's
20 actually going to be two flares because we're going to
21 put a flare in initially that would take a certain
22 amount of gas. And, actually, there may only be one
23 long-term.
24 That flare, as the gas increases,

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1 amount of gas, we may replace that one flare with a
2 larger flare or you may put another flare there. So
3 at any one time there would be no more than two.
4 Q. Okay. So there's not going to be a bunch
5 of little ones all over?
6 A. No, no.
7 Q. Okay. Is there any way to measure the
8 amount of gas that is built up underneath there? I
9 mean, don't get too technical, but, I mean, how would
10 you know that there would be enough gas to maybe begin
11 using it for another use?
12 A. Well, we actually measure the flow.
13 Q. Okay.
14 A. You know, immediately when you start
15 flaring it, we actually measure exactly how much flow
16 on a daily basis is going through that flare. So we
17 know very accurately how much gas there's going to be.
18 So -- and that's how we, you know, determine when we
19 put a gas recovery facility there.
20 Q. Okay. Now, when you're burning off like
21 that or recovering, is there any way to measure how
22 much is really escaping into the atmosphere?
23 A. There are emissions calculations, you
24 know, that are done, yeah, that you don't necessarily

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1 measure emissions directly, but, you know, we design
2 the flare to have a very, you know, low emission. And
3 the gas recovery plant would have a very low emission.
4 Q. Okay. They usually measure that in parts
5 per million, don't they?
6 A. I'm sorry, what was that?
7 Q. They usually measure that in parts per
8 million?
9 A. Yeah, yeah, a ppm measure of the air
10 emission, yeah.
11 Q. Okay. And then how long did you say
12 before the landfill would start emitting enough gas
13 before you start burning it off or really have enough
14 to start recovering?
15 A. Well, in terms of actually flaring, that
16 can come pretty early on in the operation. You know,
17 that could come really during -- it would in operation
18 of Phase 1, you know, right away, you know, when waste
19 was being deposited.
20 In terms of recovering the gas, I
21 mean, you generally want to be above 1,000 cfm, cubic
22 feet per minute, generally, maybe more like 1,200 cfm
23 is even a more accepted. That could come, you know,
24 as we expected, possibly in Phase 5 of the

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1 development.
2 Q. Okay. I wondered if you -- and maybe
3 you're not the right person to ask. If you're not,
4 just tell me that.
5 Are you familiar with the landfill in
6 St. Charles, Missouri, by the name of the Fred Weber
7 Landfill?
8 A. I know the name, but I'm not real familiar
9 with the design or anything of that.
10 Q. Well, the reason I bring it up is because
11 one of my friends is a teacher there, and there was an
12 85-acre -- there is an 85-acre landfill there that
13 emits 5.4 million tons of waste that's been in place
14 since 1998. And in 1998 they began a gas recovery
15 thing there where they piped the gas over to the high
16 school. And they heat 112 rooms, keep those rooms to
17 about 70 degrees. And at that time there was a
18 savings of about \$27,000 a year annually to the school
19 district, and, of course, that would go up.
20 But the way this landfill would be
21 set up, would that be a possibility, there could be
22 such a gas recovery system that something that would
23 move in next-door or some other land could be used for
24 using that gas, and rather than burning it off,

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1 sending it to the atmosphere, that it could actually
2 be recovered and used in some sort of thing like this
3 for a school or for a manufacturing plant or
4 something?
5 A. Yeah, that -- that's a great reuse. In
6 fact, that's -- what you describe is what I was
7 calling direct use of the gas where instead of -- you
8 know, there's a couple ways. Instead of turning
9 engines to create electricity, you know, we'd create a
10 pipeline to -- if it's a school or a manufacturing
11 facility or say a county garage, something like that
12 that had a --
13 Q. Corn dryers?
14 A. Yeah, yeah, corn dryer, sure.
15 (Continuing) Something that, you
16 know, would need methane gas and that could run a
17 boiler, and that's a very common application. So,
18 yeah, that's one way to do a gas recovery facility.
19 Q. Well, and this is just for knowledge. I
20 just wonder if you're familiar with it.
21 They pipe this gas a mile to use in
22 this school. So I'm just wondering if you guys were
23 aware of it and --
24 A. Not -- not at that particular site, but

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1 I've actually done some beneficial or direct-use gas
2 projects; in fact, one in Racine, Wisconsin, where
3 it's piped to the SC Johnson Company plant, and they
4 use it in their boilers for heating. So, yeah.
5 BOARD MEMBER VICKERY: Those are all my
6 questions. Thank you.
7 BOARD MEMBER PURCELL: John Purcell. I have
8 several here.
9 BOARD MEMBER VICKERY: How did we know?
10 EXAMINATION
11 BY BOARD MEMBER PURCELL:
12 Q. How much soil will be excavated from the
13 surface down to set the liner?
14 A. In the landfill area total? Let me check.
15 Q. I'm not looking for cubic -- I'm looking
16 for depth.
17 A. Oh, at depth?
18 Q. Yeah. You know, from the surface down,
19 is it two feet? 10 feet? 20 feet?
20 A. It varies -- 10 to, I think -- in general
21 10. The deepest part is probably 13 feet.
22 Q. So 10 to 13 feet, roughly?
23 A. Yes.
24 Q. Okay. Yesterday you had mentioned that

1 there should not be any impact on the wetlands in
 2 Walley Run.
 3 Did I hear you correctly when you
 4 said that?
 5 A. Yes.
 6 Q. Okay. The question I would have then is,
 7 if there is going to be 10 to 13 feet of soil
 8 excavated from the site, I'm making the assumption
 9 that's going to affect the groundwater somehow.
 10 Wouldn't that affect the wetlands,
 11 the groundwater being displaced in feeding those
 12 wetlands along Walley Run?
 13 A. No, because, again, the whole landfill is
 14 above the groundwater aquifer.
 15 Q. So there would be no water that seeps down
 16 in the soil now? When it rains, there is nothing
 17 there now other than soil, maybe farm crops, it rains,
 18 soil goes -- or the water goes through the soil and
 19 seeps over. Did you take that into account?
 20 A. Well, you know, we did think about that,
 21 but a lot of those -- the wetlands associated with
 22 Walley Run are really there because of the runoff in
 23 Walley Run versus --
 24 Q. Stormwater --

1 A. -- groundwater recharge, yeah.
 2 Q. Okay. Could you flip back to your double
 3 composite liner system, Slide 13, please. Thank you.
 4 That three-foot compacted
 5 low-permeability soil liner, that sits on top of the
 6 five-foot in situ material; correct?
 7 A. Yes.
 8 Q. So there actually below that lower 60-mil
 9 double-sided textured HDPE geomembrane liner -- pretty
 10 good, huh? -- there is eight feet of soil underneath
 11 that including the three foot?
 12 A. Yes, a minimum of eight feet, right.
 13 Q. Okay. Thank you.
 14 You also mentioned yesterday that the
 15 leachate collection system, the pipes are now eight
 16 inches versus six inches when you were here last year;
 17 is that correct?
 18 A. Yes.
 19 Q. Why did you make that change?
 20 A. Just to allow better flow characteristics
 21 for leachate, be able to get it off the liner quicker.
 22 Q. Okay. Thank you.
 23 Okay. Going back to some other
 24 questions that have been asked, the 100-year

1 floodplain or the 100-year flood event, I should say,
 2 was, you said, approximately 5.2 inches of rain?
 3 A. Yes.
 4 Q. Okay. But then you also said you
 5 evaluated the approximate 17-inch rain event from
 6 1996. Did I hear you correctly when you said you
 7 evaluated that?
 8 A. Yeah, we actually -- that was one of many
 9 storm events that we evaluated, yeah.
 10 Q. Okay. The question -- or one of the
 11 questions I have is why was -- why did you do that?
 12 Why did you evaluate that event?
 13 A. I believe that was an issue or someone
 14 brought that up at the last hearing, were you aware of
 15 that large storm event. They brought up other
 16 events -- I don't remember who -- but, for instance,
 17 like eight-inch rains, things like that.
 18 So even though we design the
 19 stormwater system to, you know, handle at least
 20 100-year storm, we wanted to see how much it did
 21 actually handle, could it handle that 17-inch rain.
 22 And, in fact, we found that the sedimentation basins,
 23 specifically that east one, since it's so large, could
 24 actually handle that rain event.

1 Q. What about the leachate collection system?
 2 A. We didn't evaluate the leachate collection
 3 system for that. That's, you know, way outside of any
 4 normal operating storm event, so.
 5 Q. Why would you evaluate it for the runoff
 6 outside of the actual landfill footprint but not
 7 evaluate it for the landfill footprint itself?
 8 A. Because the issue there was flooding of
 9 stormwater. You know, the 17-inch rain in 1996
 10 produced a lot of flooding in the area, and we just
 11 wanted to see what the effect on a flooding would be.
 12 And, in fact, the site provides flood storage. So
 13 that was really the only reason we looked at it --
 14 Q. Okay.
 15 A. -- was really for flooding issues.
 16 Q. Was there a reason, even though you
 17 evaluated it, why you did not include that information
 18 in the study, on your Application?
 19 A. I mean, it really wasn't -- yeah, it
 20 really wasn't real relevant. I mean, it shows that
 21 basically all the culverts on all the roads
 22 surrounding there are all flooded, everything is
 23 flooded. It's just that the amount of rain going
 24 through the site is less because the site's

1 constructed because we provide some flood storage.
 2 That's all it showed.
 3 I mean, it really wasn't helpful to
 4 put that in the report just because it showed that all
 5 the other structures -- the existing culverts are all
 6 flooded.
 7 Q. Okay. You speak repeatedly of the new
 8 regulations for landfills and the liner systems, and
 9 did I hear you say those have been in place since the
 10 early '80s?
 11 A. The Federal Subtitle D regulations have
 12 been in place -- or they were promulgated in the '80s.
 13 And I believe the Illinois regs came into effect in
 14 '91 in response to the new Subtitle D.
 15 Q. So somewhere in the '80s to early '90s?
 16 A. Yeah, late '80s to early '90s.
 17 Q. Okay. So for 20 years, roughly?
 18 A. Yes.
 19 Q. How long before those regulations had
 20 landfills been used to dispose of garbage here in
 21 Illinois?
 22 A. Forever. There's always been landfills of
 23 some sort.
 24 Q. Did any of those leak?

1 A. Some of the older sites that aren't
 2 engineered, yes.
 3 Q. Okay. And then how do you know that the
 4 new ones won't leak ever?
 5 A. Because of the engineering, you know, that
 6 we put in, the liner system and all the other systems.
 7 I mean, those older sites weren't
 8 engineered, some of them not at all.
 9 Q. So they were just -- garbage was just
 10 tossed somewhere?
 11 A. A lot of -- I mean, a lot of old landfills
 12 started as -- for instance, they had a low area like a
 13 wetland, and they just threw waste in it. I mean,
 14 that's -- if you look around the country, a lot of old
 15 landfills are like that, or they may have a gravel pit
 16 that they put garbage in because it's an open pit.
 17 Q. Okay. And then what type of -- I guess
 18 what regulations did Settler's Hill fall under --
 19 that's the one up in Geneva; right?
 20 A. Uh-huh.
 21 Q. What type of regulations did those fall
 22 under?
 23 A. Under the 811 landfill regulations.
 24 Q. Was that the Subtitle D or whatever

1 you're --
 2 A. Subtitle D, yes.
 3 Q. Was that the first one in Illinois?
 4 A. I don't know that it was the first one in
 5 Illinois.
 6 Q. How long has it been in place? I don't
 7 recall.
 8 A. Yeah, I don't remember when that -- how
 9 long that's been in place.
 10 Q. Okay. But since those regulations came in
 11 effect?
 12 A. It's -- it was there, I believe, before
 13 that. Yeah, there were other portions of the site
 14 that were -- at Settler's Hill that were in place
 15 prior to Subtitle D.
 16 Q. So part of it would have that -- the
 17 current technology and part would have the older
 18 technology?
 19 A. You know, I didn't design that site --
 20 Q. Okay.
 21 A. -- so I'm not familiar with the technology
 22 there.
 23 Q. Okay. Fair.
 24 You spoke of these borrow areas for

1 soil. Will these become ponds, then, when they're
 2 done borrowing soil?
 3 A. Yes.
 4 Q. Okay. Do you know how deep or large they
 5 will be?
 6 A. They're generally 10 to 15 feet deep. You
 7 know, some areas are a little shallower, but, you
 8 know, they're not very deep at all.
 9 Q. Do you know if they would be stocked with
 10 fish, or what would become of the end use of those?
 11 A. I -- you know, I don't know if we'd stock
 12 fish. But, you know, they will have -- similar to
 13 what we showed on that east sedimentation basin.
 14 Q. Uh-huh.
 15 A. There will be some naturalized wetlands
 16 and things like that around the edges, you know, to
 17 promote habitat and things like that.
 18 Q. So I guess what I was wondering, also,
 19 then, they wouldn't be a mosquito nuisance, would
 20 they? They wouldn't just be water that's real
 21 stagnant?
 22 A. No, no.
 23 BOARD MEMBER PURCELL: Okay. That's all I
 24 have. Thank you.

1 BOARD MEMBER MARTIN: Just very briefly. Two
2 things that I'd like to address.

3 EXAMINATION

4 BY BOARD MEMBER MARTIN:

5 Q. The flood in '96 actually didn't affect
6 the southern part of the County that much at all, I
7 don't believe.

8 But anyway, the other thing is when
9 we've talked about gas production, I think when you
10 talked about it you said that in four or five years it
11 would be possible to start having it, but in the plan
12 I believe it's in seven years if you were going to put
13 a building up to do something; is that correct?

14 A. Yeah. It would be Phase 5, but that
15 Phase 5 is like year seven.

16 Q. Seven year?

17 A. Yes.

18 Q. So even though there would be production,
19 it would probably be burned off until you felt
20 there was enough there to make it worthwhile to do
21 something with it?

22 A. Yeah, that's right. We wait until we get
23 the certain amount to -- because the -- you know, if
24 you do engines or if you create a pipeline, you need

1 to have a certain amount to allow that to work, yeah.

2 BOARD MEMBER MARTIN: Okay. Thank you.

3 BOARD MEMBER HAFENRICHTER: Jessie Hafenrichter
4 I just have one question.

5 EXAMINATION

6 BY BOARD MEMBER HAFENRICHTER:

7 Q. What is the end-use plan for the borrow
8 area? Would that be part that you would be turning
9 over when you turned over the site?

10 A. It would be a natural, you know,
11 recreation area, walking area. That's the plan, open
12 use. It could be turned over, or Waste Management
13 could retain it and create that end use.

14 Q. Normally what is your -- do you do with
15 that? Under normal circumstances, do you retain
16 ownership or pass it on?

17 A. I would say normally they're probably
18 retained by the owner.

19 BOARD MEMBER HAFENRICHTER: Thank you.

20 MR. BLAZER: Jessie, just as a reminder, the
21 Host Agreement provides that at the end of the useful
22 life of the facility it's turned -- it's leased over
23 to the County for \$1 a year.

24 BOARD MEMBER HAFENRICHTER: But the --

1 MR. BLAZER: That would include the entire
2 facility.

3 BOARD MEMBER HAFENRICHTER: The part that they
4 took the soil from?

5 MR. BLAZER: I believe so, yes.

6 HEARING OFFICER KINNALLY: I don't think it
7 says that about the borrow areas, but that's...

8 Pam, did you have anything?

9 BOARD MEMBER PARR: No, they've been answered.
10 Thank you.

11 HEARING OFFICER KINNALLY: Is there any
12 participant that wants to ask some questions?

13 Come on up. State your name, please.

14 MR. MILLIRON: Todd Milliron, 61 Cotswold
15 Drive, Yorkville.

16 CROSS-EXAMINATION

17 BY TODD MILLIRON:

18 Q. I wanted to expand on what Jessie was
19 asking about because that's a question I had, too.

20 Can you bring up the slide that's --
21 I know, it's the one that's the Willow Run RDF that
22 has the footprint of the -- and the boundaries of the
23 old application boundaries and the -- you know, your
24 new application boundaries, please?

1 A. Sure.

2 Q. Okay. Actually, I don't need the
3 footprint area. If you could take that away. There.

4 Would you be kind enough with your
5 pointer to outline Waste Management 1's footprint or
6 boundary area.

7 A. This is -- you mean the 2007?

8 Q. That's the footprint. Okay.

9 A. Yeah.

10 Q. Okay. The perimeter area, what should be
11 like the legal description?

12 A. That would be here. (Indicating.)

13 Q. All right. All the way around, please.

14 A. Okay. (Indicating.)

15 Q. Okay. Now, could we see the boundary area
16 for Waste Management 2?

17 A. (Indicating.)

18 Q. Okay. So that stays within that area
19 completely; is that correct? The boundary -- Waste
20 Management 2 is completely within that Waste
21 Management 1's old boundaries; is that correct?

22 A. Yes.

23 Q. Okay. Now, that area down there at the
24 bottom, that would be, I guess would be the south side

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1 of the Prairie Parkway there?
2 A. This here? (Indicating.)
3 Q. Yeah. On that old application, that was
4 designated as a borrow area; correct?
5 A. Yes.
6 Q. So that borrow area was an integral part
7 of the first design?
8 A. Yes.
9 Q. Okay. Yet you have failed to include the
10 borrow areas that were alluded to that are a little
11 bit south of the Waste Management 1 borrow area we
12 just talked about and the one that would be to the
13 left of there, which I guess would be to the east; is
14 that correct?
15 A. I don't know if we -- you know, it's not
16 in the Application, but we didn't fail to include it.
17 I mean, we -- sometimes sites don't have any near
18 borrow areas, they have to get everything from a third
19 party. So it's not necessarily a requirement to put
20 it in the facility boundary.
21 Q. Okay. But the borrow area is an integral part of
22 the design so you can make up this 3 million cubic
23 yards of fill or cover that you need?
24 A. Yes, in this case it is.

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1 Q. Okay. So the Host Community Agreement
2 that was, whatever, signed by Waste Management and the
3 County, it alluded to those original boundary areas in
4 Waste Management 1, correct, that had the original
5 borrow area in there which has since been expanded?
6 A. You know, I don't recall the exact Host
7 Community Agreement, you know, line that recites that,
8 but it may.
9 Q. Well, at post-closure, this area that is
10 going to have the borrow is going to be the detention
11 ponds or ponds that whatever -- all this ground and
12 soil was dug out; correct?
13 A. Yes.
14 Q. Okay. So at post-closure, as Mr. Blazer
15 apparently alluded to, this whole site that was used
16 to develop and design and use this land for a landfill
17 at some point in time will become leased to the County
18 for one buck a year?
19 A. Yeah, that is part of the Host Agreement.
20 Q. But it didn't include the borrow area that
21 Jessie was alluding to?
22 A. Not to the south, no.
23 Q. Or to the -- a little bit to the east,
24 where that like 207 and 208 is? You had said this

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1 side of Walley Run there is going to be some more
2 borrow area there, too?
3 A. Yes, right in this area. (Indicating.)
4 Q. All right. The reason I was asking that
5 question is that I had asked Mr. Blazer at a County
6 Board meeting, well, a couple, three months ago that
7 apparently the way the Host Agreement is designed is
8 specific to the boundaries, and if the boundaries
9 would change, that, whatever, that would open up the
10 Host Agreement to renegotiation.
11 But the boundary areas that were not
12 included in the first application for borrowing --
13 MR. BLAZER: Mr. Kinnally, can we have a
14 question --
15 HEARING OFFICER KINNALLY: Can we have a
16 question, Mr. Milliron?
17 BY MR. MILLIRON:
18 Q. Okay. Was there a reason that the borrow
19 areas that aren't -- that are going to be used to make
20 up this 3 million feet aren't included in the new
21 boundaries or for the boundary perimeters for Waste
22 Management 2?
23 A. You know, this is -- this is just the way
24 we decided to do the facility boundary in this

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1 Application.
2 It's not necessarily required that
3 you provide all your borrow within your facility
4 boundary. We do have some borrow within that facility
5 boundary, including the existing excavation areas
6 under the footprint and the sed pond. But we just
7 chose not to include all the borrow areas in this
8 facility, and that's a very common thing.
9 Q. The reason being that the perimeter would
10 had to have been changed?
11 A. I don't know. I guess it would have had
12 to, but that's really not -- not why. We -- at the
13 time we hadn't really even determined all the borrow
14 areas. I mean, again, I had mentioned that we did
15 investigation of these borrow areas in the summer of
16 this year to ensure that we had enough soil. So it
17 was really after the Application was submitted.
18 Q. But this new Application requires
19 additional soil than Waste Management 1 for borrowing?
20 A. Yes. From those areas, yeah.
21 Q. So this -- as I'm talking about it, the
22 design -- the borrow areas are a part of the design
23 but they're not incorporated in the boundaries?
24 MR. MORAN: Objection; asked and answered.

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1 HEARING OFFICER KINNALLY: Yeah, I don't think
2 the witness has indicated it's part of the design at
3 all. So that's sustained. He has indicated that
4 borrow areas are separate from siting applications.
5 It's not part of the Application.
6 MR. MILLIRON: But the soil is needed to
7 complete the design.
8 HEARING OFFICER KINNALLY: The soil is needed,
9 but he has already testified that it's not part of the
10 design.
11 MR. MILLIRON: Okay. Well, the reason I was
12 getting at that was that if it was included and should
13 have been, because it's part of the design --
14 HEARING OFFICER KINNALLY: Well, you know,
15 maybe it should have been, but it wasn't.
16 MR. MILLIRON: -- that it would have opened up
17 the Host Agreement to renegotiation.
18 HEARING OFFICER KINNALLY: Well, anyone else
19 have any questions? Yes.
20 MR. GILSON: I left my questions --
21 HEARING OFFICER KINNALLY: I know. I'm going
22 to read them.
23 MR. GILSON: I'd like to read them.
24 HEARING OFFICER KINNALLY: Okay, sure. Go

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1 ahead.
2 This is George, is it Gilson, Jr.?
3 THE REPORTER: G-I-L-S-O-N?
4 HEARING OFFICER KINNALLY: Yes.
5 Are you a participant?
6 MR. GILSON: I am.
7 HEARING OFFICER KINNALLY: Okay. Go ahead.
8 CROSS-EXAMINATION
9 BY MR. GILSON:
10 Q. I am George Gilson from Yorkville. A
11 couple question, Mr. Nickodem.
12 Did the Applicant's design and
13 engineering consultants assume that each liner in your
14 double composite liner system has leaks or pinholes
15 immediately upon installation like Fox Moraine
16 landfill did?
17 A. Design? I'm --
18 Q. Yeah. In the Fox Moraine landfill, they
19 actually, upon installation immediately, they assumed
20 that there was pinholes in the double -- in the
21 composite liner system.
22 Did you do the same thing in this
23 Application?
24 A. Well, let me explain. There's several

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1 different -- one, because of our construction quality
2 assurance, no. There are -- we will -- there are not
3 going to be pinholes or any type of holes in that
4 liner because we will be testing it twice.
5 But when you do evaluations for
6 engineering analysis, we are required to take some
7 very conservative approaches to evaluating that
8 specifically -- and I'm not the one that's going to be
9 testifying on this, but specifically on, for instance,
10 the groundwater impact assessment, they require some
11 very -- the IEPA requires some very conservative
12 assumptions that there will be pinholes or holes in
13 the liner. We are required to do that to be
14 conservative, but the reality is there's not going to
15 be those holes in the liner.
16 Q. Why do you suppose, then, the IEPA makes
17 you assume that if you don't think there will ever be
18 leaks in that liner or they don't think there will be
19 leaks in that liner?
20 A. To -- well, I'll tell you with the GIA, if
21 there wasn't any leak in the liner, the GIA would show
22 that there's no contamination getting in the aquifer
23 ever. So they're taking a conservative approach to
24 these -- to these issues.

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1 We do the same thing with the
2 leachate modeling, you know, very conservative showing
3 that there may be some pinholes in the liner. But
4 that's -- that's just because we're required to do
5 that. We don't expect that.
6 Q. Okay.
7 A. And it is a good way to check to see if,
8 in the odd event that that ever occurred, what would
9 happen.
10 Q. Okay. Does in situ material have gap
11 seams and porosity in which leachate can seep into the
12 aquifer and/or ground below thus helping and aiding
13 leachate escape?
14 A. You know, that question is really a
15 geology question that I would not be the one to answer
16 that. We have another witness that's going to be
17 coming on that's better to answer that question.
18 Q. But did you designed -- obviously you
19 designed the in situ layer; correct?
20 A. No, the in situ layer is just existing
21 soil. I mean, it's already out there. I didn't
22 design anything.
23 Q. But you're putting a layer of in situ,
24 underneath, correct, the landfill? You actually

1 designed a layer of in situ material to go into the
2 design?

3 A. No, that layer is already there. I mean,
4 I -- we're not placing that, we're not designing that.
5 That's just a layer that's already there that we're
6 actually leaving in place and we're putting a liner on
7 top of it.

8 Q. Would you assume, though, that that layer
9 has gaps or seams or any sort of areas where porosity
10 can seep into that and escape?

11 MR. MORAN: Objection.

12 HEARING OFFICER KINNALLY: What's the basis for
13 your objection?

14 MR. MORAN: He just indicated he is not the
15 person to address any of those issues.

16 HEARING OFFICER KINNALLY: Sustained.

17 BY MR. GILSON:

18 Q. Okay. Is your leachate management system
19 foolproof?

20 A. Is it what?

21 Q. Foolproof?

22 A. Foolproof.

23 MR. MORAN: I am going to object to the form of
24 the question. I don't know what "foolproof" means.

1 HEARING OFFICER KINNALLY: Well, it doesn't
2 matter what you understand. It matters what the
3 witness -- do you understand what that means?

4 THE WITNESS: I mean, that could mean a lot of
5 things. I'm not really sure, no.

6 HEARING OFFICER KINNALLY: Mr. Gilson, can you
7 rephrase the question?

8 BY MR. GILSON:

9 Q. Sure. Is your leachate management system,
10 is there a possibility it could ever fail at all?

11 A. You know, there are ways that a leachate
12 management system can fail. But, you know, with the
13 way we've designed it and the operational practices
14 that will be in place to monitor it, check it, clean
15 it periodically, I don't believe that's going to
16 happen, no.

17 Q. Do you feel that over an aquifer it better
18 be foolproof, it better not fail, because it's a more
19 environmentally sensitive area?

20 A. You know, again, I said that I don't
21 believe that the liner is going to leak and create
22 any -- and create any contamination and that the
23 leachate collection system will be an integral part of
24 that.

1 Q. But you did say it's a possibility;
2 correct?

3 A. I don't think it's going to happen.

4 Q. Okay.

5 A. I mean...

6 Q. Are you locked into guaranteeing
7 post-closure protection after 30 years?

8 A. Well, I explained this. Here's how that
9 works: Waste Management will be obligated to provide
10 30 years of post-closure. At that time after 30
11 years, they can then go to the IEPA and apply for
12 release from that post-closure, but that's not
13 automatic. They have to prove that the site is not a
14 threat to public health, safety, and welfare at that
15 time.

16 If the IEPA decides that it is still
17 a threat, all those requirements of post-closure
18 continue until IEPA releases them. So, you know, that
19 could be 30 years, it could be beyond that, depending
20 on what IEPA says in their release.

21 Q. Is there a possibility at 30 years the
22 IEPA can make a determination that it is not a threat,
23 release you, and then it become a threat after that?

24 A. I don't know. I kind of doubt it. I

1 mean, they do a pretty extensive review, or would do a
2 pretty extensive review of the potential threats after
3 30 years.

4 Q. You mentioned that the landfill is
5 constructed in eight phases.

6 Does each phase add monitoring wells
7 to adequately monitor water from each section of the
8 construction?

9 A. Yes.

10 Q. How does excess water or leachate affect
11 the bearing testing of the liner?

12 A. One, you know, if there's any liquid on
13 the liner -- again, I said we've designed the system
14 not to have any accumulation, but it would not be a
15 lot. The main weight on the liner is going to be the
16 weight of the waste. And, I mean, we did the bearing
17 capacity for the full 167-foot depth of waste. The
18 water, if any, it would add such a minimal amount to
19 that that it really isn't going to make a difference
20 in bearing capacity.

21 Q. I don't think you understood my question.

22 What I meant to ask you was how does
23 excess water or leachate affect the bearing testing of
24 the liner?

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1 I know what you designed it for, but
2 sometimes designs don't always work as anticipated.
3 How does excess amount of leachate or
4 water affect the bearing of the liner system?
5 A. It's not going to affect it at all because
6 the factor of safety for bearing capacity is so high
7 that if there's even an excess of liquid that we don't
8 expect, it's not going to have any effect.
9 Q. Do you know what the maximum bearing
10 weight of that liner system is?
11 A. Well, we have a factor of safety that we
12 have in the Application. I mean, I can tell you what
13 that is. I know it's pretty large.
14 Q. Well, that's a factor of safety.
15 But did you actually test for a
16 maximum bearing weight of that liner?
17 A. Well, actually doing that bearing capacity
18 does test for the maximum bearing capacity of the
19 liner, yes.
20 Q. So you can provide a maximum weight that
21 that liner can bear?
22 A. Yeah, that's in the Application.
23 Q. Okay. And above and beyond that that you
24 testified for, is it possible that liner could fail if

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1 there's excess leachate?
2 A. No.
3 Q. Okay. Who is the independent quality
4 assurance testing company for the liner construction
5 and testing?
6 A. Well, it could be -- I mean, there's a lot
7 of qualified firms in Illinois that do that. I mean,
8 we do that work. I mean, I personally have been a
9 certifying engineer on construction quality assurance
10 just as recently as a month-and-a-half ago on a site,
11 not a waste management site, but there are many
12 qualified firms out there that do that. It's a
13 consulting engineering firm that typically does that.
14 Q. But have you been specific about that in
15 the Application and who will be doing that testing to
16 make the Board feel more comfortable that it's a
17 reputable testing company?
18 A. No. I mean, that's something that's
19 generally done at the time of construction.
20 Q. Okay. Does -- do leachate collection sump
21 pumps fail, and what is their expected lifespan?
22 A. Pumps do periodically fail, and you know,
23 they vary. I mean some of them might only last a
24 year, some of them last two, three years or longer,

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1 depending on how much maintenance is done, how much
2 the site actually maintains to the pumps.
3 But, you know, those are automatic
4 pumps that are inspected -- I mean, daily there's an
5 inspection around the site to see that all things are
6 operating, and so if one fails, they'd replace it.
7 Q. How fast are you guaranteeing repair and
8 install -- and reinstall of these sump pumps, and what
9 can happen to this leachate if there's an issue with
10 this repair?
11 A. A lot of times most sites I work with,
12 they keep an extra -- you know, a spare on the site so
13 that they could replace it the same day that it fails;
14 or if it fails overnight, they'd replace it the next
15 day.
16 Q. So you're guaranteeing that for this site
17 they'll have sufficient sump pumps on hand all the
18 time for immediate repair?
19 A. They could have a spare on hand.
20 Q. I didn't say -- are you guaranteeing that
21 they will?
22 A. I don't work for Waste Management so, I
23 mean, I can't guarantee what they do on the site.
24 But, again, I'm saying that I believe they would have

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1 a spare on-site to do that, yes.
2 Q. Can gasses or excess landfill runoff water
3 back up into the drain tile, and who monitors this
4 type of occurrence?
5 A. Gasses -- can you ask that again?
6 Gasses --
7 Q. Gasses or excess landfill runoff water
8 back up into the drain tile, and who monitors this
9 type of occurrence?
10 A. No, it will not.
11 Q. Okay. Have you ever managed a landfill
12 where the landfill gasses caused a fire or explosion?
13 A. I had one landfill, yes. It was a very
14 old landfill, not with a design like we have now, that
15 had a very old gas system that created a short-term
16 fire on the surface of the landfill. We just repaired
17 it and moved on. But, again, that was a system that
18 was put in place 25 years ago.
19 Q. Would you say that post-Subtitle D or
20 Subtitle D landfills have that same sort of potential
21 to have a surface fire or explosion?
22 A. No, no.
23 Q. No, at all?
24 A. They have much less potential.

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1 Q. Oh, less potential?
2 A. Yes, much less.
3 Q. Where do the gasses go in an enclosed
4 flare?
5 A. They're burned. They're combusted to
6 actually about 98, 99 percent efficiency.
7 Q. Are these gasses noxious or potentially
8 harmful?
9 A. No. That's the purpose of the flare.
10 You're not allowed to have emissions that are harmful.
11 Q. Can they have odor to them?
12 A. I mean, they can at times, yes. But
13 managed properly, and if the gas system is running
14 properly, you will not get an odor from that system.
15 And I know many sites that are operated properly that
16 do not have odors.
17 Q. Would you say that potential odor --
18 obviously you said there is potential that it does
19 have odor.
20 Would you say that potential odor
21 could cause a nuisance to the public around that
22 surrounding area of that landfill if not managed
23 properly?
24 A. We don't expect it here. But, you know, a

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1 site that wasn't managed properly it could be a
2 nuisance, yes.
3 Q. Can groundwater flow towards the
4 upgradient wells in any situation?
5 A. Not from on the site, no. It would be
6 flowing from the north off-site towards those
7 upgradient wells, but, no, because they're upgradient.
8 Q. My next question is, then why are they
9 there, and should they be -- should they be more
10 adequately protected?
11 If that groundwater can't flow
12 towards the upgradient wells, why did you put them
13 there in the design in the landfill?
14 A. Well, there's two reasons. One, that it's
15 required.
16 What we use upgradient wells for is
17 to look at the background chemistry of the water. So
18 that water flows from the northwest to the southeast
19 on the site, we check that -- you know, the water
20 quality or background chemistry of the wells here, and
21 then we can compare that to the downgradient wells if
22 there was any release. So it's more of a background.
23 That's why they're called upgradient or background
24 wells.

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1 Q. This may sound like a silly question, but
2 you mentioned that there's a permanent water
3 structure. I call it a pond, but I'm a simple guy.
4 Can people fish in that permanent
5 water structure and eat the fish safely?
6 A. I -- you know, it's not my property, you
7 know. It will be private property, so I would say I
8 kind of doubt it, you know. I don't know what fish
9 are going to be in there, anyway, so I don't know.
10 Q. Will Willow -- will Willow Run accept
11 special waste?
12 A. Yes, there may be some special waste --
13 Q. Can you explain to the Board what special
14 waste is and to the audience, what it consists of,
15 more importantly?
16 A. Well, it's regulated waste -- it's not
17 hazardous waste -- from certain manufacturers, certain
18 things -- certain processes that are allowed by the
19 IEPA. It has to be a -- a specific waste stream has
20 to be permitted by the IEPA, tested and allowed to be
21 placed in a municipal solid waste landfill.
22 Q. I understand that, and I know the
23 permitting process.
24 What I'm asking you is, what does

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1 special waste consist of? You have an idea,
2 obviously, there's certain things in special waste.
3 What are some of the things that you
4 would consider that would be in special waste?
5 A. Like, for instance, auto fluff from an
6 auto manufacturing facility, from the shredder.
7 Something like that may be a special waste, depending
8 on -- I mean, it would have to be tested. I'm not
9 saying that all that could be taken here.
10 You know, some sludges could be
11 special waste depending on where they come from and if
12 that's allowed to be accepted here.
13 Each one of those would have to be
14 permitted separately to be allowed to be accepted
15 here.
16 Q. Can that special waste be potentially
17 hazardous?
18 A. No. It's not hazardous waste, no.
19 Q. So in -- there's nothing in that special
20 waste that can be potentially hazardous?
21 A. It's not -- no, it's not hazardous waste.
22 Q. Can the abandoned horizontal gas piping
23 continue to collect and transport uncontrolled and
24 unmonitored gasses?

1 A. The expanded -- can you read that again?
 2 Q. Abandoned -- you have some sort of a
 3 horizontal gas pipe that you're talking about?
 4 A. Yes.
 5 Q. Can that abandoned gas pipe continue to
 6 collect and transport uncontrolled and unmonitored
 7 gas?
 8 A. No. No, it's all monitored and
 9 controlled.
 10 Q. Who monitors that horizontal gas pipe once
 11 it's abandoned?
 12 A. Oh, once it's abandoned?
 13 Q. Uh-huh.
 14 A. When you saying they would be abandoned?
 15 I'm not sure what --
 16 Q. You mentioned you can continue using them
 17 or you can abandon them through the course of the
 18 landfill.
 19 My question is, when they're
 20 abandoned -- well, even when they're not abandoned,
 21 who monitors those, and when they are abandoned, who
 22 is the one that's making sure that they're not still
 23 collecting gas and transporting gas or any other
 24 material?

1 A. I believe you're talking about the interim
 2 horizontal collectors that I noted. It's just one of
 3 the ways to collect gas. Those are pipes that are
 4 interim or temporary collection devices.
 5 Q. Uh-huh.
 6 A. Once -- the reason we abandon them is
 7 because we would have permanent gas collection in that
 8 area. That's the only time we'd abandon them.
 9 Otherwise, we'd still operate them.
 10 So when the site puts permanent gas
 11 collection in those areas, doesn't need those interim
 12 horizontal collectors anymore, then they can abandon
 13 them.
 14 Q. Are they monitored after they're
 15 abandoned?
 16 A. No. They don't need to be.
 17 Q. But they can't continue to collect in
 18 those abandoned lines any sort of gasses or material?
 19 I mean, it's a pipe. Usually pipe
 20 that sits in the ground can --
 21 HEARING OFFICER KINNALLY: One question at a
 22 time.
 23 MR. GILSON: I'm sorry.
 24 HEARING OFFICER KINNALLY: One question at a

1 time. It's not fair to the witness.
 2 MR. GILSON: I apologize.
 3 BY MR. GILSON:
 4 Q. Those abandoned pipes, can they continue
 5 to collect that gas or any other material, and who
 6 monitors that?
 7 A. The site personnel monitors that.
 8 They could. They could collect gas.
 9 Q. How often do they monitor those pipes?
 10 A. They would monitor the wells and those
 11 well heads from those pipes probably on a monthly
 12 basis.
 13 Q. I'm talking about the abandoned pipe. Is
 14 there something in the Application that shows how
 15 often or specifies how often those are monitored?
 16 A. You know, you don't really need to monitor
 17 abandoned pipes. So, no, there isn't anything in the
 18 application that says that.
 19 Q. Will trucks coming in and out of the
 20 temporary roads built for soil transfer from the
 21 borrow area possibly truck -- track dirt or other
 22 materials on local roads traveled by the public?
 23 A. No.
 24 Q. Will these trucks traveling on these

1 temporary dirt roads possibly emit dust and dirt into
 2 the air and on the facility?
 3 A. You're specifically talking about the
 4 borrow areas?
 5 Q. Uh-huh.
 6 A. You know, we're going to have -- there's
 7 another -- actually, Mr. Hoekstra is going to talk
 8 operations in more detail about dust control. But,
 9 you know, there are a lot of dust control measures
 10 that will be in place on the site including watering,
 11 temporary roads, things like that, that will keep the
 12 dust from being emitted from the site.
 13 Q. Does the mere presence of these trucks on
 14 the site coming to and from the borrow areas pose any
 15 potential added risk such as accidental or traffic
 16 threats to the public?
 17 A. No. All those roads are interior to --
 18 Q. But the truck's got to get there.
 19 HEARING OFFICER KINNALLY: Let him finish his
 20 answer. Don't argue with him.
 21 MR. GILSON: I'm sorry. I apologize.
 22 HEARING OFFICER KINNALLY: Let him finish his
 23 answer.
 24

1 BY THE WITNESS:

2 A. They're not going to go out on any public
3 roads. Those roads will be interior to all of Waste
4 Management's property. So they're not going to go out
5 on any surrounding roadways around the site at all.

6 BY MR. GILSON:

7 Q. But, Mr. Nickodem, they have to get there.
8 They don't magically appear on the site?

9 HEARING OFFICER KINNALLY: Wait a minute. I
10 don't want you arguing with the witness.

11 MR. GILSON: I'm not --

12 HEARING OFFICER KINNALLY: You are arguing with
13 the witness. Just ask him the questions so we can get
14 the information to the County Board.

15 MR. GILSON: I apologize.

16 BY MR. GILSON:

17 Q. Mr. Nickodem, the question is, those
18 trucks do have to eventually get to and from the site.
19 They just don't appear there.

20 My question is, those trucks coming
21 to and from the site, can they cause, those added
22 trucks for the borrow areas that they're going to need
23 to transport soil, do they add any potential traffic
24 or accidental risk to the public?

1 A. The trucks that you're talking about will
2 be Waste Management equipment. I guess initially
3 there will be -- I mean, generally these would be like
4 off-road trucks running from the borrow area to the
5 site on interior roads. I guess initially there may
6 be some trucks that bring in those trucks to the site
7 and would add to some traffic, but, you know, they're
8 not going to be leaving the site and coming back.
9 Those trucks will always be on the site as Waste
10 Management equipment that will haul this borrowed
11 material on an as-needed basis.

12 Q. Okay. Do landfills attract excessive
13 amounts of birds?

14 A. Not if managed properly, no.

15 Q. Does your bird dispersion system get rid
16 of all birds, or do birds continue to return and
17 settle on the garbage exposed?

18 A. You know, I'm not the one that is the best
19 witness for -- Mr. Hoekstra is going to talk more
20 about bird control. I prefer to defer to him on that.

21 Q. Okay. I'm leading into that because my
22 next question is can this excessive migration or bird
23 attraction pose any threat -- any threats to aircrafts
24 and people?

1 A. Not with a proper bird control plan, no.

2 MR. GILSON: I think that's all I have. Thank
3 you.

4 HEARING OFFICER KINNALLY: Thank you, sir.

5 Mr. Blazer, you don't have any
6 question, do you?

7 MR. BLAZER: I hate to disappoint you, but I do
8 have questions.

9 HEARING OFFICER KINNALLY: Oh, someone else?
10 Okay. State your name, please.

11 MR. KARAFIAT: Gary Karafiat, K-A-R-A-F-A-I-T,
12 and I'll be brief. I appreciate your time,
13 Mr. Nickodem.

14 CROSS-EXAMINATION

15 BY MR. KARAFIAT:

16 Q. On yesterday in your list of list of
17 location standards there was an item called
18 sole-source aquifer.

19 What is a sole-source aquifer?

20 A. You know, that's an area that, again, is
21 an area where it's a protected aquifer or, you know,
22 an aquifer of a great extent that would be used by a
23 large number of people that's an important, you know,
24 aquifer for that area and may be designated as such.

1 You know, there are actual designations for those
2 sole-source aquifers, and there is none designated for
3 this site.

4 Q. You testified yesterday that it was not on
5 this site, that type of aquifer?

6 A. No.

7 Q. Okay. What type of aquifer is on this
8 particular site?

9 A. Well, I mean, it's an aquifer that's used
10 by surrounding residents. As I noted, there's a lot
11 of public and private wells around the site that
12 actually use that aquifer. It's -- you know, the
13 aquifer is in the dolomite bedrock.

14 Q. How does that differ, then, from a
15 sole-source aquifer? It sounds like they're very
16 similar.

17 A. You know, I don't know the exact details
18 of how that would differ in terms of geology. And
19 that may be better addressed by our geologist.

20 Q. Okay. So we know that a sole-source
21 aquifer does not exist on this particular site, but
22 the one that does also provides water to a large
23 number of homes.

24 I mean, I guess I'm still confused.

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1 It sounds like a sole-source aquifer does the same
2 thing as the one that's on this site.
3 MR. BLAZER: Mr. Kinnally, I believe the
4 witness has indicated that the geologist would be the
5 better person to ask this question.
6 HEARING OFFICER KINNALLY: I believe
7 Ms. Underwood is going to be here. You can ask her.
8 She's probably better for that.
9 MR. KARAFIAT: All right. Thank you.
10 BY MR. KARAFIAT:
11 Q. Just one last.
12 I have to go back to the exchange
13 that occurred earlier with Mr. Helsten.
14 I think it was determined -- and
15 correct me if I'm wrong -- that the private well study
16 that was not conducted last year that was conducted in
17 2008, the 1,003 within a five-mile radius, that one,
18 was done because it was required by ordinance?
19 A. Yes.
20 Q. Okay. Was it also required by ordinance
21 in 2007?
22 MR. MORAN: Objection; relevance.
23 HEARING OFFICER KINNALLY: Well, it was, I'll
24 tell you.

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1 MR. KARAFIAT: Okay.
2 HEARING OFFICER KINNALLY: So that's what the
3 Ordinance said in 2007.
4 MR. KARAFIAT: Okay. So --
5 HEARING OFFICER KINNALLY: Overruled. Go
6 ahead.
7 BY MR. KARAFIAT:
8 Q. I guess that begs the question. I mean,
9 If that fell through the cracks, is there something
10 that has also fallen through the cracks in this year's
11 application?
12 A. No.
13 MR. KARAFIAT: Okay. Thank you.
14 HEARING OFFICER KINNALLY: Are you a
15 participant?
16 AUDIENCE MEMBER: No.
17 HEARING OFFICER KINNALLY: I'm talking about --
18 are you a participant?
19 MR. SEVERSON: No. I said I would like to ask
20 one question as a nearby landowner but not a
21 participant.
22 HEARING OFFICER KINNALLY: Well, you have to
23 sign up as a participant. Come on up. You have to
24 sign up tonight, then. Come on up.

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1 State your name, and then you're
2 going to have to sign up later on with my Clerk here,
3 Ms. Mickelson.
4 No, you can go ahead and ask your
5 question. You can do it later.
6 MR. SEVERSON: Since I promised only one
7 question --
8 HEARING OFFICER KINNALLY: We need your name,
9 need your name.
10 MR. SEVERSON: Ron Severson.
11 HEARING OFFICER KINNALLY: Okay. I remember
12 you from last time. Go ahead.
13 CROSS-EXAMINATION
14 BY MR. SEVERSON:
15 Q. We have a farm just about a half-mile from
16 the facility. I'm also chairman of the advisory
17 committee in the Grundy County Board, and we've worked
18 a couple years now advising planning and zoning, which
19 I'm on, and the rest of the County Board in what areas
20 to conserve and why to conserve it. And one of the
21 things we use is the Land Evaluation Site Analysis.
22 And my question is, what is the LESA
23 score for the 134 acres?
24 A. The what?

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1 Q. Land evaluation site analysis?
2 HEARING OFFICER KINNALLY: Land evaluation site
3 assessment. It's used by zoning boards in Illinois.
4 It's called the LESA score, L-E-S-A.
5 BY THE WITNESS:
6 A. I don't know what the score is for this
7 particular site.
8 HEARING OFFICER KINNALLY: Okay. Thank you
9 Mr. Severson. Anyone else?
10 All right, Mr. Blazer.
11 MR. BLAZER: Thank you, Mr. Kinnally.
12 CROSS-EXAMINATION
13 BY MR. BLAZER:
14 Q. Mr. Nickodem, do you recognize the drawing
15 that's up on the screen there?
16 A. Yes.
17 Q. All right. And that is the liner system
18 detail from Drawing 37 in the Application?
19 A. Yes.
20 Q. All right. One question first about the
21 two synthetic layers of the liner, the two HDPE
22 sections.
23 You'll recall yesterday Mr. Mueller
24 asked you some question, or actually there was some

1 repartee back and forth about how long those synthetic
 2 liner elements last?
 3 A. Yes.
 4 Q. Do you remember that?
 5 A. Yes.
 6 Q. All right. I was able to lay hands on a
 7 book by Mr. Mueller's favorite author, Mr. Rowe,
 8 entitled, "Barrier Systems For Waste Disposal
 9 Facilities," and I just want to read you something
 10 here and then I'll ask you a question about it:
 11 "Predictions of Service Life. Several opinions have
 12 been provided regarding the service life of
 13 geomembrane liners for landfills. For example, a U.S.
 14 Environmental Protection Agency ad hoc committee
 15 concluded that the service life of geomembranes was
 16 likely to be in the order of hundreds of years.
 17 Tisinger and Giroud echoed this opinion and stated
 18 that in properly designed and constructed facilities,
 19 HDPE geomembranes should be able to protect
 20 groundwater from leachate for hundreds of years."
 21 Are those the types of studies that
 22 you were referring to yesterday when you said your
 23 belief is that these geomembranes will last for
 24 hundreds of years?

1 A. Yes. Among that and others, yes.
 2 Q. All right. Now, looking at the detail on
 3 Drawing 37, you'll see that there's a specification
 4 down here for the drainage layer?
 5 A. Yes.
 6 Q. There's a note there, and it says that the
 7 drainage layer -- could you identify with your laser
 8 pointer what the drainage layer is?
 9 A. Oh, the drainage layer is up here.
 10 (Indicating.)
 11 Q. All right. And that's the leachate
 12 drainage layer; correct?
 13 A. Yes.
 14 Q. And you'll see that it indicates or
 15 specifies that the drainage layer will have a
 16 permeability of one times 10 to the minus one?
 17 A. Yes.
 18 Q. Now, when you testified last year in the
 19 first siting hearing, do you recall that you
 20 acknowledged that 10 to the minus one is not
 21 appropriate because it's too fast?
 22 A. No, I don't remember saying that, but I
 23 may have.
 24 Q. All right. Is 10 to the minus one too

1 fast?
 2 A. Too fast?
 3 Q. Yes.
 4 A. No. No.
 5 Q. All right. Let me read you something and
 6 see if this will refresh your recollection:
 7 "I believe you testified that the
 8 drainage layer on the bottom of the
 9 landfill was speced at permeability
 10 of one times 10 to the minus third.
 11 "Answer: Yes, centimeters per
 12 second, yes.
 13 "Actually, sir, isn't it speced at
 14 one times 10 to the minus first
 15 centimeters per second?
 16 "I thought it was 10 to the minus
 17 three, but I may be wrong?"
 18 A. I do remember that now, yes.
 19 Q. All right. You do remember?
 20 A. Yes.
 21 Q. And you remember indicating that 10 to the
 22 minus one is too fast?
 23 A. I don't remember saying that, but --
 24 because I've speced other systems at 10 to the minus

1 one. So I'm not sure why I would have said that if I
 2 did, but...
 3 Q. Let me try this:
 4 "Question: That's actually not an
 5 appropriate permeability for a
 6 drainage layer because it's way too
 7 fast, isn't it?
 8 "Answer: It's pretty difficult to
 9 get a material that will drain in
 10 that particular permeability.
 11 "Question: And that's actually 100
 12 times faster than your previous
 13 testimony of one times 10 to the
 14 minus third; correct?
 15 "Answer: Yes.
 16 "Question: But you do agree that's
 17 not an appropriate permeability for
 18 a drainage layer?
 19 "Answer: That's not typically one
 20 that we would spec; correct."
 21 Do you remember that?
 22 A. Some of it I remember.
 23 Q. Why are you still specifying 10 to the
 24 minus one?

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1 A. I'll give you a history, a brief history.
2 When we first started designing these
3 systems, actually a lot of the systems were designed
4 at 10 to the minus three, 10 to the minus two. Sand
5 was typically used a lot on these systems.
6 As, you know, the years have
7 progressed, the, you know, design of landfills has
8 evolved. Systems have become more 10 to the minus
9 two, 10 to the minus one and use stone as -- in lieu
10 of -- in lieu of sand. So it is becoming more and
11 more common to specify minus one material.
12 So I certainly agree with the design
13 as we have it now.
14 Q. All right. I've just skipped all of my
15 questions about guarantees of impermeability since
16 they've been asked so many times.
17 You did indicate, am I correct, that
18 you're familiar with the Host Agreement between Waste
19 Management -- between the Applicant and the County?
20 A. Yes.
21 Q. And if you could -- I'm going to be asking
22 you a few questions about it during my questioning, if
23 you could pull that out. It's Tab F in Volume 3 of
24 the Application.

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1 A. I might have to get a different volume
2 here.
3 HEARING OFFICER KINNALLY: Do you want mine?
4 THE WITNESS: Yes, I could take yours. That
5 would being quicker.
6 HEARING OFFICER KINNALLY: All right. What's
7 the question?
8 BY MR. BLAZER: :
9 Q. Do you have it?
10 A. Yes.
11 Q. Okay. If you could go to Attachment C.
12 That's the domestic well protection agreement?
13 A. Okay.
14 Q. And you understand that that provides a
15 domestic well protection program for any potable water
16 supply wells within one-and-a-half miles of the waste
17 footprint; correct?
18 A. Yes.
19 Q. And it extends through the period when
20 Waste Management concludes all active landfilling
21 operations; is that correct?
22 A. Yes.
23 Q. But repeatedly from a number of witnesses
24 you've indicated your opinion that this landfill will

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1 not leak and will not contaminate the aquifer;
2 correct?
3 A. Yes.
4 Q. All right. So from that perspective,
5 would you agree that it would not place an undue
6 burden on Waste Management to extend the domestic well
7 protection program to three miles from the property
8 boundary rather than the waste footprint and to extend
9 that out to the closure and post-closure period of 30
10 years or more subject to IEPA final closure?
11 A. Yes.
12 Q. All right. And you agree that that would
13 be a reasonable condition on siting if siting were to
14 be approved?
15 A. Yes.
16 Q. All right. And let's talk about that 30
17 or more year post-closure period. Mr. Mueller asked
18 you some questions about that yesterday and Mr. Gilson
19 did, as well, today about this notion of what your
20 obligations -- or what the Applicant's obligations may
21 or may not be upon certification of final closure from
22 the IEPA.
23 And you know what I'm talking about;
24 correct?

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1 A. Yes.
2 Q. All right. Let's go back to the Host
3 Agreement. I'd like you to turn to Section 1.4. It's
4 on Page 3.
5 A. Okay.
6 Q. Now, that's the provision that talks about
7 the expiration date of this agreement; correct?
8 A. Yes.
9 Q. And it states that the agreement expires
10 30 years from and after the date of closure of the
11 landfill as certified by the IEPA, which is defined as
12 final closure; right?
13 A. Yes.
14 Q. And that's, again, that 30 or more year
15 period that people have been asking you about?
16 A. The post-closure period, yes.
17 Q. Right. And then it says, "except that the
18 operative effect of the following sections shall
19 continue beyond final closure."
20 Do you see that?
21 A. Yes.
22 Q. So the provision we're dealing with here
23 provides that no matter what EPA may do or when they
24 may certify final closure, there are certain

<p style="text-align: right;">Page 371</p> <p>1 obligations created by this agreement that Waste 2 Management will be subject to effectively forever; 3 correct? 4 A. Yes. 5 Q. All right. I'd like to focus on a few of 6 these. 7 One of those is Section 3.1, which is 8 the operational commitment; correct? 9 A. Yes. 10 Q. All right. And if we go to Section 3.1 11 that's on Page 8, it says, "Waste Management Illinois 12 commits that it will be the sole operator of the 13 landfill and landfill gas management system and will 14 not transfer ownership of the property or assign its 15 rights and obligations to operate the landfill or any 16 operations related to the landfill including the 17 landfill gas management system or any component 18 thereof without the approval of the Board," that being 19 the County Board; is that correct? 20 A. Yes. 21 Q. Then another example would be Section 3.3 22 which is the performance commitment, and that's on 23 Page 9; right? 24 A. Yes.</p>	<p style="text-align: right;">Page 373</p> <p>1 deemed to be incorporated herein by reference and 2 shall be enforceable as part of this agreement. In 3 addition, such siting conditions shall be 4 independently enforceable as a contract between the 5 County and Kendall Land & Cattle and Waste Management 6 Illinois. These commitments are collectively intended 7 to ensure the safety and environmental integrity of 8 the landfill"; is that correct? 9 A. Yes. 10 MR. KRAMER: Mr. Kinnally, I'm going object. I 11 mean, we've been patient with latitude here. It seems 12 to me we have testimony from the County about the 13 legal effect of the document as opposed to design, 14 which is, I think, the whole gist of this witness's 15 testimony. He has repeatedly said he doesn't work for 16 Waste Management as an employee, so he doesn't know 17 what they'll do or not do. He is going to design, and 18 it will be a somebody in operations or a company 19 executive that says I'll will be bound or not bound. 20 MR. BLAZER: Well, several witnesses, Mr. 21 Kinnally, have raised the issue of what continuing 22 obligations the Applicant here may have, either before 23 or after the post-closure period. The door was opened 24 by several questioners, including Mr. Mueller,</p>
<p style="text-align: right;">Page 372</p> <p>1 Q. And that one says, "Waste Management 2 Illinois intends to operate the landfill in accordance 3 with this agreement and the Act" -- that being the 4 Illinois Environmental Protection Act; right? 5 A. Yes. 6 Q. "Further, with respect to compliance with 7 the Act, Waste Management Illinois, makes certain 8 specific commitments to the County with respect to 9 performance standards; correct? 10 A. Yes. 11 Q. And just talking about those performance 12 standards, you've seen host agreements in other 13 landfill situations; correct? 14 A. Yes. 15 Q. Have you ever seen a host agreement in 16 Illinois, at least, that contained performance 17 standards like this one does? 18 A. I'm not sure. I don't recall all the 19 performance standards. But not specifically. 20 Q. All right. Going back to Section 3.3. I 21 just want to make sure I'm reading this correctly. 22 "If the Board grants a siting approval for the 23 landfill pursuant to the Siting Ordinance, any siting 24 conditions that are a part of such approval shall be</p>	<p style="text-align: right;">Page 374</p> <p>1 Mr. Gilson. 2 I think it's most important and 3 relevant to explain both to the participants and to 4 remind the County Board of the obligations that this 5 Applicant has assumed irrespective of what Illinois 6 EPA may or may not do, and it relates directly to his 7 testimony with respect to Criterion 2 and the ongoing 8 obligation to maintain the public health, safety, and 9 welfare. 10 HEARING OFFICER KINNALLY: Does anybody else 11 want to say something? 12 MR. HELSTEN: Again, I would just -- 13 HEARING OFFICER KINNALLY: You have to use the 14 microphone, please. 15 MR. HELSTEN: I'm sorry, Mr. Hearing Officer. 16 I would just, again, join in what Mr. Kramer said. 17 This seems to be pretty far afield from the subject of 18 design standards and the design of the -- of this 19 facility being protective of the human health, safety, 20 and the environment. 21 HEARING OFFICER KINNALLY: Anybody else? 22 MR. LYLE: If I may, I believe, Mr. Kinnally, 23 that the Host Agreement is a part of the Application. 24 It speaks for itself, and it seems to me like counsel</p>

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1 is just reciting that for the record, and I submit
2 that it's already in the record and is redundant and
3 at this point to not -- not appropriate as direct
4 examination of this particular witness.
5 HEARING OFFICER KINNALLY: Well, I said at the
6 outset that the Host Benefit Agreement was unusual
7 because it does have these quality assurance standards
8 in it, and it is an unusual agreement. I think the
9 County Board knows what they signed. And I don't know
10 how relevant it is at this point, but...
11 MR. BLAZER: I don't have much more on this,
12 Mr. Kinnally.
13 HEARING OFFICER KINNALLY: I'll give you a
14 little bit of latitude, but let's get it over with. I
15 think we've got like 15 copies of this Host Benefit
16 Agreement over on the table there. So, I mean,
17 anybody can go read it.
18 MR. BLAZER: It was actually 75.
19 HEARING OFFICER KINNALLY: Well, whatever.
20 MR. BLAZER: I'll skip a couple.
21 HEARING OFFICER KINNALLY: I'm going to
22 overrule the objection, Mr. Kramer, for now.
23 MR. KRAMER: Thank you, Mr. Kinnally.
24

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1 BY MR. BLAZER:
2 Q. All right. Just in terms of ongoing
3 obligations with respect to public health, safety, and
4 welfare, Mr. Nickodem, Section 3.6, operator pledge,
5 that's another one of those that continues after the
6 post-closure period; correct?
7 A. Yes.
8 Q. "Waste Management Illinois shall correct
9 any environmental impairment arising out of or related
10 to the landfill. For purposes of this commitment,
11 environmental impairment means the release or
12 threatened release of any substances, pollutants or
13 contaminants at or from the property so as to harm or
14 threatened harm to human health, welfare, or the
15 environment"; correct?
16 A. Yes.
17 Q. And, again, that lasts essentially
18 forever; correct?
19 A. Yes.
20 HEARING OFFICER KINNALLY: All right. We have
21 enough now, Mr. Blazer. Move on.
22 MR. BLAZER: Thank you.
23 HEARING OFFICER KINNALLY: Thank you.
24

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1 BY MR. BLAZER:
2 Q. Going back to Drawing 37 up there, the
3 liner system, we talked about the granular drainage
4 layer.
5 Is there an anticipated source or
6 specification for the materials that are going to be
7 used for that?
8 A. It could be a local quarry.
9 No, we don't have a source right now.
10 That's usually identified right before construction.
11 But it will be a crushed, you know, rock or rock
12 material to meet that specification, stone.
13 Q. Now, you also specify up on top there a
14 four-ounce per square yard geotextile filter.
15 Do you see that?
16 A. Yes.
17 Q. And what's the purpose of that?
18 A. It's to prevent any, you know, of the
19 waste material from contaminating the granular
20 drainage layer and to allow it to continue to flow
21 freely.
22 Q. All right. And the specification of four
23 ounces per square yard, that's a measure of the
24 thickness and weight of the fabric?

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1 A. Yes.
2 Q. And waste, then, will be placed directly
3 on top of that layer; correct?
4 A. Yes.
5 Q. Are you familiar with something known as
6 an eight-ounce per square yard seam sewn geotextile?
7 A. How many ounce?
8 Q. Eight ounce.
9 A. Eight ounce, yes.
10 Q. All right. Could you explain what that
11 is?
12 A. An eight-ounce per square yard non-woven
13 geotextile, did you say?
14 Q. Seam sewn.
15 A. Seam sewn. That's probably a construction
16 term, actually, sewn seam.
17 HEARING OFFICER KINNALLY: If you don't know
18 what it is, that's okay. I'm sure Mr. Hoekstra can
19 tell us.
20 BY THE WITNESS:
21 A. Not specifically -- I mean, really that's
22 not a term from a manufacturer, seam sewn, no.
23 BY MR. BLAZER:
24 Q. All right. Is there a reason why you

1 specified a four-ounce geotextile as opposed to an
 2 eight-ounce geotextile?
 3 A. Yes. The thicker the geotextile, the less
 4 liquid that can actually flow through that geotextile.
 5 So we don't want to prevent the leachate from getting
 6 into the -- into the granular drainage layer, so we
 7 basically speced a very thin geotextile, just enough
 8 to protect so that no fines would get into that layer
 9 but to allow leachate to still continue to flow into
 10 there.
 11 Q. All right. What I have up on the screen
 12 now is a portion of your Drawing 5 which is the
 13 facility drawing.
 14 Do you recognize that?
 15 A. Yes.
 16 Q. All right. Now, your design -- again,
 17 you've gone through, I think until we're all blue in
 18 the face, the issue of how much soil is needed and
 19 where it's coming from. I want to talk specifically
 20 about the elevations here and that minimum five-foot
 21 layer that we're talking about below the double
 22 composite liner system.
 23 Your design also includes raising the
 24 elevation of about 50 acres of the base of the site;

1 is that correct?
 2 A. There are areas that will be raised, yes.
 3 Q. Could you explain what that means?
 4 A. Sure. If we remember, the leachate flows
 5 from the west side of the site to the east because of
 6 the way we've graded the site. So, in general,
 7 portions of the west side of the site will be raised
 8 above existing grade to make that -- to allow that to
 9 drain.
 10 HEARING OFFICER KINNALLY: How high are you
 11 going to raise it?
 12 THE WITNESS: In some areas, it could be -- the
 13 largest area is down in here because of the slope of
 14 the land. You know, 10 to 15 feet in some areas.
 15 (Indicating.)
 16 HEARING OFFICER KINNALLY: Why do you have to
 17 raise it if you have pumps that can pump the leachate
 18 out?
 19 THE WITNESS: Well, you still need to have --
 20 HEARING OFFICER KINNALLY: Gravity?
 21 THE WITNESS: -- gravity drainage to allow it
 22 to flow. I mean, we still want to allow for that.
 23 HEARING OFFICER KINNALLY: Sorry to interrupt.
 24 Go ahead.

1 MR. BLAZER: It's quite all right.
 2 By MR. BLAZER:
 3 Q. In terms of the soil deficit at the site,
 4 the largest shortfall, according to the Application,
 5 about 2.4 million cubic yards, is for what's called
 6 miscellaneous soils; is that correct?
 7 A. Yes.
 8 Q. All right. And what are miscellaneous
 9 soils? What are they used for?
 10 A. Primarily daily and intermediate cover on
 11 the site covering, the waste that's being brought in
 12 with either daily or intermediate cover. They might
 13 be used for other things such as construction of
 14 screening berms, things like that, that did not have
 15 to have a low-permeability specification soil.
 16 Q. Now, the Application contemplates the use
 17 of what's called alternate daily cover; correct?
 18 A. Yes.
 19 Q. And could you explain what alternate daily
 20 cover is?
 21 A. It's typically a tarp material that's
 22 pulled over the active area of waste at the end of the
 23 operating day. The edges are typically covered with
 24 soil to hold it down, and that serves as a cover.

1 Then that is taken off at the next operating day and
 2 then can be reused.
 3 Q. All right. Now, does the 2.4 million
 4 cubic yard miscellaneous soil deficit take into
 5 account the use of alternate daily cover, or does it
 6 assume that no daily cover -- no alternate daily cover
 7 will be used?
 8 A. It takes it into account, yes.
 9 Q. The next thing I have up on the screen is
 10 your -- it's a section of Drawing 21 which reflects
 11 the leachate management system.
 12 Do you recognize that?
 13 A. Yes.
 14 Q. All right. The length of the leachate
 15 collection headers vary from about 2,800 feet to 3,800
 16 feet; is that correct?
 17 A. Yes.
 18 Q. And then the cleanout access is on both
 19 sides?
 20 A. Yes.
 21 Q. In your experience, are those lengths
 22 unusually long?
 23 A. No. I've actually cleaned -- been present
 24 when lines have been cleaned out at 2,000 feet. No,

1 they're not unusually long.
 2 Q. All right. Well, in this case you've got
 3 some that are as long as 3,800 feet; correct?
 4 A. Yes, but what we do since we clean out
 5 from both ends, really what you try to do is just
 6 cross in the middle. And so then you've cleaned out
 7 one end this way, one end the other way, and you
 8 essentially clean out the whole pipe. You don't have
 9 to go through the entire length.
 10 Q. And then just a couple of final questions.
 11 There's been a lot of discussions
 12 about the proposed or potential gas recovery facility,
 13 and in the Application you state that a gas recovery
 14 facility will be developed as part of the gas
 15 management system; correct?
 16 A. Yes.
 17 Q. Is the construction of a gas-to-energy
 18 facility or a gas management -- gas recovery facility
 19 proposed to be approved as part of this Siting
 20 Application?
 21 A. Yes. It's in the Application, yes.
 22 Q. Where are the details for that facility?
 23 A. Again, we -- I mentioned the type of
 24 facility has not been determined, so we don't have

1 details for that yet because we haven't determined
 2 what the end use of that gas will be.
 3 Q. All right. You still have the Host
 4 Agreement there?
 5 A. Yes.
 6 Q. Could you turn to Section 9.21?
 7 A. 9.21?
 8 Q. Yes.
 9 A. Okay.
 10 Q. It says, "The County reserves all its
 11 power and authority, including the power to tax and
 12 zone the property, including zoning authority over a
 13 landfill gas recovery system should one be installed
 14 at the landfill"; correct?
 15 A. Yes.
 16 Q. Have you determined whether the proposed
 17 gas recovery facility complies with the County zoning
 18 code?
 19 MR. KRAMER: I'm going to object to relevancy,
 20 Mr. Kinnally. We're getting far afield again.
 21 HEARING OFFICER KINNALLY: Yeah, I think we
 22 are.
 23 He is not a zoning expert. I'm going
 24 to sustain the objection. Ask a different question.

1 He showed you a picture of the gas
 2 facility they've got up at Settler's Hill. That's the
 3 kind they said they might put up here. Mr. Hoekstra
 4 can tell you about that, too. He ran the facility for
 5 20 years.
 6 BY MR. BLAZER:
 7 Q. When will the active gas collection system
 8 be installed?
 9 A. Immediately.
 10 Q. All right.
 11 HEARING OFFICER KINNALLY: But the one where if
 12 we could get any commercial value out of this gas
 13 isn't going to happen until seven years, right, and
 14 when you're in Phase 5? Didn't Ms. Martin ask you
 15 that?
 16 THE WITNESS: Yes. Well, the -- it will be
 17 collected before that time, but we won't put a
 18 recovery system in until that phase.
 19 HEARING OFFICER KINNALLY: But until it reaches
 20 this 1,200 feet per minute, or whatever it is, is that
 21 when it's commercially viable to use the gas from the
 22 facility?
 23 THE WITNESS: Yes.
 24 HEARING OFFICER KINNALLY: Is that pretty much

1 right?
 2 THE WITNESS: Yes.
 3 HEARING OFFICER KINNALLY: Okay. Thank you.
 4 MR. BLAZER: That's all I have, Mr. Kinnally.
 5 HEARING OFFICER KINNALLY: Can I have my
 6 agreement back?
 7 THE WITNESS: Yes.
 8 HEARING OFFICER KINNALLY: I only have about
 9 two or three questions.
 10 EXAMINATION
 11 BY HEARING OFFICER KINNALLY:
 12 Q. Can you pull up the Aux Sable water
 13 picture you've got?
 14 Mr. Jeff Wehrli who couldn't be here
 15 tonight and asked me to ask you a question, and the
 16 question is -- he's one of the Board members -- does
 17 the leak protection system work for the life of the
 18 landfill?
 19 A. The leak protection system?
 20 Q. That's the question he wanted me to ask.
 21 You have a leak protection system;
 22 right?
 23 A. We do leak detection on the liner at
 24 construction --

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1 Q. When you're putting it in?
2 A. When we're putting it in.
3 Q. But you can't do any leak detention after
4 that; right?
5 A. Well, that would be the monitoring wells,
6 the monitoring system, and that would be for the life
7 of the landfill, yes.
8 Q. So other than the leak protection system
9 that you use when you install the liner, the only
10 other protection system you have is the monitoring
11 wells; fair statement?
12 A. Yes.
13 Q. All right. Nothing else?
14 A. No. That's the monitoring, yes.
15 Q. Okay. When you started to design this
16 landfill, the new one, the one we have today, did you
17 ever have any discussions with anyone from Waste
18 Management as to whether or not if this siting was
19 approved that you would expand it?
20 A. No.
21 Q. None of those discussions were ever had?
22 A. No.
23 Q. Okay. Now, this picture here, the
24 Aux Sable water creek watershed, this is an area that

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1 you figured was applicable to this particular
2 facility?
3 You did this; right?
4 A. Yes.
5 Q. You went up in an airplane; right?
6 A. No, we had a company do a flyover of that,
7 yeah.
8 Q. Somebody went up in an airplane and they
9 told you that this was the critical area?
10 A. They actually did a topographic map from
11 that aerial, and then we took the aerial and that map
12 and determined this area. We actually determined this
13 area.
14 Q. How did you do that?
15 A. You look at the contours, how they
16 actually flow in and around the site, and then you can
17 determine if flow goes to the north away from the site
18 or the west or it flows through the site. It's kind
19 of an engineering exercise.
20 Actually, I did the study area
21 myself. I actually did that.
22 Q. Well, how come it's limited to these
23 boundaries?
24 A. Because no other -- none of these other

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1 areas flow through the site at all. They all flow to
2 some of these -- you see all these other tributaries?
3 It flows to here, to here, to here. It flows to the
4 other tributaries and away from the site.
5 (Indicating.)
6 Q. And this is the critical watershed, you
7 would agree, that relates to the site; true?
8 A. Yes.
9 Q. Now, the Ordinance requires under
10 Section 5(c) that you locate all of the aquifers
11 related to this particular site.
12 Were you aware of that?
13 A. Yes.
14 Q. And how many aquifers are affected by this
15 proposed site? Do they include all the aquifers
16 within this watershed?
17 A. Yes, they were all investigated.
18 Q. And how many are there?
19 A. There's really only the one aquifer under
20 the site. Ms. Underwood will testify to that in
21 detail.
22 Q. And how big an area have you indicated
23 that this watershed contains? Can you give us an
24 idea? Is it two miles? Three miles? A mile?

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1 A. This right here. (Indicating.)
2 Q. No, I'm talking about the watershed now.
3 A. Oh, this here? (Indicating.)
4 Q. Uh-huh.
5 A. This is approximately 150 square miles.
6 Q. Okay. And in that watershed you would
7 agree with me that there's more than one aquifer?
8 A. That I don't know --
9 Q. You don't know?
10 A. -- Mr. Kinnally, no.
11 Q. Okay. So it's your opinion that the
12 Ordinance Section 5(c) requires you only to identify
13 the aquifer that's under the site; true?
14 A. Yes.
15 Q. Okay. Where are the drinking water
16 aquifers as required by Section 6(c) of the ordinance
17 within three miles of the site? How many are there?
18 A. Again, I wouldn't be able to testify to
19 that.
20 Q. You don't know that?
21 A. That would be -- Ms. Underwood would be
22 better to answer that question.
23 Q. Do you know whether there are more than
24 one aquifer within three miles of the site?

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1 A. I just know what's on the site, yes.
2 Q. Okay. So all you know is that there's one
3 aquifer, one drinking water aquifer, under the site?
4 A. That's what I know, right. Yes.
5 HEARING OFFICER KINNALLY: Okay. Thank you. I
6 have no further questions.
7 Mr. Moran, do you have any questions
8 of your witness?
9 MR. MORAN: I have no further questions,
10 Mr. Kinnally.
11 I would, though, request and submit
12 for admission Petitioner's Exhibit No. 3, which I
13 don't believe we've marked as yet but it is the resumé
14 of Mr. Nickodem that was filed on September 4th, and I
15 have copies, if that will be helpful.
16 HEARING OFFICER KINNALLY: Is there any
17 objection?
18 (No response.)
19 HEARING OFFICER KINNALLY: Okay. You can file
20 that with the Clerk. That's fine.
21 (Petitioner's Exhibit No. 3 marked.)
22 HEARING OFFICER KINNALLY: Anything else,
23 Mr. Moran, of this witness?
24 MR. MORAN: I have nothing further of this

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1 witness.
2 HEARING OFFICER KINNALLY: Mr. Nickodem, I know
3 the County Board, I know I do, and I'm sure everyone
4 here appreciates your testimony. You've been
5 testifying for about six hours or more, and we thank
6 you for coming and telling us about this Application
7 and giving us the information that you feel is
8 important, and you're excused.
9 THE WITNESS: Thank you.
10 (Witness excused.)
11 HEARING OFFICER KINNALLY: And we're going to
12 take a break because the girls need to rest their
13 hands.
14 (Recess taken.)
15 HEARING OFFICER KINNALLY: Okay. I'd like to
16 reconvene, please, so take your places.
17 Where's Anne? Okay. All right.
18 We're back. Now we have a quorum. And Mr. Moran, do
19 you want to call your next witness, please?
20 MR. MORAN: Yes. Thank you,
21 Mr. Hearing Officer. We would call Mr. Dale Hoekstra.
22 HEARING OFFICER KINNALLY: Okay. Would you
23 state your name, please.
24 THE WITNESS: Dale Hoekstra.

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1 (Witness sworn.)
2 HEARING OFFICER KINNALLY: Okay. Go ahead,
3 Mr. Moran.
4 MR. MORAN: Thank you, Mr. Hearing Officer.
5 Again, we would request that the
6 qualifications of Mr. Hoekstra be subject to
7 stipulation, assuming the parties remaining would
8 agree.
9 HEARING OFFICER KINNALLY: Is there any
10 objection to that stipulation?
11 MR. HELSTEN: No.
12 HEARING OFFICER KINNALLY: All right. It will
13 be stipulated that he is an expert with respect to
14 Criterion 5, are we talking about?
15 MR. MORAN: 5 and 2.
16 HEARING OFFICER KINNALLY: Okay. 5 and 2.
17 MR. MORAN: Thank you.
18 DALE HOEKSTRA
19 called as a witness herein, having been first duly
20 sworn, was examined and testified as follows:
21 DIRECT EXAMINATION
22 BY MR. MORAN:
23 Q. Mr. Hoekstra, is there a written report
24 that sets out the proposed operation of the Willow Run

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1 Recycling Disposal Facility?
2 A. Yes.
3 Q. And that's contained in the siting
4 Application previously admitted as Petitioner's
5 Exhibit No. 1?
6 A. Yes, it is.
7 Q. Also is there a written plan of operations
8 that is contained in that Siting Application?
9 A. Yes.
10 Q. And that's the plan of operations
11 relating to Criterion 5; correct?
12 A. Correct.
13 Q. Now, Mr. Hoekstra, could you tell us what
14 the hours of waste acceptance are for the proposed
15 Willow Run facility?
16 A. The hours of waste acceptance for the
17 Willow Run facility are 5:30 a.m. to 6:00 p.m. Monday
18 through Saturday.
19 Q. What types of waste will be accepted at
20 Willow Run?
21 A. The facility will accept municipal solid
22 waste, and an example of that is the household waste
23 that we all put out at our curbs every week for
24 collection. We'll also accept construction and

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1 demolition debris such as concrete, brick, wood, and
2 asphalt-type material, and non-hazardous permitted
3 special waste such as municipal sludge from a
4 wastewater municipal plant or industrial-type sludges.
5 Q. What type of waste will not be accepted at
6 Willow Run?
7 A. The type of waste that are unacceptable at
8 the facility are regulated hazardous waste, liquid
9 waste, wastes that are banned by the Act such as white
10 goods, tires, and yard waste, potentially infectious
11 medical waste and radioactive materials.
12 Q. Mr. Hoekstra, are there procedures in
13 place to verify that the waste that will be received
14 at Willow Run are acceptable wastes?
15 A. Yes.
16 Q. And what are those procedures?
17 A. The procedures are the receipt control and
18 the employee training, random load inspection, and the
19 waste characterization.
20 And beginning with the receipt
21 control process, all trucks enter the facility and
22 come to the receipt control area to receive their load
23 ticket. From there they are directed to the disposal
24 location at the active area.

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1 Also, at the receipt control area
2 there are security cameras to record the transaction
3 that is taking place at that area.
4 Employees are trained in waste
5 identification procedures so that they understand what
6 types of materials are allowed to come into the
7 facilities and can identify those.
8 And the employee training is not just
9 for the receipt control individual but extends all the
10 way through all employees who are working at the site,
11 so the labors, the operators, and the receipt control
12 clerk.
13 The facility also will conduct random
14 load inspections in accordance with the Illinois EPA
15 inspections. So three loads per week will be pulled
16 off to the side, those contents gone through to
17 determine what has been brought in on those particular
18 loads, determine whether or not those loads meet the
19 requirements of acceptable waste materials.
20 And those random load inspections
21 are also documented in accordance with the Illinois
22 EPA regulations.
23 Additionally, special waste materials
24 must go through a special waste characterization

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1 process, so a municipal sludge, for instance, would go
2 through a special waste characterization process which
3 concludes the completion of a profile sheet which
4 would detail the analysis of the material as well as
5 the type of the material that -- where it is generated
6 from, et cetera.
7 And this profile sheet would then go
8 through a technical review and approval process. And
9 upon approval by the technical manager, the site would
10 be notified that the material is acceptable to come to
11 the facility.
12 Q. Mr. Hoekstra, in your experience how have
13 these procedures worked?
14 A. In the 31 years that I've been in this
15 business, they work very well. As a matter of fact,
16 we've been able to detect some types of materials that
17 should not come into facilities through the random
18 load inspection process or at the receipt control
19 location at some of the facilities that I've overseen.
20 Q. We heard Mr. Nickodem talk about the phase
21 development in the construction of Willow Run.
22 Can you describe for us the typical
23 waste placement procedures that are proposed for the
24 facility?

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1 A. Yes. As Mr. Nickodem described earlier on
2 this waste placement slide, there are eight phases in
3 the facility, designed in the facility, and the
4 Phase 1 is where waste placement will begin in the
5 southeasternmost portion of this face.
6 Q. So, Mr. Hoekstra, with this phase
7 development the entire 134-acre footprint is not going
8 to be developed at one time?
9 A. That is correct. Waste placement will
10 begin in Phase 1 as we see it here. And if we go to
11 our next slide, we show the face separation berms, one
12 located on the northern portion of this phase and then
13 on the western portion of the face.
14 And Phase 1 is approximately 34 acres
15 in size, so we will break up Phase 1 into three
16 separate phases, or three separate sections, I should
17 say, as we show here on this slide.
18 These are interface separation berms
19 designed into Phase 1 to separate this into three
20 sections where filling would then occur in the
21 southeasternmost portion of the face.
22 So the first lift of material would
23 be placed in this section and completed to the end,
24 come back across that, remove the interface separation

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1 berm, and then go through the same process in the next
2 section, and then of course remove this interface
3 separation berm and complete the filling across the
4 floor in Phase 1. (Indicating.)
5 Q. Mr. Hoekstra, why do you divide or
6 separate Phase 1 into these three sections?
7 A. Well, it's important in the operation of
8 the facility to contain the waste in a smaller area,
9 so we are containing the filling operations to just
10 this first section of Phase 1 in the very beginning
11 stages of the operation of the site.
12 Additionally, it's important to
13 control the surface water as it may come in contact
14 with this area as we're filling it.
15 So by putting in interface separation
16 berms, along with the outer phase separation berms, we
17 are controlling the amount of surface water that may
18 come in contact with the waste material as it's being
19 placed and would keep that surface water clean. It
20 would be pumped out as clean water into the surface
21 water management system of the site. And any water
22 that comes in contact with the waste material being
23 placed in the first phase would then be treated as
24 leachate.

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1 Q. And how does waste placement then
2 continue?
3 A. Once we begin -- once we've covered the
4 entire floor of Phase 1, then the filling continues in
5 Phase 1, as you can see here, bringing those
6 elevations up during the time of the filling of
7 Phase 1. Then Phase 2 construction would begin. This
8 is Phase 2 up here up on the northern end.
9 (Indicating.)
10 So that's how construction would
11 begin while Phase 1 is being filled.
12 And once that is approved by the
13 Illinois EPA for filling, then we would go ahead and
14 begin to place waste in that portion of the site.
15 That general progression would continue throughout the
16 entire area of the facility all the way through
17 Phase 8.
18 Q. Now, you mentioned leachate being formed
19 at the site.
20 Could you describe for us the
21 different ways in which leachate may be generated?
22 A. Leachate can be generated a number of
23 different ways at the facility. It can come in
24 contact -- rainwater can come in contact with the

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1 waste material as it's being deposited at the active
2 face on any operating day while it may be raining.
3 Leachate is also generated through
4 the decomposition of the waste material as it is in
5 the landfill itself.
6 And additionally, leachate is part of
7 the constituents that comes in the refuse or the waste
8 material at the landfill. The material that we throw
9 out in our trash every day, the orange peel, the
10 apple, little bit of leftover milk that might end up
11 in the trash can, those types of things all contribute
12 to leachate.
13 Q. Will generation of leachate at the site be
14 minimized?
15 A. Yes, it will.
16 Q. How?
17 A. Leachate is minimized through the
18 operational methods that I've somewhat already
19 described; through these face separation berms,
20 interface separation berms, keeping the active face as
21 small as possible on any given day just to manage the
22 amount of material that is coming into the site.
23 And also the Application of daily
24 cover, intermediate cover and final cover throughout

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1 the operation of this facility is important in
2 controlling and minimizing the amount of leachate that
3 may be produced.
4 Q. Are there procedures that have been
5 proposed to manage leachate that will be generated?
6 A. Yes, there are.
7 Q. And what are those procedures?
8 A. As leachate is generated and we look at
9 how the site is designed, we can see here the leachate
10 collection system that has been designed into the
11 site.
12 In Phase 1 we're looking at three
13 sumps that have been built in this particular face, or
14 designed into this particular face, with the
15 collection system in the floor of the cell itself.
16 So as leachate is produced and
17 collects in the leachate collection system, it runs
18 into the sump where it then is pumped into the
19 forcemain and into the aboveground leachate storage
20 tanks. From there it is then removed via tanker truck
21 to a -- typically a local wastewater treatment plant
22 for treatment.
23 Q. Are these procedures sufficient to manage
24 the leachate that's generated as a result of a major

1 storm event?
2 A. Yes, they are. These procedures, as well
3 as the operational techniques that I've previously
4 mentioned such as the minimization of the daily active
5 face, and, of course, the application of daily
6 intermediate and the final cover, all play an
7 important role in controlling leachate in any type of
8 rainstorm event.

9 Q. Were you operating the Settler's Hill
10 facility when the major storm event that's been
11 referred to in these proceedings occurred in July of
12 1996?

13 A. Yes, I was.

14 Q. And did this -- did that storm event cause
15 any operational difficulties at Settler's?

16 A. As I recall, the site was still open at
17 6:00 a.m. that day, and we opened up half an hour
18 later as a result of a culvert that had washed out in
19 a secondary access road to the active area. So we
20 replaced that culvert, repaired the road, and opened
21 the site and operated as normal.

22 Q. Did that storm event cause any problems in
23 the management of the leachate at Settler's Hill?

24 A. No, it didn't. All the same procedures

1 were in place at Settler's Hill that I'm speaking
2 about here.

3 The -- probably the major issue that
4 we dealt with at that time was dealing with the amount
5 of surface water that needed to be managed from a cell
6 construction that had been taking place at that time
7 and removing the water over a period of time into the
8 surface water management system from that cell.

9 Q. I want to move on to a few concerns that
10 are sometimes expressed about proposed facility
11 operations.

12 Do you expect litter to be a concern
13 at Willow Run?

14 A. No, I don't.

15 Q. Can you explain why not?

16 A. Well, we have a litter control plan in
17 place for the facility. First of all, the facility
18 will require enclosed and/or tarped vehicles to --
19 coming into the facility. So any vehicles that are
20 using the site must be either tarped or enclosed in
21 order to bring their waste to the facility.

22 Additionally, the minimization of the
23 active face throughout an operating day when wind
24 conditions are higher is important in controlling

1 litter, staging that active area for prevailing winds;
2 so locating our cells in an area where we can control
3 the litter more effectively, placement of windscreens
4 in and around the active area so that litter can be
5 controlled and be caught by these windscreens on a
6 windy day.

7 The application of daily cover
8 materials throughout the operation of the day while
9 waste is accepted is important, not just at the end of
10 that operating day but pushing that daily cover across
11 the previously compacted refuse as it comes into the
12 site so that you've got a good six inches of soil over
13 that area on a windy day.

14 And, of course, collecting the litter
15 throughout the day to make sure it doesn't leave the
16 site off the windscreens and around the area,
17 patrolling the facility, as well, and making sure that
18 we pick up the papers around not only the facility but
19 on the public streets and adjacent areas that are
20 within one mile of the entrance of the facility.

21 Q. Mr. Hoekstra, do you expect odor to be a
22 concern at Willow Run?

23 A. No, I don't. And looking at the odor
24 control plan, there are a couple of important points.

1 Again, keeping the active face small,
2 just large enough to manage the area, the area that's
3 necessary to accept the inbound waste materials, is
4 important in controlling odor, rapidly handling the
5 material as it comes into the site and compacting it
6 in place.

7 Also, the application of cover
8 materials on a daily basis, six inches of daily cover,
9 the application of intermediate cover on areas that
10 have not received waste for a period of 60 days; and
11 as we reach final cover, the application of final
12 cover on areas that have reached that final contour is
13 also important to the management and control of odors.

14 And lastly, as Mr. Nickodem talked
15 about, the gas management system designed into the
16 site, the installation and the operation of that gas
17 management system is another important component of
18 controlling odors at the facility.

19 Q. We heard earlier this evening a question
20 asked about dust.

21 Do you expect dust to be an issue or
22 concern at Willow Run?

23 A. Again, no, I don't believe that dust is
24 going to be a problem at this facility or a concern.

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1 We have several things designed into
2 the site to manage this issue. First of all,
3 beginning with the paved entrance road coming into the
4 site, that's an important component.
5 As vehicles come into the facility
6 they are on a paved section of roadway from the
7 entrance gate all the way beyond -- just slightly
8 beyond Walley Run. Then they get on a gravel primary
9 access road which will be maintained, and then after
10 that the trucks are accessing a secondary roadway up
11 in the active area portions of the facility.
12 And that secondary access road is
13 also constructed similarly to the gravel primary
14 access road in that it is built out of concrete or
15 brick and then coated with a layer of gravel,
16 compacted. And the trucks will be using that.
17 A water truck onsite is utilized
18 throughout the day on drier days to control dust not
19 only on the roads that the trucks are using to come
20 in -- in and out of the facility, but also where heavy
21 equipment is working.
22 A street sweeper will also be used on
23 the paved section of roadway to also assist in
24 controlling the dust on that section of roadway.

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1 Additionally, the site supervisor
2 will be patrolling the facility to ensure that dust is
3 controlled not only at the facility but the public
4 streets and adjacent areas within one mile of the
5 site.
6 Q. Mr. Hoekstra, what about mud? Is mud
7 going to be a problem at this facility?
8 A. Well, again, mud will be controlled
9 through a couple of things. The paved entrance road
10 plays an important part of that in controlling mud as
11 well as the all-weather access road, both the
12 secondary and the primary.
13 Those roads are long sections of
14 roadway, and allowing the trucks to -- maintaining
15 those roads through the use of a grader and allowing
16 those trucks to leave the active area and have a long
17 section of roadway in which to lose any mud that might
18 collect on their tires, grading that material off
19 throughout the day, and then using the street sweeper
20 on paved roadway sections are all important components
21 in controlling mud at the site.
22 Q. Mr. Hoekstra, beginning with the arrival
23 of a collection vehicle, could you describe for us the
24 proposed operation of Willow Run?

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1 A. Certainly. The slide we have up now is a
2 photograph of the Prairie View landfill, which is
3 owned by Will County, operated by Waste Management,
4 located near Wilmington, Illinois.
5 And there are a couple of things that
6 I'd like to point out on this slide that are very
7 similar to the Willow Run facility that we're talking
8 about here.
9 Here is the paved section of roadway
10 that is the entrance into the facility. The actual
11 entrance gate is located here, and then the entire
12 section is paved, as you can see it, all the way back
13 to where the secondary access road begins.
14 (Indicating.)
15 We see the receipt control area
16 located right here in this photograph, and you can see
17 a couple of trucks that are waiting to get on the
18 scale and receive their load ticket for the materials
19 that they are bringing into the site. (Indicating.)
20 Now, you can also see another truck
21 that's traveling down this paved section of roadway
22 and, again, on the secondary access road which then
23 brings them to the active face that you can see
24 operating on this particular day.

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1 Also, I'd like to point out a couple
2 of other features that are very similar to this
3 facility that we are presenting today, and these are
4 two retention basins; a smaller one here which serves
5 as a retention basin for these paved sections of
6 roadway and this receipt control facility.
7 (Indicating.)
8 This is a larger retention basin,
9 stormwater retention basin, that's been designed for
10 this site to receive the runoff from most of the area
11 that you see under development. (Indicating.)
12 Additionally, you can see a couple of
13 different types of operation occurring in this
14 particular slide.
15 Again, we see the active area here.
16 We see some intermediate cover sections in this area,
17 and we also have intermediate cover in these areas
18 with some vegetation on them. (Indicating.)
19 So we've got vegetation already
20 growing in this area. We're spreading topsoil on some
21 intermediate cover areas here for more vegetative
22 until the time comes to apply that final cover.
23 (Indicating.)
24 Finally, I'd like to point out this

1 area here. This is a cell under construction.
 2 (Indicating.) It's shiny reflective in this
 3 photograph due to the sun. But this is the 60-mil
 4 liner that is in place on the floor of this cell, and
 5 the darker section here is the beginnings of the
 6 installation of the cushion layer on top of the
 7 geomembrane just prior to the placement of leachate
 8 gravel. (Indicating.)
 9 Our next slide shows the entrance
 10 sign to this facility. This is a typical entrance
 11 sign with the landscaping that we like to use for the
 12 entrance to our facilities. (Indicating.)
 13 And this is also some signage at the
 14 front entrance of the Prairie View site noting that no
 15 hazardous waste materials are accepted at this site.
 16 And also this sign is -- the sign on the right is a
 17 sign that is required to be on the entrance of the
 18 facility designating what the permit is, who the
 19 operator is, telephone number, et cetera.
 20 (Indicating.)
 21 Here we see the same facility. This
 22 is a closeup shot of the receipt control building and
 23 the scales. (Indicating.) We've got a truck on the
 24 scale here waiting for its load ticket. This is a

1 commercial front-loader that's picked up its route and
 2 has come into the landfill to deposits its waste
 3 material.
 4 This is the inside of that building,
 5 and the receipt control clerk is checking in that
 6 truck at her computer. (Indicating.)
 7 All of the vehicles that come into
 8 our facilities are on a computer system so their empty
 9 weights are stored. Once they use the facility for
 10 the first time, that empty weight is stored. And so
 11 we enter the appropriate data for the weight of the
 12 material and generate the load ticket for that
 13 particular load.
 14 I also want to point out the TV
 15 camera that is located here on the wall.
 16 (Indicating.) This is a split-screen TV camera which
 17 is part of the security camera system that I had
 18 mentioned earlier in my testimony. There are a number
 19 of different views here that the receipt control clerk
 20 can look at.
 21 This is a recorded -- recorded
 22 information that is kept for a period of time beyond
 23 the actual day that is taking place.
 24 And there are several different

1 cameras mounted on the building. We have one inside
 2 the building pointed at the receipt control clerk so
 3 we can watch the transaction take place.
 4 There is also a camera on the outside
 5 of the building so that we can see the inbound scale,
 6 see the truck on the scale, the name on the truck, and
 7 any other important information that might be on the
 8 truck such as a license number on the vehicle.
 9 Additionally, there is an outbound
 10 scale at this building, and there's a camera mounted
 11 on the outbound scale so we can record that activity.
 12 And also there's a camera mounted on
 13 the back of this building behind the building as the
 14 trucks are going past the scale to get into the active
 15 area of the facility.
 16 There's another camera mounted on the
 17 back of the building so that if this receipt control
 18 clerk were to reject a load for any reason, she can
 19 actually watch on the TV screen, watch that truck turn
 20 around in the turnaround area, then come back around
 21 on the other side.
 22 If the truck were to continue on to
 23 the active area after she rejected it, she's got
 24 two-way radio contact with the active face and the

1 supervisor on-site to notify them that this truck
 2 needs to be escorted out of the facility.
 3 Our next slide then shows trucks that
 4 have already checked in, continuing down the paved
 5 access road to the secondary access road. And here we
 6 are at the active area of this particular facility,
 7 and we can see several things occurring here.
 8 We've got an 836 Caterpillar
 9 compactor which weighs over 100,000 to compact the
 10 waste in place.
 11 This is a tipper which tips transfer
 12 trailers. So the trucks come in, they separate their
 13 trailers from the tractor, that tipper goes up in the
 14 area, and the material slides out the back end.
 15 (Indicating.)
 16 And you can see a dozer here which is
 17 waiting for this material to come out to push that
 18 across to the compactor and get it compacted in place.
 19 (Indicating.)
 20 Here we've got a direct haul truck in
 21 this location. This is a roll-off truck dumping its
 22 waste material in this area. (Indicating.)
 23 Also on this slide I wanted to point
 24 out the daily cover that's been stockpiled in this

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1 area. This is more daily cover than is really
2 necessary for this day's activities, and it's not
3 uncommon for us to stockpile additional daily cover in
4 the area that we are working in for several days in
5 advance, and then that material is pushed across the
6 active area at the end of the operating day.
7 Also on this slide we can see the
8 cell construction that is taking place in the
9 foreground. So this is a new cell that is being
10 developed, and the phase that we are in of
11 construction is the placement of the leachate gravel
12 drainage blanket. So we're placing this leachate
13 gravel across the cushion layer which is sitting on
14 top of the 60-mil liner.
15 And although you can't tell that it's
16 here, there is a face separation berm built in this
17 location right at this junction to keep this surface
18 water that may come in contact with this construction
19 clean while this becomes leachate if it comes in
20 contact with the waste material. (Indicating.)
21 Again, another good slide here of
22 active operations with a couple of things taking place
23 here that I'd like to point out.
24 Active area is occurring here.

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1 (Indicating.) In this particular slide, due to the
2 area that we're working in in this particular
3 location, we've split the lift into two different
4 sections where we've got direct haul trucks depositing
5 their waste in a lower area and the tipper trucks are
6 working off in this section, a couple of compactors
7 working on this particular lift compacting the waste
8 in place. (Indicating.)
9 You can see this material here. This
10 is stockpile daily cover and some stockpiled daily
11 cover in this location. These are tarps of ADC
12 material, which you heard about earlier, alternate
13 daily cover, placed on areas that have previously
14 been -- a waste that has previously been compacted
15 already. (Indicating.)
16 Also, I want to point out the
17 windscreens. These are windscreens located here.
18 (Indicating.) They're movable with heavy equipment.
19 You pull them around and set them downwind of the
20 active area to catch the blowing papers.
21 And I also want to point out a
22 diversion berm which has been built on this slope.
23 This is a slope rising above this area that's already
24 been built out of waste material and then intermediate

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1 cover has been placed on this slope. (Indicating.)
2 And if you look carefully, you can
3 see a darkened area here which is a surface water
4 diversion berm so that as rainwater hits this upper
5 slope, rather than have it flow into the active area,
6 it is hitting this diversion berm and flowing away
7 from the active area. (Indicating.)
8 That's one of the controls that we
9 put in place to ensure that we minimize the leachate
10 that is produced at the site. Here we've also got a
11 small diversion berm in this location. (Indicating.)
12 And, lastly, this is cell
13 construction that has been completed in this
14 particular photograph. (Indicating.)
15 And, again, there's a face separation
16 berm that's been built into this area, I know you
17 can't see it but this is where it would be, to keep
18 these two sections separate. And this cell has
19 already got all of the components designed and
20 completed so you're looking at the geotextile filter
21 fabric on top of the leachate gravel material, and
22 this cell is waiting for Illinois EPA approval.
23 (Indicating.)
24 Here we see a typical slide,

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1 end-of-the-day slide at one of our landfills where
2 we've got the windscreens in the background that have
3 been placed for blowing papers. We've got the
4 alternate daily cover tarp in place, and then the
5 dozer is spreading the dirt across that area to cover
6 that refuse that's been previously placed during the
7 day to complete that application of daily cover.
8 We've also got stockpile of dirt in
9 this location, which is not an uncommon thing for us
10 to do as we go through our active areas to keep some
11 stockpiles close by so we can use those for daily
12 cover as needed. (Indicating.)
13 And lastly, this is a slide that
14 shows a water truck spreading water across one of our
15 secondary access roads on -- built on top of
16 previously buried refuse.
17 Q. Mr. Hoekstra, were you here earlier in
18 the evening when Mr. Belt was asking various questions
19 of Mr. Nickodem regarding the Morris Airport?
20 A. Yes, I was.
21 Q. And you're aware that that airport is
22 located in the City of Morris south of this facility?
23 A. Yes.
24 Q. Do you know where that airport is located?

1 A. It's located approximately 3.3 miles to
 2 the southwest of the facility.
 3 Q. Do you know what type of airport it is?
 4 A. General aviation.
 5 Q. Now, as we've indicated you operated
 6 Settler's Hill landfill for a number of years.
 7 Is there an airport near Settler's
 8 Hill?
 9 A. Yes, there is.
 10 Q. What airport?
 11 A. It's the DuPage Airport.
 12 And the slide that we have up on the
 13 screen now shows the -- if I can get my pointer to
 14 work -- the DuPage Airport located here with the
 15 various runway approaches. (Indicating.)
 16 And if you look down to the lower
 17 left-hand side, you can see the Settler's Hill
 18 landfill complex in this location. (Indicating.)
 19 Q. What type of airport is the DuPage
 20 Airport?
 21 A. The DuPage Airport is general aviation, as
 22 well.
 23 Q. Same as the City of Morris airport?
 24 A. That's correct.

1 Q. How far is the DuPage Airport from
 2 Settler's Hill?
 3 A. It's within 10,000 feet.
 4 Q. So within two miles?
 5 A. Yes.
 6 Q. Now, were there occasions in which flight
 7 patterns to the DuPage Airport went directly over the
 8 Settler's Hill landfill?
 9 A. Yes, there were.
 10 Q. And how did that come about, or why did
 11 that occur?
 12 A. Well, of course depending on the wind
 13 direction on a given day, the pilots were directed to
 14 take a flight pattern into their landing of -- into
 15 DuPage Airport directly over Settler's Hill.
 16 It was not uncommon for us to see
 17 flight patterns come across Settler's Hill and into
 18 DuPage or to take off and come across Settler's Hill
 19 and head west out of the DuPage Airport.
 20 Q. And what was the height of Settler's Hill,
 21 or what is the height of Settler's Hill?
 22 A. Settler's Hill's height was -- it's one --
 23 let's see. It's nine -- I think it's about nine ten
 24 elevation, and the height or the mass of waste, it's

1 total height was over 200-and-some-feet at the highest
 2 point.
 3 Q. So taller than Willow Run is proposed to
 4 be?
 5 A. That is correct.
 6 Q. Were there bird controls in place at
 7 Settler's Hill?
 8 A. Yes, there were.
 9 Q. What were they?
 10 A. Well, the bird control measures that will
 11 be in place at the facility we're talking about today,
 12 and that is to keep your active face small in size to
 13 the needs of the amount of waste that is coming in, to
 14 apply the daily cover on your active area at the end
 15 of every operating day. The application of
 16 intermediate cover, of course, is very important, as
 17 well as final cover.
 18 Additionally, the facility used bird
 19 control -- bird cannons for control and hand-held guns
 20 for bird control at Settler's Hill.
 21 It's also important to point out on
 22 this particular slide that the -- this property here
 23 is a golf course that was built by the DuPage Airport
 24 directly adjacent to the airport itself, which in and

1 of itself is an attractant of birds to the airport
 2 area. (Indicating.)
 3 Q. How do those bird controls procedures at
 4 Settler's Hill work?
 5 A. Very well.
 6 Q. Over the course of your operation of that
 7 facility, was there ever a reported incident involving
 8 any aircraft as a result of any activity at the
 9 landfill?
 10 A. No, not one.
 11 Q. Mr. Hoekstra, based upon your experience
 12 and your review of this proposed operation, do you
 13 have an opinion as to whether Willow Run has been
 14 proposed to be operated so as to protect the public
 15 health, safety, and welfare?
 16 A. Yes.
 17 Q. And what is your opinion?
 18 A. It is my opinion that the facility will be
 19 operated to protect the public health, safety, and
 20 welfare.
 21 Q. And what are the reasons for your opinion?
 22 A. It goes back to my earlier testimony on
 23 the waste acceptance and the load-checking procedures
 24 first of all, where all waste materials coming into

1 the site will be -- will receive a load ticket. The
 2 activity of that transaction will be recorded.
 3 Also, the load-checking procedure
 4 that is in place at the facility so that we've got the
 5 random load-checking procedure taking place in
 6 accordance with the Illinois EPA regulations.
 7 Additionally, the waste placement
 8 procedures that are in place where the operators of
 9 the facility who are trained in waste identification
 10 can manage or take a look at the materials as they're
 11 coming in to ensure that the waste materials coming
 12 into the site, in fact, are acceptable for the
 13 facility.
 14 Also, the rapid placement of that
 15 waste material at the active area. And, of course,
 16 going to the operational procedures, the application
 17 of daily intermediate and final cover, and then the
 18 controlled access through one access point into the
 19 site and one exit point from the site.
 20 Q. Mr. Hoekstra, do you have an opinion as to
 21 whether the plan of operations for Willow Run has been
 22 designed so as to minimize any danger to the
 23 surrounding area from fire, spills or operational
 24 accidents?

1 A. Yes, I do.
 2 Q. And what is your opinion?
 3 A. It is my opinion that the site has been so
 4 designed to minimize the area from -- surrounding area
 5 from fire, spills or other operational accidents.
 6 Q. And what are the reasons for that opinion?
 7 A. There are several. First of all, the
 8 facility will have a fire prevention and control plan,
 9 a spill prevention and control plan or SPCC plan, an
 10 accident prevention control plan, which includes
 11 health and safety, an emergency action plan, and
 12 facility security around the site.
 13 Q. Could you describe for us, Mr. Hoekstra,
 14 each of these components?
 15 A. Beginning with fire prevention and
 16 control, all personnel are trained in the proper
 17 methods to manage a fire should one occur. That
 18 includes the use of a fire extinguisher and how to use
 19 that fire extinguisher.
 20 Also, all equipment will be fixed
 21 with a fire extinguisher on them.
 22 Additionally, fire extinguishers will
 23 be placed in buildings in accordance with codes, and
 24 fueling procedures will be gone over with all of the

1 employees for the fueling of heavy equipment so they
 2 understand the safe procedures that must be taken to
 3 ensure that there is not a spill of fuel.
 4 With regard to the spill prevention
 5 and control plan, that will also be created for the
 6 facility taking into consideration all areas where a
 7 spill could possibly occur such as the fueling of
 8 heavy equipment or the removal of leachate from the
 9 site.
 10 Also, the facility will have
 11 emergency spill kits on hand so that should a spill
 12 occur we'll be able to contain it in its location, and
 13 personnel on the site will be trained. So all
 14 employees will be trained in the SPCC plan so that
 15 they know the proper actions to take should a spill
 16 occur at the facility.
 17 The accident prevention control plan
 18 is also an important component of the facility. A
 19 comprehensive health and safety training program will
 20 be created for the site, and that will include weekly
 21 safety meetings that all employees must attend, and
 22 the topics that are covered are important for their
 23 personal safety as well as the safety of our customers
 24 and surrounding residents at the site on how to manage

1 the facility and how to manage their jobs accordingly
 2 in a safe manner.
 3 Personal protective equipment will be
 4 given to all the operators and laborers on the
 5 facility such as hard hats, high-visibility vests, the
 6 necessary gloves and footwear to protect them, and the
 7 site will only use trained equipment operators for the
 8 heavy equipment that are pre-qualified on that heavy
 9 equipment.
 10 The emergency action plan will be
 11 created for the site and will include the proper
 12 action to take should an emergency occur such as a
 13 natural disaster, a tornado, that type of -- a bomb
 14 threat, those types of emergencies.
 15 There will be an assigned emergency
 16 coordinator to manage the emergency should it take
 17 place. That individual will be identified and will be
 18 in charge of managing the emergency and directing the
 19 employees should the emergency occur. Employees will
 20 be trained in that emergency action plan so that they
 21 understand what they need to do in case of an
 22 emergency, where to meet if we are to evacuate the
 23 site for any reason, such as a tornado, after the
 24 threat has gone by.

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1 Additionally, there will be internal
2 and external communication procedures in place. And
3 the internal communication procedures I'm speaking
4 about are two-way radio contact, such as Nextel
5 radios, between our supervisor on-site, the operators
6 in their heavy equipment as well at receipt control
7 clerk.

8 External communication procedures are
9 those written procedures and understanding who to
10 contact, what emergency response agency to contact in
11 case of an emergency.

12 Facility security is also an
13 important component, and the access to the site is
14 controlled through the use of one entrance and one
15 exit at the facility along with fencing and screening
16 berms to limit that access.

17 Perimeter security, again, is through
18 the berming and the screening and fencing. And also
19 the video surveillance that I talked about earlier,
20 that is an important component in the facility
21 security.

22 Q. Mr. Hoekstra, has Waste Management adopted
23 environmental initiatives going into the development
24 of its solid waste landfills?

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1 A. Yes, they have. Earlier in 2007 our CEO,
2 David Steiner, introduced a sustainability plan and
3 program for our company, for Waste Management, which
4 include several initiatives, and they're all based on
5 a goal of 2020.

6 Waste Management currently is very
7 active in the production of energy through its
8 waste-to-energy facilities such as Wheelabrator and
9 the removal of methane gas from its landfills to
10 produce energy in a variety of ways. And currently we
11 produce enough energy to the equivalent of one million
12 homes, supplying enough energy for one million homes.
13 And the goal is to extend that -- increase that to two
14 million homes by the year 2020.

15 Additionally, the company is very
16 active in recycling and currently recycles 8 million
17 tons of recyclable materials per year and has a goal
18 of increasing that to 20 million tons by the year
19 2020.

20 Also, the performance of our fleet,
21 our hauling fleet is very important and how we can
22 conserve fuel. So increasing the efficiency of our
23 fleet by 15 percent and thereby reducing the
24 pollutants that we might give off from the operation

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1 of that fleet by 15 percent is another goal that has
2 been set by the company by the year 2020.

3 And, lastly, the company is very
4 active in certifying some of its acreage as certified
5 wildlife habitat with the Wildlife Habitat Council.
6 Currently we have 17,000 acres of property certified
7 for wildlife habitat, and we intend to increase that
8 to more than 25,000 acres by the year 2020.

9 MR. MORAN: Thank very much, Mr. Hoekstra.
10 No further questions, Mr. Hearing
11 Officer.

12 HEARING OFFICER KINNALLY: Thank you,
13 Mr. Moran.

14 Mr. Kramer?

15 MR. KRAMER: Thank you.

16 CROSS-EXAMINATION
17 BY MR. KRAMER:

18 Q. Mr. Hoekstra, could you put up, I believe
19 it would be, the sixth slide in your presentation
20 called "Waste Placement."
21 Perhaps the next one. There were two
22 with the same title. Yeah, that one's a little bit
23 better. I believe that was the sixth one.
24 Mr. Hoekstra, you show the entrance

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1 feature to the facility being on the west side of
2 Walley Creek; is that correct?

3 A. That is correct.

4 Q. So obviously the berm is going to have to
5 build a bridge and get proper permitting from state
6 authorities or whoever to cross the creek?

7 A. That's correct.

8 Q. And then the blacktop road will continue
9 from the entrance on Whitewillow across the creek.
10 And does the blacktop portion end
11 where it flares out? Is that a correct reading of
12 your drawing?

13 A. The blacktop portion ends just beyond the
14 Walley Creek area, just around in this vicinity where
15 you see it begin to get onto this built section
16 where -- (Indicating.)

17 Q. That's where I'm talking about the flaring
18 up on the southern portion.

19 A. Right.

20 Q. How far would you say that is off the
21 boundary line of your 2008 June 8 Application?

22 A. I'm not sure I understand your question.

23 Q. Okay. Let me rephrase it.
24 How far north of the boundary line of

1 this Application would you say the roadway is, if you
 2 know?
 3 A. I don't know really know.
 4 Q. Fair enough.
 5 Now, with respect to the drawings, on
 6 many of the slides we've seen -- you've been here
 7 throughout the testimony of the previous witness; is
 8 that fair to say?
 9 A. Yes.
 10 Q. West of the creek where it gets to your
 11 southern boundary line, would it be fair to say that
 12 Waste Management and Kendall Land Company do not own
 13 that land?
 14 A. You're talking about somewhere down in
 15 here? (Indicating.)
 16 Q. Right. In other words, when you get to
 17 the southern boundary at the southwest corner of the
 18 Application --
 19 A. Right here? (Indicating.)
 20 Q. Right. And now you go south from the
 21 border, from the boundary line, please.
 22 A. This way? (Indicating.)
 23 Q. Right. And on the west side of the creek
 24 as it continues down through the adjoining land is not

1 owned by Kendall Land & Cattle or Waste Management?
 2 A. I think that's correct.
 3 Q. Do you propose to put in any type of
 4 berming, landscaping, or screening adjoining that
 5 owner to the southwest?
 6 A. Well, actually there's going to be another
 7 witness that will talk about all the screening that
 8 will be placed around the facility and how that's
 9 designed at a later time.
 10 Q. Okay. Is that something you would have
 11 any knowledge of as far as the south and west border?
 12 And if you don't, that's fine.
 13 A. No, I don't.
 14 Q. Fair enough. Is there anything
 15 operationally from your experience, the 20-some years
 16 you have at Settler's Hill, that would prevent Waste
 17 Management from continuing that blacktop area of
 18 roadway further east to avoid dust to that neighbor to
 19 the southwest?
 20 A. Is there anything operationally that would
 21 prohibit that?
 22 Q. Correct.
 23 A. Other than I don't think it's necessary
 24 based on my experience.

1 Q. Okay. Again, there's no operational
 2 impediment?
 3 A. No, not that I'm aware of.
 4 Q. Now, you've indicated one of the goals of
 5 your company is to increase the use of recycling;
 6 would that be fair to say?
 7 A. Yes, that's correct.
 8 Q. And Waste Management company as a
 9 corporate entity owns transfer stations at various
 10 locations in the country?
 11 A. That's correct.
 12 Q. One of the materials you indicated on your
 13 "can accept" list is construction materials?
 14 A. Correct.
 15 Q. Those are materials that are very capable
 16 of being accepted by transfer stations and being
 17 recycled rather than taking up valuable landfill
 18 space?
 19 A. Sometimes they are collected and sorted,
 20 depending on their quality and quantity, that is
 21 correct.
 22 Q. And, again, those are materials that
 23 certainly can be recycled?
 24 A. Correct.

1 Q. And, again, would save on valuable
 2 landfill space?
 3 A. Yeah. In some cases they can be recycled,
 4 right.
 5 Q. Is there anything planned in the
 6 operations end that you're in charge of here to
 7 encourage companies to take construction materials to
 8 alternate transfer station or recycling sites rather
 9 than bringing them to your landfill?
 10 A. Well, actually that -- that encouragement,
 11 if you will, or incentive, if you will, is driven by
 12 the ability for the hauler and the generator of that
 13 material to reduce the amount of material that they're
 14 bringing to the facility, and that incentive is driven
 15 by incentives or pricing that is instituted at
 16 transfer stations throughout this area.
 17 So if the company is actively
 18 interested in sorting wood and other types of
 19 construction material, as it is at its landfills,
 20 or at its transfer stations, excuse me, the incentive
 21 will be there for the haulers to bring to material to
 22 the transfer station because it will be there -- it
 23 will be brought there at a reduced rate from normal
 24 refuse.

1 Q. Okay. With regard to the type of waste
 2 you'll accept, one of the categories you've indicated,
 3 of course, is special waste?
 4 A. Uh-huh.
 5 Q. Would an example of special waste, besides
 6 some of the testimony you've heard here earlier
 7 tonight, be contaminated soil from, let's say, LUST
 8 fund cleanups?
 9 A. Yes, it could be.
 10 Q. And that would have benzines, petroleum
 11 products, that sort of thing, subject to regulations
 12 by the Illinois EPA?
 13 A. That is correct.
 14 Q. And, again, would that ground be used as
 15 cover or simply fill material or waste that's put in
 16 the landfill or both?
 17 A. Illinois EPA regulations require that
 18 special waste is deposited at the active face and
 19 mixed in the with the refuse that's being brought in
 20 on that day. So it, in fact, would be mixed at the
 21 active face.
 22 Q. Steal a little of Mr. Belt's thunder since
 23 he's not here, the slide you showed on location of
 24 airport, you've indicated that you believe the Grundy

1 Airport was 3.3 miles, I believe your testimony is,
 2 from the site?
 3 A. That's correct.
 4 Q. And was that as the crow flies, or did you
 5 measure that from roadway distances?
 6 A. I think it's measured from the facility
 7 boundary to the airport itself.
 8 Q. Okay. As opposed to the nearest runway to
 9 the facility boundary?
 10 A. Actually, I'm not sure if it's the nearest
 11 runway or if it's the boundary of the facility itself.
 12 MR. KRAMER: Thank you. No further questions,
 13 Mr. Kinnally.
 14 HEARING OFFICER KINNALLY: Okay. Thank you,
 15 Mr. Kramer. I think we're going to conclude for
 16 tonight. It's 10:30. And we'll start again tomorrow
 17 at 9:00, and I'm to tell you that the ladies will have
 18 breakfast at what time, you'll have donuts and stuff
 19 around 8:15 or 8:30, and then lunch is at 11:30 or
 20 11:45, and we'll quit around 3:00 tomorrow. Have a
 21 nice evening. Thanks for coming.
 22 * * * * *
 23
 24

1 STATE OF ILLINOIS)
) SS.
 2 COUNTY OF DU PAGE)
 3 I, Janet L. Galasso, CSR. No. 84-002176, and
 4 Kathleen M. Grove, CSR No. 84-002197, do hereby
 5 certify that we reported in shorthand the proceedings
 6 had at the hearing of the above-entitled cause and
 7 that the foregoing Report of Proceedings, Pages 223
 8 through 523, inclusive, is a true, correct, and
 9 complete transcript of my shorthand notes taken at the
 10 time and place aforesaid.
 11 We further certify that we are not counsel for
 12 nor in any way related to any of the parties to this
 13 suit, nor are we in any way, directly or indirectly
 14 interested in the outcome thereof.
 15 This certification applies only to those
 16 transcripts, original and copies, produced under our
 17 direction and control; and we assume no responsibility
 18 for the accuracy of any copies which are not so
 19 produced.
 20 IN WITNESS WHEREOF we have hereunto set my
 21 hand this 13th day of September, 2008.
 22
 23 Certified Shorthand Reporter
 24
 Certified Shorthand Reporter