TCEO DOCKET NO. 2007-1774-MSW

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Page 1513
          TRANSCRIPT OF PROCEEDINGS BEFORE THE
                                                               1
                                                                       A Good morning, Mr. Carlson.
          STATE OFFICE OF ADMINISTRATIVE HEARINGS
                                                                       Q At the end of yesterday, you recall we had
                                                               2
         TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
                                                               3
                                                                    been discussing slope stability issues. Correct?
                 AUSTIN, TEXAS
                                                                       A Yes, sir, that's correct.
                                                               4
                                                               5
                                                                       Q I just wanted to ask you a couple of final
      IN THE MATTER OF THE
                                 ) SOAH DOCKET NO.
                                                               6
                                                                    questions about that. Do you recall some questions
      APPLICATION OF BFI WASTE )
                                         582-08-2178
                                                               7
                                                                    that I had about the height of waste columns at
      SYSTEMS OF NORTH AMERICA, LLC)
                                                                    certain landfills in Texas?
                                           TCEQ DOCKET NO.
      PROPOSED SOLID WASTE PERMIT )
                                                               9
                                                                       A I remember a line of questions where we
      AMENDMENT NO. 1447A
                                      2007-1774-MSW
                                                              10
                                                                    mentioned other sites, yes, sir.
                                                              11
                                                                       Q And we talked about the excavation slopes and
              HEARING ON THE MERITS
                                                             12
                                                                    the side slopes, the aboveground side slopes at
             WEDNESDAY, JANUARY 28, 2009
                                                             13
                                                                    various facilities as well. Do you remember that?
                                                             14
                                                                       A Yes, sir.
             BE IT REMEMBERED THAT AT approximately
                                                             15
      9:04 a.m., on Wednesday, the 28th day of January 2009,
                                                                       Q Okay.
      the above-entitled matter came on for hearing at the
                                                              16
                                                                             MR. CARLSON: May I approach, Judge?
      State Office of Administrative Hearings, 300 West 15th
                                                              17
                                                                             JUDGE NEWCHURCH: Yes, sir.
      Street, Hearing Room 402, Austin, Texas, before
                                                              18
                                                                             (Exhibit BFI No. 10 marked)
      WILLIAM NEWCHURCH, Administrative Law Judge; and the
                                                              19
                                                                       Q (BY MR. CARLSON) Mr. Chandler, I've handed
      following proceedings were reported by Steven Stogel,
                                                              20
                                                                    you a document that I will represent to you --
      a Certified Shorthand Reporter of:
      Volume 7
                           Pages 1511 - 1779
                                                              21
                                                                       A No, you didn't.
                                                              22
                                                                       Q Oh, has the court reporter not handed it to
                                                              23
                                                                    you? I believe the document he's handed you has been
                                                              24
                                                                    labeled as Exhibit BFI-10. Is that correct?
                                                              25
                                                                       A It's not labeled, sir. Yes, sir, it's now
                                              Page 1512
                                                                                                            Page 1514
              PROCEEDINGS
                                                               1
                                                                    labeled BFI-10.
 2
             WEDNESDAY, JANUARY 28, 2009
                                                               2
                                                                       Q Okay. Yesterday I believe you testified that
 3
                 (9.04 a m)
                                                               3
                                                                    you worked for TDSL on a permit modification for the
 4
             JUDGE NEWCHURCH: We're on the record.
                                                               4
                                                                    Subtitle D upgrades for that facility in the
 5
      It is four minutes after 9:00 a.m., January 28th.
                                                               5
                                                                    mid-1990s. Is that correct?
 6
      This is the continuation of the hearing in 582-08-2178
                                                               6
                                                                       A Yes, I did.
 7
      concerning BFI. And are there any preliminary matters
                                                               7
                                                                       Q And does this appear to be a few pages from
 8
      this morning?
                                                               8
                                                                    that particular upgrade -- modification?
 9
             MR. CARLSON: No, Your Honor.
                                                               9
                                                                       A Yes, it does.
10
             JUDGE NEWCHURCH: I think when we left
                                                             10
                                                                       Q And there are a couple of fill
11
      off yesterday, Mr. Carlson, you had just completed
                                                             11
                                                                    cross-sections, the last two pages of this four-page
12
      your cross of Mr. Chandler. Is that right?
                                                             12
                                                                    document. Do you see that?
13
             MR. CARLSON: I don't think I completed
                                                             13
                                                                       A Yes, sir, I do.
14
     it. I believe I stopped mid redirect.
                                                             14
                                                                       Q Okay. Is that your seal to the right-hand
15
             JUDGE NEWCHURCH: Okay. For some
                                                             15
                                                                    corner above those fill cross-sections?
16
      reason, I thought you were done. Okay. Then you may
                                                              16
                                                                       A Yes, sir, it is.
17
      proceed.
                                                              17
                                                                       Q Will you look with me at the last page of
18
             MR. CARLSON: Thank you, Judge.
                                                              18
                                                                    BFI-10? It's the fill cross-section for the D-D
19
       PRESENTATION ON BEHALF OF TJFA, L.P. (CONTINUED) 19
                                                                    prime?
20
             PIERCE L. CHANDLER, JR.,
                                                             20
                                                                       A Yes, sir.
21
      having been previously sworn, continued to testify as
                                                             21
                                                                       Q Now, this is a document you prepared. Is
22
      follows:
                                                              22
23
             CROSS-EXAMINATION (CONTINUED)
                                                              23
                                                                       A It's actually a document that I modified.
24
      BY MR. CARLSON:
                                                              24
                                                                          Okay.
25
        Q Good morning, Mr. Chandler.
                                                              25
                                                                           If you'll notice, I added some information to
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1 (Pages 1511 to 1514)

	11 BOCKET NO. 302 00 2170		CEQ DOCKET NO. 2007 1774 MSV
	Page 1515		Page 1517
1	it relative to the I'm having a hard time reading	1	Q Are you aware of any slope failures
2	it. It's been reduced, but I believe it says to	2	excavation slope failures that have occurred at the
3	include or add leachate collection system as	3	TDSL facility, sir?
4	the revision. John Burkes actually did the original	4	A I am not.
5	document. I added details to John Burkes' document,	5	Q Are you aware of any slope failures of any
6	and so when I did the documents, I indicated what I	6	sort that have happened at the TDSL facility, sir?
7	had added to the document and resealed the document.	7	A No, I am not.
8	Q Thanks for that clarification. So, for	8	Q All right. Let's move forward to your
9	example, the information regarding collector drains,	9	groundwater protection section of your prefiled
10	that's the sort of information you added to this	10	testimony, Mr. Chandler. I believe Mr. Terrill
11		11	yesterday asked you a question your basic assertion
12		12	is that the Sunset Farms landfill is leaking. Is that
13	, ,	13	correct?
14	1	14	A I said based on the groundwater contours, it
15		15	bears the indication that it is leaking, yes, sir.
16 17		16 17	That's the nature of my testimony.
	top of the landfill is maybe 800, 820 feet, maybe		Q All right. And I believe Mr. Terrill asked
18 19	9	18 19	you something along the lines of that's a pretty serious allegation, isn't it?
20	excavation could be as deep as maybe 650. So maybe 70		A And I think I agree with Mr. Terrill.
21	feet, 80 feet, something on that order.	21	Q You do agree
22	Q Actually, around 820 minus something around	22	A Yes, I do.
23	650 would be about 170 feet.	23	Q that a charge that a landfill is
24	A I'm sorry. I mis-subtracted. You are	24	leaking is pretty serious stuff. Right?
25	correct.	25	A Yes, I do.
	Page 1516		Page 1518
1	Q Okay. So at least this document represents a	1	Q Okay. Now, I looked at your prefiled, and by
2	maximum waste column at the TDSL facility of	2	my count, you've devoted a total of three and a half
3	approximately 170 feet. Correct?	3	pages of your testimony to your assertion that the
4	A That would appear to be correct, yes, sir.	4	Sunset Farms landfill is leaking. Do you have any
5	Q And the document shows the side slope for	5	reason to dispute that?
6	this particular facility, doesn't it?	6	A No, I don't.
7	A Yes, sir.	7	Q Okay. And I believe we went through an
8	Q Okay. And that's four-to-one. Right?	8	exercise yesterday and we talked about your criticism
9	A It's identified as four-to-one on the outer	9	of the boring plan or 18 borings in the Sunset Farms
10	edge, and then it rounds off. This is one of those	10	application. Right?
11	round sites that I mentioned relative to Skyline	11	A Yes, sir.
12 13	yesterday. This is another example of that.	12 13	Q And we ultimately concluded, I think you agree, that despite those 11 pages in your prefiled
$\frac{13}{14}$	Q And it shows the excavation slopes. Correct?A Yes, sir, it does.	14	testimony, that you had no basis or you agreed that
15	Q And what are the excavation slopes predicted	15	the site characterization at Sunset Farms was, in
16	on BFI-10?	16	fact, okay based on the original 67 borings. Right?
17	A On Section D-D, it indicates one-to-one usual	17	A Except for the northeast corner, I think, was
18	mass is the number. So I would interpret that to be a	18	actually what I testified yesterday.
19	one-to-one.	19	Q Now, if I understand your testimony, you
20	Q And one-to-one is steeper than three-to-one.	20	contend that groundwater is mounding underneath Sunset
21	Right?	21	Farms landfill. Is that correct?
22	A Yes, sir, it is.	22	A My testimony was that the application shows
23	Q Which is the excavation slope at Sunset	23	the mounding.
24	Farms. Correct?	24	Q You keep saying that the application shows
25	A Yes, sir, that is correct.	25	mounding. Do you have any proof that it's actually

2 (Pages 1515 to 1518)

	Page 1519		Page 1521
1	mounding under there?	1	Q Okay. And in the key down below it indicates
2	A That's just what the application shows.	2	that it's groundwater level from December 1999.
3	Q So your opinion is based strictly on what the	3	Right?
4	application shows. Is that correct?	4	A Yes, sir.
5	A That is correct.	5	Q Is that dashed line is that the primary
6	Q And in particular you're pointing to a couple	6	basis or a primary basis for your conclusion that the
7	of cross-sections in the application. One is a fill	7	landfill is leaking?
8	cross-section. Correct?	8	A Yes, sir, it is.
9	A Yes, sir.	9	Q All right. Now, in your deposition, I
10	Q That was prepared by the ACE group. Right?	10	believe that you agreed that these water levels don't
11		11	represent what's actually inside the landfill in terms
12	Q Okay. And that would be APP 000409. Could	12	of either groundwater or leachate. Right?
13	you pull that out?	13	A That's what the application indicates. The
14	A Yes, sir. Is that Volume 2, from Carlson?	14	application indicates that they're in the weathered
15		15	Taylor is what these water levels represent.
16	Volume 1, but if you'll get Volume 2, I'm going to ask	16	Q Well, I believe that you were asked a little
17	you some questions about that, Mr. Chandler.	17	different question. I want to make sure this is
18		18	clear. I believe you agreed that these water levels
19	Mr. Carlson?	19	don't represent what's actually inside the landfill?
20	Q Sure. APP 000409.	20	A That is correct, because the application
21	A I have that figure.	21	doesn't indicate that that's what they are. I'm just
22	Q Okay. This is one of the documents that you	22	restating what the application indicated that those
23	believe supports your contention that the landfill is	23	water levels were.
24	leaking. Right?	24	Q Okay. It represents a potentiometric
25	A Yes, sir, it is.	25	surface. Correct?
	Page 1520		Page 1522
1	Q Would you pull up APP 000711? It's in	1	A Yes, sir, that's correct.
2	Binder 2.	2	Q Okay. In other words, it represents water
3	A Yes, sir, I have 000711.	3	levels that hypothetically may have been in the
4	Q All right. Let's look at and that	4	landfill or in the area of the landfill at some point
5	document is a geologic cross-section that was prepared	5	in time if there had not been a bottom liner. Right?
6	by Mr. Snyder. Is that correct?	6	A I'm not sure I understood your question.
7	A That's what it indicates, yes, sir.	7	Q Potentiometric surface represents a potential
8	Q Okay. And both of these cross-sections go	8	water level in the ground. Right?
9	roughly through the heart of the landfill basically on	9	A No, that's not what it really represents.
10	a west/east basis. Correct?	10	Q Okay. Tell me what a potentiometric surface
11	A Yes, sir.	11	is, sir.
12	Q Let's look at the ACE cross-section,	12	A Okay. If we were to drill a well down into
13	APP 000409.	13	the weathered Taylor or some material we can either
14	A Okay.	14	deal with it as a hypothetical or this case. Which
15	Q Okay. Do you see the two little upside down	15	would you prefer?
16	black carrots, one on the left-hand side and one on	16	Q Well, let me do it in a hypothetical. Okay?
17	the right-hand side?	17	A Okay.
18	A Yes, sir, I do.	18	Q Suppose I have a galvanized metal trough, the
19	Q And beneath that is a dashed and dotted line.	19	kind that a cow or a horse would drink out of. Okay?
20	Do you see that?	20	A Okay.
21	A Yes, sir, I do.	21	Q It's two feet tall.
22	Q And it runs through the middle of the	22	A Okay.
	cross-section, through the landfill that's depicted	23	Q Okay? And let's just say it's about ten feet
23	cross-section, through the fandin that's depicted	43	Okay: And ict's just say it's about ten icet
23 24	here. Right?	24	around in diameter. Okay?

3 (Pages 1519 to 1522)

	Page 1523		Page 1525
1 2	Q Let's suppose that inside this trough I put a wash tub that's on six-inch stands. Okay?	1 2	Q Okay. But you agree that that does not represent an actual level of leachate inside the
3	A Okay.	3	landfill at any point in time. Right?
4	Q So we have a trough excuse me, a wash tub	4	A I don't know.
5	sitting inside of a trough. Right?	5	Q Do you recall me asking you that question in
6	A Yes, sir.	6	deposition or Mr. Gosselink, I believe, took your
7	Q Okay. Now I put a foot of water into the	7	deposition.
8	trough on the outside part of the doughnut. Okay?	8	A And I believe my answer then was I don't know
9	A Okay.	9	what the levels are inside the landfill.
10	Q How much water is inside the tub?	10	Q Okay. Well, let's look. If you could turn
11	A There is I assume that the tub is intact,	11	to Page 230.
12	so there would be no water, assuming it doesn't float.	12	A Sure. Yes, sir.
13	But you're assuming that the tub doesn't float. It	13	Q All right. Bear with me for a moment, sir.
14	stays six inches above the bottom of the tank?	14	Okay. I believe earlier in your deposition you agreed
15	Q Right.	15	that that represented a potentiometric surface.
16	A Okay.	16	Correct? We're looking roughly at the same drawing,
17	Q Okay. The tub was dry when I put it in.	17	the geologic cross-section. Right?
18	Right?	18	A Yes, sir.
19	A Sure. You filled the tank around it.	19	Q Okay. And you were asked whether that
20	Q Okay. And there's no water in that tub, at	20	line represents I'm looking at the Page 230,
21	least as far as you know. Right?	21	Line 4, whether that line represents a hypothetical
22	A That's correct.	22	line when it appears inside the landfill as opposed to
23	Q Okay. Now if I drill a hole through the	23	a real water level measurement. Right? Did I read
24	bottom of that tub and insert a tube or a straw	24	that correctly?
25	that doesn't quite touch the bottom of the trough	25	A Yes, you did.
	Page 1524		Page 1526
1	do you follow me so far?	1	Q And your answer is, "Well, it says that the
2	A Yes, sir.	2	water levels if the liner wasn't there, the water
3	Q The water would rise up in that straw.	3	level would be that high in the landfill." Correct?
4	Correct?	4	A That's correct.
5	A That is correct.	5	Q Okay. The next question was, "But the liner
6 7	Q Okay. And how far would it rise?	6	is there, and the water levels" you said, "I have
8	A It would rise to level in the tank. Q Right. The water inside the trough. Right?	7 8	no idea what the water level in the landfill is, so I don't know." Correct?
9	A Well, what you're calling the trough, I'm	9	A That's correct.
10	calling the tank. Yes, sir. Okay.	10	Q Okay. So you don't know as we sit here
11	Q Okay. And that level that's inside the	11	today, you have no idea what the water levels were
12	straw, that's reflective of the potentiometric	12	inside the landfill at that point in time?
13	surface. Is that correct?	13	A That is correct. I think I've consistently
14	A Or the piezometric surface, yes, sir.	14	said that.
15	Q Those are synonymous terms. Right?	15	Q Okay. And you also don't know in this
16	A Yes, sir.	16	December 1999 time frame what the degree of
17	Q So I think we have a basic understanding	17	landfilling was in this western and northwestern
18	of a common understanding of potentiometric	18	portion of the landfill site. Is that correct?
19	surfaces?	19	A I could not tell that from the application,
20	A Yes, sir, we do.	20	no, sir.
21	Q All right. Now, getting back to APP 409, you	21	Q All right. Now, in rendering your opinion
22 23	agreed that that dashed and dotted line with the	22 23	that the landfill is leaking, you didn't look at any
23 24	carrots on top, that represents a potentiometric surface. Correct?	23 24	groundwater monitoring data at all, did you? A No, sir, I did not.
25	A Yes, sir.	25	Q Okay. You didn't look at any of the
	11 100, 011.	<u></u>	V Okay. Tou didn't look at ally of the

4 (Pages 1523 to 1526)

	Page 1527		Page 1529
1	analytical data that came out of or from the	1	don't require BFI or any other operator to seed or sod
2	groundwater monitoring well system at the Sunset Farms	2	the intermediate cover condition for 180 days, don't
3	site?	3	you?
4	A I did not.	4	A Yes, I do.
5	Q Okay. And you didn't check the leachate	5	Q Now, you've seen the Rule 11 agreement
6	levels in the sumps to determine how much water or	6	between BFI and Mobley and the city of Austin?
7	what the level of leachate in the landfill was at all,	7	A As I said, I looked at it. I have not
8	did you?	8	studied it to any great depth.
9	A I did not.	9	Q All right. But I believe that you've
10	Q Okay. In reaching your conclusion that the	10	testified that that agreement, if it's implemented,
11	landfill is leaking, you didn't perform any sort of	11	would resolve your concerns regarding the intermediate
12	calculations at all, did you?	12	cover condition and potential erosion. Is that
13	A No. No, I didn't.	13	correct?
14	Q Okay. You didn't do any sort of modeling?	14	A I said as far as I know it should address
15	A No.	15	most of them, I think, was my actual answer.
16	Q Okay. Let's move on to surface water	16	Q Okay. Well, why don't you pull out your
17	protection.	17	deposition and look at Page 247.
18	A Just a moment. Let me do a little	18	A Okay. Yes, sir
19	housekeeping.	19	Q Would you read the question and answer
20	Q Sure. I was doing the same thing.	20	starting on Line 11 of 247 in your deposition?
21	A Okay.	21	A Yes. "Would the terms of this agreement
22	Q All right. Yesterday we went over, I	22	resolve your criticisms with regard to erosion if this
23	believe, some areas in which you claim expertise. Do	23	agreement is incorporated into the terms of the
24	you recall that discussion?	24	permit?"
25	A Yes, sir.	25	"They would address them substantively
	Page 1528		Page 1530
1	Q Okay. You're not trained as a hydrologist,	1	for the intermediate condition, yes, sir."
2	are you?	2	Q All right. "They would address them
3	A No, I'm not.	3	substantively for the intermediate condition, yes,
4	Q And you don't specialize in that field, do	4	sir," that was your answer. Right?
5	you?	5	A That is correct.
6	A That is correct.	6	Q Okay. Now, with regard to the final cover
7	Q Okay. Let's say that I'm designing a	7	condition, I believe that you have opined that there's
8	top-of-the-line landfill that I expect to be	8	a problem regarding inadequate vegetation. Is that a
9	challenged during the permitting phase. Do I hire	9	fair characterization of your criticism?
10	e ,	10	A I think it's more the nature of being able to
11	hydrology work on the application?	11	maintain adequate vegetation would more accurately
12	A I think as I said earlier, you would probably	12	characterize what I'm concerned about.
13	go to someone who specializes in that area; although,	13	Q You're concerned about whether or not the
14	I have done that type of work in the past.	14	site can maintain 85 percent vegetative covering.
15	Q If I hired Pierce Chandler, would Pierce	15	Right?
16	Chandler end up subcontracting out the hydrology	16	A Yes, sir.
17	section to someone else?	17	Q All right. Now, you're not an agronomist.
18	A Now I would. I think I've testified I no	18	We established that yesterday. Right?
19	longer have any interest in continuing to specialize	19	A That is correct.
20	in that area.	20	Q You're not a botanist. Right?
21	Q All right. And as I understand your prefiled	21	A I don't think so.
22	testimony, you had some concerns regarding erosion in the intermediate cover condition. Is that correct?	22 23	Q Now, you do know the Rule 11 agreement that
	the intermediate cover condition. Is that correct?	14.5	we've been discussing provides for irrigation of newly
23			
23 24 25	A Yes, sir. Q Okay. Now, you agree that the TCEQ MSW rules	24	seeded or sodded grass. Is that correct? A That's my understanding.

5 (Pages 1527 to 1530)

	Page 1531		Page 1533
			_
1	Q Okay. So your concern over the 85 percent	1	Q Okay. And generally speaking, would it be
2	coverage level in the final cover condition, that	2	fair to say that you believe that the RUSLE methods,
3	would at least be mitigated and perhaps mooted by the	3	both 1 and 2, for example in terms of rainfall and
4	irrigation provisions in that. Is that correct?	4	runoff, they're more specific they require more
5	A That could be.	5	specific requirements?
6	Q All right.	6	A Well, they tend to deal less with averages
7	A Because that was what I was mainly concerned	7	and deal with more time like, USLE is dealing more
8	about.	8	with annual conditions whereas the revised models will
9	Q Okay. Now, you did some calculations related	9	let you input or I consider seasonal effects and
10 11	to erosion. Right?	10 11	things like that.
	A Yes, sir, I did.		Q In terms of soil erodibility, USLE requires
12	Q Okay. Would you agree you're familiar	12	just annual average whereas RUSLE-1 requires half
13	with USLE and RUSLE or USLE and RUSLE. Is that	13	monthly and RUSLE-2 is daily. That's what your chart
14	correct?	14 15	says. Right?
15 16	A Yes. I think they're normally pronounced		A I'm not sure I followed your question the way
16 17	with the long U. USLE or RUSLE is how I normally	16	you worded it.
	Q I think we've got a tomato and tomato	17 18	Q Why don't you pull out Exhibit PC-19, sir.
18	situation here, don't we?	19	A Could you re-ask the question?
19 20	A Yes. I understand what you're talking about,	20	Q Sure. Look on the bottom of Exhibit PC-19.
21	yes, sir.	21	A Yes, sir.
22	Q All right. All right.	22	Q Do you see the chart that I've been referring to?
23	MR. RENBARGER: Let's call the whole	23	A Yes, sir.
24	thing off.	24	
25	(Laughter) MR. CARLSON: Let's try, huh?	25	Q You've got various equations and factors on the left-hand side, and you've got entries for USLE,
23	·	23	
	Page 1532		Page 1534
1	A For the sake of everybody, should we explain	1	RUSLE-1, and RUSLE-2. Correct?
2	what that actually what the acronym means?	2	A Yes, sir.
3	Q (BY MR. CARLSON) Well, sure. Go ahead.	3	Q And in terms of the rainfall and runoff
4	A USLE is the universal soil loss equation,	4	factor, the R, USLE does it by county. Right?
5	RUSLE-1 is the revised soil loss equation, Version 1,	5	A That is correct.
6	and RUSLE-2 is the revised universal soil loss	6	Q Okay. And RUSLE-1 and RUSLE-2 use more
7	equation No. 2.	7	specific have more specific data. Right?
8	Q All right.	8	A Right. You can break it down to a particular
9	A For the court reporter's benefit.	9	spot.
10	Q USLE, we'll use that term.	10	Q Okay. So you can get more fine-tuned with
11 12	A Okay.	11 12	RUSLE versus the methods in USLE. Is that fair?
13	Q I'm more of a "potato" guy myself, but we'll	13	A Well, they're interpolating, but it would give the appearance of fine tuning.
			give the appearance of thie tuning.
1 21	go with USLE. That was the original soil loss	11 4	O All right And soil prodibility Factor V
14 15	equation, the first. Right?	14 15	Q All right. And soil erodibility, Factor K,
15	equation, the first. Right? A Well, there were several versions of it, but	15	USLE uses an annual average. Right?
15 16	equation, the first. Right? A Well, there were several versions of it, but that was the original.	15 16	USLE uses an annual average. Right? A Yes, sir. That's correct.
15 16 17	equation, the first. Right? A Well, there were several versions of it, but that was the original. Q And that, as time has gone on, has been	15 16 17	USLE uses an annual average. Right? A Yes, sir. That's correct. Q And again, the RUSLE-1 and the RUSLE-2 are
15 16 17 18	equation, the first. Right? A Well, there were several versions of it, but that was the original. Q And that, as time has gone on, has been replaced by RUSLE-1 and then RUSLE-2. Correct?	15 16 17 18	USLE uses an annual average. Right? A Yes, sir. That's correct. Q And again, the RUSLE-1 and the RUSLE-2 are more fine-tuned. Right?
15 16 17 18 19	equation, the first. Right? A Well, there were several versions of it, but that was the original. Q And that, as time has gone on, has been replaced by RUSLE-1 and then RUSLE-2. Correct? A It hasn't been replaced. There are	15 16 17 18 19	USLE uses an annual average. Right? A Yes, sir. That's correct. Q And again, the RUSLE-1 and the RUSLE-2 are more fine-tuned. Right? A Yes, sir, that's correct.
15 16 17 18 19 20	equation, the first. Right? A Well, there were several versions of it, but that was the original. Q And that, as time has gone on, has been replaced by RUSLE-1 and then RUSLE-2. Correct? A It hasn't been replaced. There are computerized versions that are available. USLE is	15 16 17 18 19 20	USLE uses an annual average. Right? A Yes, sir. That's correct. Q And again, the RUSLE-1 and the RUSLE-2 are more fine-tuned. Right? A Yes, sir, that's correct. Q Okay. Would it be fair to say basically the
15 16 17 18 19 20 21	equation, the first. Right? A Well, there were several versions of it, but that was the original. Q And that, as time has gone on, has been replaced by RUSLE-1 and then RUSLE-2. Correct? A It hasn't been replaced. There are computerized versions that are available. USLE is still in use and commonly used.	15 16 17 18 19 20 21	USLE uses an annual average. Right? A Yes, sir. That's correct. Q And again, the RUSLE-1 and the RUSLE-2 are more fine-tuned. Right? A Yes, sir, that's correct. Q Okay. Would it be fair to say basically the same things with the other three equation factors; LS,
15 16 17 18 19 20 21	equation, the first. Right? A Well, there were several versions of it, but that was the original. Q And that, as time has gone on, has been replaced by RUSLE-1 and then RUSLE-2. Correct? A It hasn't been replaced. There are computerized versions that are available. USLE is still in use and commonly used. Q All right. I believe in your Exhibit PC-9	15 16 17 18 19 20 21 22	USLE uses an annual average. Right? A Yes, sir. That's correct. Q And again, the RUSLE-1 and the RUSLE-2 are more fine-tuned. Right? A Yes, sir, that's correct. Q Okay. Would it be fair to say basically the same things with the other three equation factors; LS, C, and P?
15 16 17 18 19 20 21 22 23	equation, the first. Right? A Well, there were several versions of it, but that was the original. Q And that, as time has gone on, has been replaced by RUSLE-1 and then RUSLE-2. Correct? A It hasn't been replaced. There are computerized versions that are available. USLE is still in use and commonly used. Q All right. I believe in your Exhibit PC-9 that we looked at, you at least had a chart that	15 16 17 18 19 20 21 22 23	USLE uses an annual average. Right? A Yes, sir. That's correct. Q And again, the RUSLE-1 and the RUSLE-2 are more fine-tuned. Right? A Yes, sir, that's correct. Q Okay. Would it be fair to say basically the same things with the other three equation factors; LS, C, and P? A Yes, sir, that would be fair.
15 16 17 18 19 20 21	equation, the first. Right? A Well, there were several versions of it, but that was the original. Q And that, as time has gone on, has been replaced by RUSLE-1 and then RUSLE-2. Correct? A It hasn't been replaced. There are computerized versions that are available. USLE is still in use and commonly used. Q All right. I believe in your Exhibit PC-9	15 16 17 18 19 20 21 22	USLE uses an annual average. Right? A Yes, sir. That's correct. Q And again, the RUSLE-1 and the RUSLE-2 are more fine-tuned. Right? A Yes, sir, that's correct. Q Okay. Would it be fair to say basically the same things with the other three equation factors; LS, C, and P?

6 (Pages 1531 to 1534)

		1	
	Page 1535		Page 1537
1	A Yes, sir.	1	Q All right. Now, one of the factors in the
2	Q You did not use RUSLE-1, which, I believe, we	2	equation is the C. Right?
3	agreed can use more refined information. Correct?	3	A Yes, sir.
4	A That is correct.	4	Q Okay. And for your C, you assumed 40 percent
5	Q I don't want to get into real details	5	coverage with weeds. Is that correct?
6	let's just look at one of the numbered you ended up	6	A Yes, sir.
7	ultimately calculating or at least coming close to a	7	Q And if the Rule 11 agreement is implemented
8	conclusion about the projected soil loss from the site	8	between the city of Austin and 85 percent vegetative
9	in the final cover condition. Is that correct?	9	cover is achieved, what would the appropriate C be
10	A I believe that's correct.	10	then, sir?
11	Q Okay. What number did you come up with?	11	A Well, the C would be what the applicant used.
12	A I'm sorry. What was the question?	12	Q Okay. So assume strike that. Let me ask
13	Q What number did you come up with when you did		you one last question on
14 15	your calculations for the final cover conditions, the	14	that. Mr. Stecher is it Mr. Stecher or Dr. Stecher?
16	side slopes?	15	
17	A Well, I had several different because I looked at the impact of several different factors,	16 17	A I believe it's Mr. Stecher.
18	there's no one specific answer. Did you have	18	Q I don't think he has a Ph.D., does he? A He's never introduced himself as that.
19	something a condition in mind?	19	Q At least not since he was deposed. Right?
20	Q Well, the calculation leads to a result	20	A I don't know.
21	that's measured in terms of tons per acre per year.	21	Q Okay. He does these sorts of calculations.
22	Is that correct?	22	Correct?
23	A That is correct.	23	A I believe so.
24	Q Okay. And TCEQ has at least a	24	Q Okay.
25	recommendation, if not something in the technical	25	A I've actually never checked.
	Page 1536		Page 1538
1	guideline, that says that we don't want more than	1	Q Okay. Are you aware that he was asked to
2	something between a range of two to three tons per	2	perform some calculations similar to this in his
3	acre per year of erosion sites. Is that correct?	3	deposition?
4	A I believe that's correct.	4	A No, I'm not.
5	Q Okay. And ACE calculated something within	5	Q Okay. You didn't see the result of that, did
6	that range. Right?	6	you?
7	A I believe so.	7	A No, I did not.
8	Q Okay. Something in the 2.2 range for the	8	Q Let's say hypothetically that Dr. Stecher,
9	final cover condition pertaining to the side slopes.	9	using his assumptions, came up with erosion of
10	Right?	10	somewhere between the realm of two and three tons per
11	A I believe that's correct.	11	acre per year, would you have any reason to disagree
12	Q Okay. What did you calculate, sir?	12	with Dr. Stecher's conclusions?
13	A I think what I actually stated them, the	13	A I would have no reason to agree or disagree
14	calculations, on Page 4, that if the completed final	14	since I haven't seen the calculations.
15	cover calculations are corrected only to reflect a	15	Q All right. Now, you were here during
16	6 , 6,	16	Mr. Mehevec's testimony. Correct?
17	percent weed cover, no appreciable canopy of 0.15, the	17	A Yes, sir, I was.
18	final cover erosion losses would increase by a factor	18	Q Do you recall some testimony where he was
19	of 15 and a half.	19	asked some questions and gave some answers to the
20	Q All right. You've got doing some rough	20	effect that the TCEQ MSW regulations themselves
21	math for me, sir, how many tons per acre per year do	21	contemplate that unvegetated soil during the
22	you get?	22	intermediate cover condition is likely to be eroded at
23	A That would be over 30. Just multiplying the	23 24	an MSW site?
24 25	applicant's two by a factor of 15, I would say something over 30.	24 25	A Could you restate that? I'm not sure I understood your question.
د ک	sometime over 50.	ر کا	understood your question.

7 (Pages 1535 to 1538)

	Page 1539		Page 1541
1	Q Sure. Why don't you pull out are the 2006	1	of the date you prepared your prefiled testimony,
2	versions of the MSW rules in front of you?	2	you've never been present on the Sunset Farms site.
3	A Yes, sir, they are.	3	Correct?
4	Q Could you turn that to 330.133(f), please,	4	A That is correct.
5	sir?	5	Q In fact, you've never set foot on that site.
6	A 330.133(f). Yes, sir.	6	Is that correct?
7	Q Would you read that out loud?	7	A To the best of my knowledge, I never have.
8	A Sure. "330.133(f), Erosion of Cover.	8	Q So you didn't know what the status of berms
9	Erosion of final or intermediate cover must be	9	or silt fences or downshoots or sedimentation ponds or
10	repaired within five days of detection by restoring	10	gabions was based on any sort of personal
11	the cover material, grading, compacting, and seeding	11	observations. Is that fair to say?
12	unless the Commission's regional office approves	12	A Prior to my prefiled, that is correct.
13	otherwise based on the extent of the damage requiring	13	Q All right. And prior to the time you offered
14	more time to repair or the repairs are delayed because	14	your opinions and your criticisms pertaining to the
15	of weather conditions. The date of detection of	15	subject matter. Right?
16	erosion and date of completion of repairs including	16	A That is correct.
17	reasons for any delays must be documented in the cover	17	Q Just one last question about PC-19, the first
18	inspection records required under Subsection (g) of	18	page?
19	this section. The site operating plan must establish	19	A Yes, sir.
20	a frequency and identify other occasions for	20	Q If you look slightly above that table that we
21	conducting inspections of the final and intermediate	21	were looking at before, it has a sentence that says,
22	covers to detect the need for repairs. The periodic	22	"Terminology and barometer values are given in U.S.D.
23	inspections and restorations are required during the	23	Agricultural Handbook 537 called Predicting Rainfall
24 25	entire operational life and for the post-closure	24 25	Erosion Losses." Do you see that?
25	maintenance period."	23	A Yes, sir.
	Page 1540		Page 1542
1	Q All right. Thank you, Mr. Chandler. That	1	Q Are you aware that that did you use that
2	whole section or subsection is premised on the notion	2	book?
3	that some erosion will occur at a MSW site. Isn't	3	A Yes, I did.
4	that fair to say?	4	Q Okay. Are you aware that that's been
5	A I think that's very fair to say.	5	superseded by a more recent book called the USA
6	Q All right. And as long as an operator picks	6	Handbook 703?
7	up the soil that got eroded before it leaves the site	7	A Yes, I am.
8	and places it back where it belongs and engages in the	8	Q But you didn't use the USA Handbook 703 when
9	restoration and repair of the cover, it hasn't	10	you did your calculations, did you?
10 11	violated any regulation, has it? A It potentially could have. Your question	11	A No, I did not. I did not.
12	· · · · · · · · · · · · · · · · · · ·	12	Q All right. Okay. Let's move on to the landfill gas and odor area of your testimony, sir.
		1 2	landing gas and odor area or your testimony, sir.
	involves an assumption. May I state what I believe	1 3	A Okay
13	the inherent assumption is?	13	A Okay.
13 14	the inherent assumption is? Q Sure.	14	Q Would you open up the application, I believe
13 14 15	the inherent assumption is? Q Sure. A That waste was not exposed by the erosion.	14 15	Q Would you open up the application, I believe it's in the third volume, to Page APP 001157?
13 14 15 16	the inherent assumption is? Q Sure. A That waste was not exposed by the erosion. Q Let's assume that no waste was exposed.	14 15 16	Q Would you open up the application, I believe it's in the third volume, to Page APP 001157? A That's 00
13 14 15 16 17	the inherent assumption is? Q Sure. A That waste was not exposed by the erosion. Q Let's assume that no waste was exposed. Okay? In that case, as long as everything else I said	14 15 16 17	Q Would you open up the application, I believe it's in the third volume, to Page APP 001157? A That's 00 Q Well, I'm sending you in the wrong direction.
13 14 15 16 17	the inherent assumption is? Q Sure. A That waste was not exposed by the erosion. Q Let's assume that no waste was exposed. Okay? In that case, as long as everything else I said occurred, there was no violation. Would that be fair	14 15 16 17 18	Q Would you open up the application, I believe it's in the third volume, to Page APP 001157? A That's 00 Q Well, I'm sending you in the wrong direction. Let's just move on. You've seen the planned well
13 14 15 16 17 18	the inherent assumption is? Q Sure. A That waste was not exposed by the erosion. Q Let's assume that no waste was exposed. Okay? In that case, as long as everything else I said occurred, there was no violation. Would that be fair to say?	14 15 16 17 18 19	Q Would you open up the application, I believe it's in the third volume, to Page APP 001157? A That's 00 Q Well, I'm sending you in the wrong direction. Let's just move on. You've seen the planned well design for the Sunset Farms site that Mr. Stutz
13 14 15 16 17 18 19 20	the inherent assumption is? Q Sure. A That waste was not exposed by the erosion. Q Let's assume that no waste was exposed. Okay? In that case, as long as everything else I said occurred, there was no violation. Would that be fair to say? A Assuming that no waste was exposed and	14 15 16 17 18 19 20	Q Would you open up the application, I believe it's in the third volume, to Page APP 001157? A That's 00 Q Well, I'm sending you in the wrong direction. Let's just move on. You've seen the planned well design for the Sunset Farms site that Mr. Stutz prepared?
13 14 15 16 17 18 19 20 21	the inherent assumption is? Q Sure. A That waste was not exposed by the erosion. Q Let's assume that no waste was exposed. Okay? In that case, as long as everything else I said occurred, there was no violation. Would that be fair to say? A Assuming that no waste was exposed and sediment was not discharged off site or into waters of	14 15 16 17 18 19 20 21	Q Would you open up the application, I believe it's in the third volume, to Page APP 001157? A That's 00 Q Well, I'm sending you in the wrong direction. Let's just move on. You've seen the planned well design for the Sunset Farms site that Mr. Stutz prepared? A The gas extraction well, is that what you're
13 14 15 16 17 18 19 20 21	the inherent assumption is? Q Sure. A That waste was not exposed by the erosion. Q Let's assume that no waste was exposed. Okay? In that case, as long as everything else I said occurred, there was no violation. Would that be fair to say? A Assuming that no waste was exposed and sediment was not discharged off site or into waters of the state or U.S. on site, I would agree that	14 15 16 17 18 19 20	Q Would you open up the application, I believe it's in the third volume, to Page APP 001157? A That's 00 Q Well, I'm sending you in the wrong direction. Let's just move on. You've seen the planned well design for the Sunset Farms site that Mr. Stutz prepared? A The gas extraction well, is that what you're referring to?
13 14 15 16 17 18 19 20 21	the inherent assumption is? Q Sure. A That waste was not exposed by the erosion. Q Let's assume that no waste was exposed. Okay? In that case, as long as everything else I said occurred, there was no violation. Would that be fair to say? A Assuming that no waste was exposed and sediment was not discharged off site or into waters of	14 15 16 17 18 19 20 21	Q Would you open up the application, I believe it's in the third volume, to Page APP 001157? A That's 00 Q Well, I'm sending you in the wrong direction. Let's just move on. You've seen the planned well design for the Sunset Farms site that Mr. Stutz prepared? A The gas extraction well, is that what you're

8 (Pages 1539 to 1542)

	Page 1543		Page 1545
1	wells that are going to be placed across the facility?	1	collection system. Right?
2	A Yes, sir.	2	A No. I think I was pointing out the
3	Q All right. You're familiar with that	3	operational considerations of the vertical expansion.
4	document?	4	Q Okay.
5	A Yes, sir.	5	A I was not criticizing I don't think I was
6	Q Okay. I believe in your prefiled testimony	6	criticizing the gas extraction system, per se, but the
7	you agreed that the areal coverage of the landfill of	7	effects that the vertical expansion would have on that
8	these extraction wells, that is, the number and	8	system.
9	location of these wells as shown on the diagram oh,	9	Q Well, let me ask you this. The six well TDSL
10	I did some poor note-taking. It's APP 001557.	10	system that you designed, did that involve a vertical
11 12		11 12	expansion?
13		13	A No, not where those wells are located. They're outside any area that will be filled.
14	* * * * * * * * * * * * * * * * * * *	14	Q Okay. So you've never personally even
15		15	designed a well system for a vertical expansion?
16	• •	16	A I have not.
17		17	Q And you've never been personally responsible
18	\mathcal{E}	18	for overseeing the construction of such a system?
19	•	19	A No, I have not.
20	Q And to your recollection, it includes 180	20	Q Okay. So you're criticizing that aspect of
21	plus or minus a few extraction wells. Right?	21	it despite your one system experience that didn't even
22	A I haven't counted them, but I think that	22	involve a vertical expansion. Is that correct?
23	seems about right.	23	A That's correct.
24	Q Okay. And I believe, to get back to what I	24	Q And you're criticizing the work of Mr. Stutz,
25	was asking, in the prefiled testimony you agreed that	25	who I believe testified that he's worked on dozens of
	Page 1544		Page 1546
1	the areal coverage of the extraction wells, those	1	systems. Correct?
2	reflected on APP 001557, would theoretically control	2	A Actually, I criticized the application's
3	landfill gas and migration and surface emissions and,	3	failure to address how the vertical expansion would be
4	hence, control odors if the system is properly	4	accommodated by the system.
5	designed, installed, and operated. Is that correct?	5	Q Okay. Let's talk just very briefly about
6	A Yes, it would.	6	landfill gas probes, sir. You understand that the
7	Q Okay. Now, you, yourself you designed one	7	application proposes to place gas probes along the
8	landfill gas collection and control system for an MSW	8	Sunset Farms/Austin Community landfill boundary?
9	landfill?	9	A I understood they were going to install
10		10	probes around the entire boundary.
11	•	11	Q And you agree that the placement of gas
12		12 13	probes between the Sunset Farms let's carve out
13 14		14	everything else. Let's just talk about that boundary. You agree that the placement of probes along that
15	e e	15	boundary resolves any criticisms that you would have
16		16	that the probes would be properly placed?
17	•	17	A I believe on the south side, one of the probe
18		18	locations I believe I commented that it appeared the
19	• •	19	screened interval appeared to be below the water
20		20	table, that there was a design flaw on I believe
21	or take. Right?	21	there was one on the south and there was one that I
22	A Yes, sir, that's correct.	22	don't recall. But outside of that, yes, I would
23	Q So let me just make sure I can get this	23	agree.
24	straight, get a little perspective here. You're	24	Q All right.
25	potentially criticizing the Sunset Farms gas	25	MR. CARLSON: Judge, if I could just

9 (Pages 1543 to 1546)

	Page 1547		Page 1549
1	have a few moments.	1	Q Okay.
2	JUDGE NEWCHURCH: Off the record.	2	A I recognize the document. I just haven't
3	(Recess from 9:47 a.m. to 9:48 a.m.)	3	seen one of these in quite a while.
4	MR. CARLSON: I'm ready, Judge.	4	Q Okay. It's some correspondence involving
5	JUDGE NEWCHURCH: Go ahead. On the	5	soil and liner evaluation reports for the Sunset Farms
6	record.	6	landfill. Right?
7	Q (BY MR. CARLSON) Mr. Chandler, do you recall	7	A Yes, sir, that's correct.
8	a series of questions that Mr. Blackburn asked in his	8	Q Back and forth between the operator of Sunset
9	cross regarding separatory overliner systems and	9	Farms and the Texas Department of Health. Right?
10	whether one would be placed here?	10	A Yes, sir, that's correct.
11	A Yes, I do.	11	Q In the 1982 time frame?
12	Q All right. And I believe you have agreed	12	A Yes, sir, that is correct.
13	that at least under the TCEQ MSW regs, that no	13	Q The cover letter is dated May 6th, '82?
14	separatory overliner is required for this particular	14	A Yes, sir, that's correct.
15	vertical expansion. Is that fair to say?	15	Q And the Texas Department of Health, that was
16	A Under the rules that are in effect for this	16	a predecessor agency to TCEQ. Right?
17	application, that would be correct.	17	, , , ,
18	Q All right. And Mr. Blackburn asked you some	18	A Way on back, yes, sir.
19	questions about the Subtitle D area and the	19	Q Several agencies ago. Right?
20	•	20	A Yes, sir. That's what I was trying to
21	pre-Subtitle D area. Do you remember that?		indicate.
22	A Yes, sir, I do. Q And this is roughly a 250-acre landfill	21 22	Q It had a solid waste department. Right?
23	- · · · · · · · · · · · · · · · · · · ·		A Was it a department? I can't remember. Was
24	footprint. Right? A That's what I understand.	23	it solid waste department? Yeah, it was bureau.
25		24	Q Okay.
25	Q Okay. And of that, roughly two-thirds is	25	A That's what it says. Yeah, it says Bureau of
	Page 1548		Page 1550
1	Subtitle D has a Subtitle D composite liner.	1	Solid Waste Management. That's what I remember it
2	Right?	2	was.
3	A That seems reasonable, but I don't know the	3	Q They had a bureau that performed essentially
4	exact breakdown, to be honest.	4	the same functions, albeit in a different time frame
5	Q Roughly two-thirds is Subtitle D?	5	than the ladies and gentlemen at the end of the table
6	A That seems about right.	6	over here that do it. Is that correct?
7	Q And the other is pre-Subtitle D. Correct?	7	A That is correct.
8	A That seems about right.	8	Q All right. The first page talks about a
9	MR. CARLSON: Judge, may I approach?	9	review of a soil and liner evaluation questionnaire
10	JUDGE NEWCHURCH: Yes, sir.	10	report dated April 2nd. Is that correct?
11	(Exhibit BFI No. 11 marked)	11	A That's what it indicates, yes, sir.
12	Q (BY MR. CARLSON) Mr. Chandler, have you had		Q All right. And the second page?
13	an opportunity to look at BFI-11?	13	A Yes, sir.
14	A I've just looked at the cover. I'm just	14	Q The second line of the letter refers to a
15	glancing through it now. Do you want me to read it	15	permittee's requirement to provide a soils and liner
16	all, or is there a specific area you would like me to	16	evaluation report prior to depositing any solid waste
17	focus on?	17	in an evaluated area. Is that correct?
18	Q Take a moment. I want to move things along,	18	A That is correct.
19	but if you want to, I want you to have an opportunity	19	Q Okay. If you turn to the third page about
20	to familiarize yourself with the document.	20	two-thirds of the way down, it reflects the permittee
21	A Okay.	21	is Sunset Farms. Right?
22	Q Have you at least had an opportunity to get a	22	A Yes, sir.
23	sense of what the document is?	23	Q The permit application number is 1447, which
24	A Yes, I have. It's a pretty old document, but	24	is the permit we're talking about here or at least
25	I'm familiar with what was done back then.	25	the existing permit. Right?

10 (Pages 1547 to 1550)

TCEQ DOCKET NO. 2007-1774-MSW

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Page 1551
                                                                                                            Page 1553
         A The one that existed at that time in '82,
                                                                     information regarding the first soil, liner, and
 1
                                                               1
 2
                                                               2
      yes, sir.
                                                                    evaluation report for the Sunset Farms landfill.
 3
                                                               3
         Q Yes, sir. Travis County. Right?
                                                                    Okay?
                                                                       A Okay.
 4
         A Yes, sir.
                                                               4
 5
                                                               5
         Q Do you have any reason to believe that what
                                                                       Q Your understanding is it started accepting
 6
       we're looking at does not pertain to the BFI Sunset
                                                               6
                                                                     waste in the 1982 time frame. Right?
 7
       Farms landfill?
                                                               7
                                                                       A I believe that's correct.
 8
         A No, I do not.
                                                               8
                                                                       Q Okay. Do you have any basis to believe that
 9
         Q Okay. Would you turn to the second to last
                                                               9
                                                                     any other part of the pre-Subtitle D area of the
10
       page of BFI-11?
                                                              10
                                                                     Sunset Farms landfill, the liner, was not constructed
11
                                                              111
         A Is that the page called "Comments"?
                                                                     and tested in a manner commensurate with what we're
12
                                                              12
         Q Comments. Right.
                                                                     seeing in BFI-11?
13
                                                              13
         A Yes, I have it.
                                                                       A Since I really haven't looked at any of those
14
         Q Why don't you just read the first paragraph
                                                              14
                                                                    records, I don't know.
15
                                                             15
                                                                       Q Okay. You didn't even bother to look at the
       into the record, sir?
16
         A "The area evaluated in this report was
                                                              16
                                                                    SLERO?
17
                                                              17
                                                                       A I did not.
      excavated into Stratum 2 as defined in the permit
18
                                                              18
      application. The Stratum 2 soils are low permeability
                                                                       Q Okay. And these are public records. Right?
19
      clays with shrinkage cracks, fissures, and joints.
                                                              19
                                                                    They're available at TCEQ?
20
      These soils were overexcavated to approximately 2.5
                                                              20
                                                                       A I think so. It may be a little work to find
21
                                                              21
       feet below plan depth. The remaining soils were
                                                                    something this old, but I assume they're still
22
       scarified to three feet below plan depth and
                                                              22
                                                                    available.
23
                                                              23
       recompacted in place to an acceptable density which
                                                                       Q All right.
24
                                                                             MR. CARLSON: Judge, I'll offer BFI-11.
                                                              24
       would provide for one times ten to the minus seventh
25
      centimeter per second or lower permeability. The 2.5
                                                              25
                                                                             JUDGE NEWCHURCH: Any objection?
                                              Page 1552
                                                                                                            Page 1554
                                                               1
                                                                             MR. RENBARGER: Objection, Judge.
      feet of overexcavated soil was replaced in individual
 2
      lifts and compacted to acceptable density as required.
                                                               2
                                                                    Obviously, this is information that is at least
 3
      Compacted liner material which did not meet acceptable
                                                               3
                                                                    represented to come from some public records, but
 4
      levels or compaction was reworked and retested until
                                                               4
                                                                    there's nothing on the face of the document to
 5
                                                               5
                                                                    indicate that it is a verified public record from TDH
 6
         Q Okay. You don't have any basis to disagree
                                                               6
                                                                    or anywhere else. So, to that extent, there's
 7
      with the truthfulness of any of that paragraph.
                                                               7
                                                                    hearsay. There's hearsay within hearsay to the extent
 8
         A No.
                                                               8
                                                                    that the letters going back and forth with Robert
 9
         Q Is that correct?
                                                               9
                                                                     Kistner with no sponsoring witnesses to reflect the
10
         A No, I do not.
                                                              10
                                                                    authenticity of those documents or whether they were
11
                                                              11
         Q Why don't you go ahead and read the second
                                                                    sent or received from the TDH to Edward G. Miller, who
12
                                                              12
      paragraph into the record, please, sir?
                                                                    is identified as the recipient at Robert Kistner.
13
         A Surely. "The periphery boundary liners and
                                                              13
                                                                             JUDGE NEWCHURCH: Mr. Carlson?
14
      sidewall liner were connected to the bottom liner and
                                                              14
                                                                             MR. CARLSON: It's an ancient document,
15
                                                              15
      line section of the perimeter berms. All keys, berm
                                                                    which is admissible under the rules.
16
                                                              16
                                                                             JUDGE NEWCHURCH: Let's look at that.
      liners, periphery boundary liners, and sidewall liners
17
      were tested by Tetco for percent compaction and
                                                              17
                                                                            MR. TERRILL: Your Honor, can I also add
18
      percent moisture. Compaction series tests were
                                                              18
                                                                    that governmental records is an exception to hearsay,
19
      conducted as indicated by changes in material. A
                                                              19
                                                                    and this is the sort of document that experts rely on.
20
      full-time inspector was present during the majority of
                                                              20
                                                                    Mr. Chandler said that it was reasonable to rely on
21
                                                              21
      the liner placement. Inspections of the key, liner
                                                                     this sort of thing, and, you know, it doesn't have any
22
                                                              22
      placement and the finished area to receive waste were
                                                                    indication that it's anything other than a government
23
                                                              23
      conducted by the professional staff of Robert Kistner
                                                                    record of this landfill.
24
                                                              24
      Consultants, Inc. on a regular basis."
                                                                             JUDGE NEWCHURCH: Okay. Let's break
25
                                                              25
         Q I'll represent to you that this is
                                                                    that down a little bit. Mr. Renbarger, are you
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11 (Pages 1551 to 1554)

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Page 1555
                                                                                                           Page 1557
      objecting to the authenticity of this document or just
                                                               1
                                                                            MR. RENBARGER: Are you saying that the
 2
      to hearsay?
                                                               2
                                                                    first page of the exhibit is self-authenticating
 3
                                                               3
              MR. RENBARGER: Well, both.
                                                                            JUDGE NEWCHURCH: Well, that's --
 4
                                                               4
              JUDGE NEWCHURCH: Both. Okay.
                                                                            MR. RENBARGER: -- or are you saying all
 5
                                                               5
              MR. RENBARGER: If it were a public
                                                                    of the document?
 6
      record and being offered as such, then it would need
                                                               6
                                                                            JUDGE NEWCHURCH: Well, that's certainly
 7
      to be some indication on the document itself that it
                                                               7
                                                                    true, but the first page refers to the attachments.
 8
      was a true and correct copy from the files of TDH to
                                                               8
                                                                    So, if the first page is authentic, then the
 9
                                                               9
      authenticate it as a public record.
                                                                    attachment is an authentic public record as well. It
10
              JUDGE NEWCHURCH: Okay. Let's start
                                                             10
                                                                    was in the records of the department.
11
      with authenticity, because I don't think we go
                                                             11
                                                                            MR. RENBARGER: Well, we don't know if
12
                                                             12
      anywhere unless it's authentic.
                                                                    these were the attachments to this specific letter,
13
                                                             13
              MR. CARLSON: Judge, let's look at 902,
                                                                    though, do we?
14
      too. Domestic public documents not under seal. A
                                                             14
                                                                            JUDGE NEWCHURCH: Well, let's see. It
15
                                                             15
      document purporting to bear the signature and in the
                                                                    talks about --
16
      official capacity of an officer or employee of any
                                                             16
                                                                            MR. CARLSON: It pretty much described
17
                                                             17
      entity included in Paragraph 1, which would certainly
                                                                    it.
18
      be the Texas Department of Health, and having official
                                                             18
                                                                            JUDGE NEWCHURCH: It's incorporated by
19
                                                             19
      duties in the district or political subdivision and
                                                                    reference. Mr. Griffith talks about the April 2nd,
20
                                                             20
      the signature is genuine. I don't think we have any
                                                                    1982 letter from Ed Miller, blah, blah, Robert
21
                                                             21
      we've got Mr. Arthur's signature for Mr. Griffith. I
                                                                    Kistner. So, yeah, I can conclude that it's
22
                                                             22
      don't think there's any dispute as to the authenticity
                                                                    incorporated by reference. So I'm going to find that
23
                                                             23
      of this document.
                                                                    it's an official document. Now, we still have a
24
              JUDGE NEWCHURCH: Mr. Chandler, were you 24
                                                                    hearsay objection.
25
      were you involved in the solid waste disposal facility
                                                             25
                                                                            MR. RENBARGER: That's correct.
                                              Page 1556
                                                                                                           Page 1558
 1
      work in 1982?
                                                               1
                                                                            JUDGE NEWCHURCH: And your response
 2
                                                               2
                                                                    there is?
        A Yes, I was.
 3
              JUDGE NEWCHURCH: Are you familiar with
                                                               3
                                                                            MR. CARLSON: At least twofold, Judge.
 4
                                                               4
                                                                    First, I would point you to 803.16, statements in
      L.B. Griffith and Howard Phillips.
 5
        A Howard Phillips, I'm not familiar with at
                                                               5
                                                                    ancient documents, which pertains to documents that
 6
      all. L.B Griffith, Jr., I am familiar with. I knew
                                                               6
                                                                    are over 20 years old. And I think it also gets in
 7
                                                               7
      him, yes, sir.
                                                                    under 803.8, public records and reporting.
 8
              JUDGE NEWCHURCH: What about Edward
                                                               8
                                                                            JUDGE NEWCHURCH: Okay. Well, I think
 9
      Miller?
                                                               9
                                                                    that certainly is sufficient to get you the first
10
        A No, sir.
                                                             10
                                                                    page. We have what purports to be a public document
11
                                                             11
              JUDGE NEWCHURCH: So you're at least
                                                                    which I found is authentic based in part on
12
      familiar with Mr. Griffith?
                                                             12
                                                                    Mr. Chandler's testimony. And the document that
13
        A Yes, sir.
                                                             13
                                                                    purports to be from Mr. Miller is incorporated by
14
              JUDGE NEWCHURCH: And this reflects that
                                                            114
                                                                    reference.
15
                                                             15
      he was the director of surveillance enforcement
                                                                            MR. RENBARGER: Judge, I do not note on
16
                                                             16
                                                                    the face of the first page where there are any
      division for the Bureau of Solid Waste Management of
17
      the Department of Health. Did you know him in that to
                                                             17
                                                                    references or incorporations by reference of any kind
18
      occupy that position?
                                                             18
                                                                    with respect to some of the other documents that
19
        A Yes, I did.
                                                             19
                                                                    follow the April 2nd, 1982 letter to Robert Kistner,
20
              JUDGE NEWCHURCH: Okay. I'm going to
                                                             20
                                                                    and in particular, that addresses the comments which
21
                                                             21
      find that the document is self-authenticating. Let's
                                                                    are identified on the face of that particular page as
22
                                                             22
      go to the hearsay objections.
                                                                    Part D2.d.
23
              MR. RENBARGER: Judge, with respect to
                                                             23
                                                                            JUDGE NEWCHURCH: You lost me on that
24
                                                             24
                                                                    last reference. D2 --
      your ruling, just so I understand, please.
25
                                                             25
              JUDGE NEWCHURCH: Yes, sir.
                                                                            MR. RENBARGER: Okay. Yeah. The second
```

12 (Pages 1555 to 1558)

23

24

25

that might be an optional completeness opportunity

MR. CARLSON: Judge, I'm happy --

there. Let's get back to the hearsay.

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Page 1561
                                              Page 1559
                                                                            JUDGE NEWCHURCH: You know, I think the
      to the last page of the exhibit has some comments
                                                               1
                                                                    entire thing is sufficiently incorporated. There is a
 2
      which I think Mr. Carlson elicited testimony from the
                                                               2
 3
      witness, and I do not see any reference or
                                                               3
                                                                    web of references here. There's a reference to the
 4
      incorporation by reference in the letters that he
                                                               4
                                                                    Robert Kistner report on the first page. The second
 5
      previously had indicated appear to be authentic based
                                                               5
                                                                    page is on the Robert Kistner letterhead signed by
 6
                                                               6
      on the incorporation by reference. I do not see any
                                                                    Mr. Miller. There's a reference to Mr. Miller on the
 7
      references to that specific document in the second to
                                                               7
                                                                    first page. There's a reference to the questionnaire
 8
      the last page. And I guess the concern here is that
                                                               8
                                                                    on the first page, and the third page appears to be
 9
      we do not know I mean, it may well be that these
                                                               9
                                                                    the start of the questionnaire. There's again a
10
      documents came from a variety of sources within TDH
                                                             110
                                                                    reference to Sunset Farms.
11
                                                              11
                                                                            It's referenced repeatedly earlier on,
      that are bundled up in this exhibit.
12
                                                             12
              MR. CARLSON: Judge, it even refers to
                                                                    getting all the way up to what's marked as Page 7.
13
      the site map, which is on the back of the paper. I
                                                             13
                                                                    Again, we see Mr. Miller is the author of the letter
14
      don't think there's any way you cannot fairly read the
                                                             14
                                                                    beginning on the second page, same date April 2nd. On
15
      cover letter to not incorporate the documents that are
                                                             15
                                                                    the next page there's a reference, there's the Robert
16
      attached here. Well, let me -- can I just walk
                                                             16
                                                                    Kistner letterhead and the Robert Kistner logo, which
17
                                                              17
      through here very briefly?
                                                                    matches what's on Page 2, and there's a reference to
18
              JUDGE NEWCHURCH: Sure.
                                                             18
                                                                    Part D2.d. And, in fact, within the questionnaire
19
                                                             19
              MR. CARLSON: Page 1 under the
                                                                    there is a D2.d question, which this seems to be
      letterhead of the Department of Health signed for
                                                                    intending to fill in the blank in a longer format than
20
                                                             20
21
                                                             21
      Mr. Griffith, the first line of the substance of the
                                                                    what was allowed on the form.
22
                                                             22
                                                                            MR. RENBARGER: May I make one last
      letter says, "Our staff has reviewed the soil and
23
                                                              23
      liner evaluation questionnaire report dated April 2,
                                                                    comment, Judge?
24
                                                              24
      which covers the area on the submitted site map."
                                                                            JUDGE NEWCHURCH: Yes, sir.
25
                                                              25
              And then if we turn to Page 3, the
                                                                            MR. RENBARGER: On the third to the last
                                             Page 1560
                                                                                                           Page 1562
 1
      document is called Texas Department of Health
                                                               1
                                                                    page and I believe you identified it as having been
 2
      Municipal Solid Waste Site Soil and Liner Evaluation
                                                               2
                                                                    signed at the top by Edward Miller
 3
      Questionnaire. And if we turn a little further back,
                                                               3
                                                                            JUDGE NEWCHURCH: Yes.
 4
      we have, on Page 7 there, the signature of Mr. Miller
                                                               4
                                                                            MR. RENBARGER: -- on or about
 5
      and the date April 2nd, 1982.
                                                               5
                                                                    April 2nd, 1982, I would ask that you just please note
 6
               MR. RENBARGER: Perhaps my exhibit is
                                                               6
                                                                    at the bottom where it says, "Part A signature of the
 7
      incomplete, but once we do get the third page, we
                                                               7
                                                                    permittee," that is an unsigned and undated document
 8
                                                               8
      start there with the document is identified,
                                                                    from the permittee's perspective.
 9
                                                                            JUDGE NEWCHURCH: Right.
      Mr. Carlson, as the Texas Department of Health
                                                               9
10
      Municipal Solid Waste Landfill Site Soils and Liner
                                                             10
                                                                            MR. RENBARGER: Which suggests to me
11
                                                             11
      Evaluation Questionnaire, and then my at least the
                                                                    that it was not a finalized document that was being
12
      documents that I've got in front of these skips from
                                                             12
                                                                    submitted for approval to the TDH. One would think
13
      Page 1 to Page 3 to Page 5 --
                                                             13
                                                                    the permittee would sign it.
14
               MR. CARLSON: You know what? I agree
                                                             14
                                                                            JUDGE NEWCHURCH: Maybe. Maybe not.
15
      with you on one point. It appears that it was a
                                                             15
                                                                    It's on Mr. Miller's letterhead letter. Well, first
16
      double-sided copy that is missing every even page.
                                                             16
                                                                    of all, I find that there's sufficient
17
               MR. RENBARGER: And it also reflects on
                                                             17
                                                                    cross-references that the entire thing is at least a
18
      the cover letter talking about Part F on the
                                                             18
                                                                    part of a single document and within well, the
19
      evaluation report, which is not included either in the
                                                             19
                                                                    attached document to Mr. Griffith's letter. So I find
20
      documents provided.
                                                             20
                                                                    the whole thing is authentic, No. 1.
21
               JUDGE NEWCHURCH: Okay. Well, let's
                                                             21
                                                                            No. 2, it does appear to fall under the
22
                                                             22
      see. With regard to the skipping of every other page,
                                                                    ancient documents exception.
```

13 (Pages 1559 to 1562)

And so I'm going to overrule the hearsay

objection, as well as the authenticity objection, and

BFI Exhibit 11 is admitted.

23

24

25

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Page 1563
                                                                                                         Page 1565
               (Exhibit BFI No. 11 admitted)
                                                                             REDIRECT EXAMINATION
 1
                                                              1
                                                                   BY MR. RENBARGER:
 2
              MR. CARLSON: And, Judge, at the risk --
                                                              2
 3
                                                              3
      I don't want to muddy the record. I do have the
                                                                     Q Good morning, Mr. Chandler.
                                                                     A Good morning, Mr. Renbarger.
 4
      source copy of this document that has Pages 2, 4, and
                                                              4
 5
                                                              5
      6 on it. They just were inadvertently not copied last
                                                                     Q Mr. Chandler, I believe in response to a
 6
      night as we were making copies. I'd be happy to show
                                                              6
                                                                   question from Mr. Terrill, he made an inquiry about
 7
      people those. We can make a full copy. I don't have
                                                              7
                                                                   you were not a registered professional geoscientist in
 8
      any problem with the whole document going in.
                                                              8
                                                                   the state of Texas. Is that correct?
 9
                                                             9
               MR. BLACKBURN: I'd just be happy to
                                                                     A That is correct.
10
                                                            10
                                                                     Q Is it your understanding that professional
      take a look at it.
11
                                                            11
                                                                   engineers are required to become registered
              MR. CARLSON: Sure.
12
                                                            12
              MR. BLACKBURN: I think we're satisfied
                                                                   geoscientists in the state of Texas under the Texas
13
      that the copy that's in the record is adequate.
                                                            13
                                                                   Geoscience Practice Act?
14
              MR. CARLSON: Okay.
                                                            14
                                                                     A They are not.
15
              JUDGE NEWCHURCH: So let's move on to
                                                            15
                                                                     Q Mr. Carlson also asked you a number of
16
      something else, Mr. Carlson.
                                                            16
                                                                   questions concerning the 121 landfill boring plan. Do
17
              MR. CARLSON: Just a few more questions,
                                                            17
                                                                   you recall that line of questioning?
18
                                                            18
                                                                     A Yes, I do.
      Judge.
19
                                                            19
        Q (BY MR. CARLSON) BFI-11, Mr. Chandler,
                                                                     Q Do you recall that the boring plan submitted
20
                                                                   for the 121 landfill proposed 40 separate borings?
      indicates that at least with respect to the liner that
                                                            20
21
      was constructed in 1982 and was the subject of this
                                                            21
                                                                   Correct?
22
                                                            22
      report, that it was constructed to a permeability of
                                                                     A Yes, sir, that's correct.
23
                                                            23
      1.0 times ten to the minus seven centimeters per
                                                                     Q And of those 40 borings, 20 of those were
24
                                                            24
      second or lower. Is that correct?
                                                                   considered to be wash rotary borings. Correct?
25
                                                            25
        A Yes, sir, that's what it says.
                                                                     A That is correct.
                                             Page 1564
                                                                                                         Page 1566
 1
        Q And that's the current -- that's the
                                                              1
                                                                     Q What was the purpose of the wash rotary
 2
      permeability standard under the current Subtitle D
                                                              2
                                                                   borings with respect to the boring plan submitted and
                                                                   approved for the 121 landfill?
 3
      rules for liners as well. Is that correct?
                                                              3
 4
        A For constructed soil liners, yes, sir.
                                                              4
                                                                     A If I could back up a minute, the 121 landfill
 5
              MR. CARLSON: One housekeeping matter,
                                                              5
                                                                   is in a rock setting called the Austin chalk. It was
 6
                                                                   recognized early on that we would probably have to
      Judge. I forgot to offer BFI-10.
                                                              6
 7
              JUDGE NEWCHURCH: Any objection?
                                                              7
                                                                   rely on geophysics as part of the investigation and
 8
              MR. RENBARGER: I don't believe so. No
                                                              8
                                                                   characterization of that site. The decision was made
 9
      objections.
                                                              9
                                                                   to utilize geophysics as a major tool in investigating
10
              JUDGE NEWCHURCH: BFI-10 is admitted.
                                                            10
                                                                   that site, and the wash borings were used --
11
                                                            11
              (Exhibit BFI No. 10 admitted)
                                                                     Q If I could interrupt you just a second. When
12
                                                            12
              MR. CARLSON: Pass the witness.
                                                                   you say "geophysics," just so everyone's clear what
13
              JUDGE NEWCHURCH: Let's see. Back to
                                                            13
                                                                   you're referring to, what kinds of items fall within
14
      Mr. Renbarger.
                                                            14
                                                                   your definition of geophysics for purposes of a site
15
              MR. RENBARGER: Would it be possible to
                                                            15
                                                                   characterization?
16
      take a short break?
                                                            16
                                                                     A We're referring to both electronic, nuclear,
17
              JUDGE NEWCHURCH: Why don't we take our 17
                                                                   and ultrasound methods of investigating the
18
      morning break now.
                                                            18
                                                                   subsurface, the resistivity, the conductivity, natural
19
              MR. RENBARGER: Thank you, Judge.
                                                            19
                                                                   radiation, evaluating rock density using neutron
20
              (Recess from 10:15 a.m. to 10:30 a.m.)
                                                            20
                                                                   bombardment methods, and using ultrasound to actually
21
              JUDGE NEWCHURCH: Back on the record.
                                                            21
                                                                   photograph the sides of the boring. And those 20 wash
22
                                                            22
      Mr. Renbarger?
                                                                   borings were used in addition to the 20 sample borings
23
                                                            23
              MR. RENBARGER: Thank you, Judge.
                                                                   for geophysical access so we could put the downhole
24
                                                            24
                                                                   tools in the borings to get the information.
25
                                                            25
                                                                         Okay. So the 20 borings that were wash
```

14 (Pages 1563 to 1566)

25

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Page 1567 Page 1569 rotary drilled were not for purposes of sampling the waste slope condition, which is the global stability 1 of the filled landfill as proposed in the application. 2 2 underlying strata. Is that correct? 3 That's the full height completed waste fill over the A No, they were not intended for geotechnical 3 4 4 sampling in that or geologic sampling, and that was bottom liner. 5 5 indicated in the boring plan. Q And if I understood your testimony correctly, 6 Q So would it be fair to say that those 20 bore 6 your major concern was that nowhere in the application 7 holes that were drilled using the wash rotary methods 7 did that analyses appear. Is that right? 8 were mainly for the purposes of providing, if you 8 A It was in the application, but it was 9 will, access to the underlying structures for these 9 incomplete in that the leachate collection system, 10 more exotic geotechnical tests that you just 10 bottom liner system, and sidewall liner system were 11 11 not modeled in the stability analysis, so the model described? 12 12 A That would be correct. doesn't accurately reflect the actual design proposed 13 Q Mr. Carlson also asked you a number of 13 in the application. 14 questions concerning the use of computer programs 14 Q And you consider that to be a critical flaw, 15 15 versus hand calculations in the context of slope do you not? 16 stability analyses. Do you recall that general line 16 A Yes, I do. 17 17 of questioning? Q Mr. Chandler, I believe Mr. Carlson also 18 18 A Yes, sir, I do. asked you questions concerning a table that appears in 19 Q And I believe you indicated in your testimony 19 an EPA publication that has to do with factors of 20 20 that you only performed some hand calculations. Isn't safety. Do you recall that general testimony? 21 21 A I do. that right? 22 22 A That is correct. Q Could you please turn to Page I think it's 23 23 Q Is it your testimony that the hand around Page 70 of your prefiled testimony, PC-1. 24 calculations can be the more accurate methodology for 24 There may be some pagination issues, or have you found 25 25 purposes of conducting a slope stability analysis? that on your chart? Page 1568 Page 1570 1 1 A I believe the table you're referring to is on A Yes, sir. 2 Q And would you agree with me that the validity 2 Page 70. Are you referring to Table 2-4? 3 of any computer slope stability analyses is strictly 3 Q Yes, sir, that table. 4 4 A Yes, sir. based on the accuracy of the data inputted into that 5 5 Q And I believe Mr. Carlson asked you some computer model? 6 questions about Footnote 1. Do you see Footnote 1 A I would answer it's not only a function of 6 7 7 the quality or the accuracy of the data that's input, there? 8 but when I say "data," I'm talking about how the 8 A Yes, sir, I do. 9 physical conditions are actually modeled, the 9 Q And the line of questioning, as I recall, had 10 geometries and stuff like that, if you include that in 10 to do about the uncertainty of strength measurements 11 and how that would ultimately affect the recommended your definition of data. 11 12 O I do. 12 factors of safety. Correct? 13 A Then it would yes. 13 A Yes, sir, that's correct. 14 Q And isn't one of the greatest concerns that 14 Q And I believe Mr. Carlson had you read 15 you had with the slope stability analyses that were a 15 Footnote 1 into the record, did he not? 16 A That may be true. I don't recall that for a part of the application was that in your judgment they 16 17 did not properly analyze some of the more critical 17 fact. 18 potential failure models? 18 Q Well, let's just -- if you would, please, 19 A That would be a fair characterization. 19 just read it into the record currently, then, make 20 Q And would you, please, just for clarity in 20 sure we have it in there. 21 21 A "The uncertainty of the strength measurements the record, identify the largest area of what you 22 22 consider to be a defect in their slope stability is smallest when the soil conditions are uniform and 23 23 analysis? high quality strength test data provide a consistent, 24 24 A I think the biggest concern that I had would complete, and logical picture of the strength

15 (Pages 1567 to 1570)

25

be regarding the modeling or the analyses of the final

characteristics."

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- Q And if I remember your testimony in response to Mr. Carlson's questioning, I believe you indicated that for purposes of this site, that the sole conditions are relatively uniform. Isn't that right?
 - A That was my testimony, yes, sir.

- Q What about the second part or the second component in that sentence, and that has to do with high quality strength test data. Do you find the high quality strength test data to fall within small uncertainty of strength measurements or large uncertainty of strength measurements at the Sunset Farms landfill site?
- A The application doesn't really contain any what we would consider high quality strength test data, so it would fall into the large uncertainty category.
- Q What do you as an engineer experienced in geotechnical engineering consider to be high quality strength test data?
- A High quality strength test data are generally defined as laboratory evaluations of strength on samples representing the entire spectrum of the subsurface at a particular site. The specific tests that would be considered high quality strength tests would be the triaxial multistage tests, which would

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- Q Do you agree with me that the tests I just outlined, the unconfined compression test, pocket penetrometer results, penetration sampler, blow counts, and/or Atterberg limit testing would qualify as high quality strength test data?
 - A Not as it's commonly used in the geotechnical engineering work.
 - Q In the course of your career in doing geotechnical work, approximately how many high quality strength tests have you conducted or supervised?
- A Probably 500 total, maybe. It could be a little more than that.
- Q So you are very familiar, then, are you not, with high quality strength testing regimens? Correct?
 - A Yes, I am.
 - Q In questioning from Mr. Carlson regarding some of the groundwater issues present in your testimony, I believe he asked some questions having to do with you having not undertaken certain kinds of activities, among others, that you didn't look at the groundwater monitoring data for the site. Do you recall that?
- 23 A Yes, sir, I do.
 - Q And you didn't check leachate levels in the sumps. Correct?

Page 1572

- include unconsolidated undrained tests, consolidated undrained tests, and consolidated drained tests. And
- also direct shear multistage tests, which would
- 4 include consolidated drain and also consolidated drain
- on a repeated basis, which we would also call residual
 shear tests.
 - Q From your review of the application, is there any data reflected in the application that would suggest that triaxial compression tests were performed at the Sunset Farms landfill facility?
 - A I do not see any.
 - Q How about direct shear tests?
- A I do not see any.
 - Q I recall some earlier testimony where I believe BFI asserted that there was adequate testing based on unconfined compression tests, pocket I can't even pronounce it penetrometer results, penetration sampler, blow counts or Atterberg limit tests. All of these things indicated, at least from BFI's perspective, that those were test data that were
- BFI's perspective, that those were test data t of a quality sufficient to meet any testing
- requirements for a stability analysis. Do you generally remember that?
 - A I remember Mr. Adams testifying something to that effect, yes, sir.

Page 1574

- A That is correct.
- Q And you didn't perform any independentcalculations or modeling. Correct?
 - A That is correct.
 - Q Why was that?
 - A As I recall, the application is pretty vague about what the leachate levels were. I don't recall seeing that information in general. But when I looked through it, beyond that point, I thought that the groundwater contouring data was pretty conclusive on its own. And I also, from my experience, recognize that a monitoring system may not always be the best way to judge whether you've actually got leakage from a site or not. Leakage can be occurring, but you haven't either picked it up yet or you just missed it in your monitoring system.
 - Q One of the main things as I at least heard you testify about was that essentially you relied on what was in the application to draw some of your conclusions. Correct?
 - A Yes, that's correct.
 - Q Is it accurate to say that a professional engineer should be able to rely on what is represented in a permit application to determine the issues relative to groundwater contours and groundwater

16 (Pages 1571 to 1574)

	Page 1575		Page 1577
1	monitoring levels?	1	entire pre-Subtitle D portion of the Sunset Farms
2	A I believe so.	2	landfill, that information is only relative or
3	Q I believe you also had some testimony that	3	applicable to that cell. Would you agree with that?
4	reflected a landfill gas system that was at the TDSL	4	A I would agree.
5	landfill. Do you remember that testimony?	5	MR. RENBARGER: Pass the witness.
6	A Yes, sir, I do.	6	JUDGE NEWCHURCH: Mr. Blackburn?
7	Q And I believe you testified that you designed	7	MR. BLACKBURN: No questions.
8	that system. Right?	8	JUDGE NEWCHURCH: Ms. Noelke?
9	A That is correct.	9	MS. NOELKE: No questions.
10	Q And if I remember your testimony correctly,	10	JUDGE NEWCHURCH: Ms. Talley?
11	it consisted of six wells. Is that right?	11	MS. TALLEY: No questions.
12	A That is correct.	12	JUDGE NEWCHURCH: Let's see. Ms. Mann,
13	Q Now, do those six wells completely ring the	13	I guess you're next.
14	TDSL landfill?	14	MS. MANN: I have no questions.
15	A Oh, no.	15	JUDGE NEWCHURCH: Mr. Shepherd?
16	Q Could you please tell us, then, what is the	16	MR. SHEPHERD: No questions.
17	purpose of the six landfill gas wells that you	17	JUDGE NEWCHURCH: Mr. Terrill?
18	designed for insulation at the TDSL facility?	18	MR. TERRILL: No questions.
19	A The six wells were the first phase of a I	19	JUDGE NEWCHURCH: Mr. Carlson?
20	guess what would ultimately be a multiphase gas	20	MR. CARLSON: No questions.
21	collection and control system as the landfill is	21	JUDGE NEWCHURCH: All right. Thank you,
22	developed generally to the east and north. We	22	Mr. Chandler. You're excused.
23	installed the six wells on basically the southwest	23	A Thank you, Your Honor.
24	corner of the site, and that was the area that was	24	MR. RENBARGER: May we have just a
25	filled and brought to final upgrade as of that time.	25	moment to reorganize?
	Page 1576		Page 1578
1	Q So would you say, in your opinion, that	1	JUDGE NEWCHURCH: Off the record.
2	comparison of the six well landfill gas system at the	2	(Recess from 10:49 a.m. to 10:53 a.m.)
3	TDSL facility versus the I think he indicated it was	3	JUDGE NEWCHURCH: Back on the record.
4	something like 180 wells, approximately at the	4	Mr. Renbarger?
5	Sunset Farms landfill facility is a fair comparison?	5	MR. RENBARGER: TJFA calls Robert Kier.
6	A It's really not.	6	JUDGE NEWCHURCH: Mr. Renbarger?
7	Q Mr. Chandler, there was also a line of	7	MR. RENBARGER: Thank you.
8	questioning earlier about the soil and liner	8	ROBERT S. KIER, Ph.D,
9	evaluation report from some older TDH documents. Do	9	having been first duly sworn, testified as follows:
10	you recall that?	10	DIRECT EXAMINATION
11	A Are you referring to the Sunset Farms	11	BY MR. RENBARGER:
12	documents?	12	Q Good morning, Dr. Kier.
13	Q Yes, sir, Sunset Farms. And I believe it	13	A Good morning.
14	actually was in an exhibit that we discussed at some	14	Q Would you please state you full name for the
15	length, the exhibit being BFI-11.	15	record?
16	A Yes, I remember that particular one.	16	A Robert, middle initial S, Kier, K-I-E-R.
17	Q Now, the information contained in BFI-11, is	17	Q And would you please state your business
18	that inclusive of the entirety of the pre-Subtitle D	18	address?
19	landfill liner at Sunset Farms?	19	A 505 East Huntland Drive, Suite 250, Austin,
20	A Just from a very quick glance at it, it did	20	78752.
21	not appear to be. It appeared to be maybe the first	21	Q What is your occupation, Dr. Kier?
22	cell or one of the first cells at the site, because	22	A I'm a geologist by training. I practice
23	it's right next to Giles Road. It's a very small	23	principally in the field of hydrogeology and
24	cell.	24	engineering geology with some regular geology.
25	Q So, to the extent we're talking about the	25	Q What was your role with respect to the BFI

17 (Pages 1575 to 1578)

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Page 1579 Page 1581 mistakes that a substitution of BK-3 would not in 1 application? 2 2 A My role was to review the permit application any way change your narrative testimony contained in 3 in its final form; that is, the May 2008 form, not any 3 BK-1? 4 previous ones, and to make my comments or testimony 4 A That is correct. 5 5 based on that. Q Dr. Kier, if we read each question and answer 6 Q As a result of your review of BFI's 6 in your prefiled testimony into the record today, 7 application dated May of '08, did you prepare any 7 would it be the same as represented in BK-1? 8 prefiled testimony? 8 A Yes, sir. 9 9 Q And do you adopt that as your testimony A Yes, I did. 10 Q Do you have before you a document that's 10 today? 11 identified as PC-1? 111 A Yes, sir. 12 12 A No. It's BK-1. MR. RENBARGER: Move to admit BK-1 13 13 Q Excuse me. BK-1. I beg your pardon. Wrong through BK-8. 14 witness. 14 JUDGE NEWCHURCH: Let's be a little 15 15 A But, yes. clearer about that. You filed on let's see the 16 Q Is BK-1 a true and accurate copy of your 16 14th of January revisions to Dr. Kier's prefiled 17 prefiled testimony? 17 testimony that incorporated the agreement concerning 18 A It certainly looks like it without checking 18 the objections? 19 19 every word, yes. MR. RENBARGER: That is correct, Judge. 20 Q Also in front of you is there a document 20 And I think it consisted, perhaps, of one page where 21 21 identified as BK-2? there was some very slightly amended narrative 22 22 A Yes. testimony. 23 23 Q What is BK-2? JUDGE NEWCHURCH: So, with regard to 24 24 BK-1, that's what you're offering? A BK-2 is a copy of my most recent resume. 25 25 MR. RENBARGER: That is what we're And are there any other exhibits that you Page 1580 Page 1582 prepared to correspond to your prefiled testimony offering, yes, Your Honor. 1 2 that's covered in BK-1? 2 JUDGE NEWCHURCH: With the exception of 3 A Those would be BK-3 through BK-8. 3 BK-3, the other attachments to the prefiled testimony 4 4 Q Have you had an opportunity to review your did not change? 5 5 prefiled testimony prior to this morning? MR. RENBARGER: That is correct. 6 6 JUDGE NEWCHURCH: And now you're A Yes. offering, in addition to that, this revised vision of 7 Q Are there any changes or amendments to your 7 8 prefiled testimony which you would like to make at 8 BK-3? 9 this time? 9 MR. RENBARGER: We would propose to 10 A I would like to substitute the copy of BK-3. 10 substitute BK-3 to reflect the inaccuracies that the 11 11 Do you want me to explain? witness just testified about. 12 12 Q Please. For what purposes? JUDGE NEWCHURCH: Okay. So is there 13 A During my deposition, it was pointed out to 13 further objection to BK-1 through 8 as just described? 14 me that there were some errors in the ground surface 14 MR. CARLSON: I do, Your Honor. With I 15 15 object to the revised BK-3. I don't have a problem elevations, not the water level elevations, which is 16 the principal part of purpose of the exhibit. And 16 with including it in some form or substance in the 17 so we corrected those, put a proper notation on the 17 record, but I'd like to have it called BK-3B or 18 bottom, and wrote out what the corrections for the 18 something like that. I intend to cross-examine 19 particular borings were. In the process, we found one 19 Dr. Kier, at least in part, on his original BK-3. 20 error in a groundwater level where we had written 617 20 MR. TERRILL: Your Honor, I join in that 21 instead of 607, and I missed it, but it does not 21 objection as well. Again, it's a change in the 22 22 change the position of the contours. In other words, testimony, and it's certainly something that 23 23 the configuration of the exhibit is the same. Mr. Renbarger could do to rehabilitate his witness. 24 24 But the original document ought to be in there because Q And would it be fair to say, Dr. Kier, that a 25 25 substitution for purposes of correcting some of those there was a mistake or several mistakes.

18 (Pages 1579 to 1582)

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Page 1583
                                                                                                               Page 1585
                                                                              MR. RENBARGER: Judge, my --
 1
               MR. RENBARGER: Judge, may I respond?
                                                                 1
 2
               JUDGE NEWCHURCH: Yes, sir.
                                                                 2
                                                                              JUDGE NEWCHURCH: Okay. This would have
 3
                                                                 3
               MR. RENBARGER: I'm sure everyone
                                                                      been prefiled --
 4
                                                                 4
                                                                              MR. RENBARGER: Judge, I believe the
      recalls that there has been a number of changes to
 5
                                                                 5
      prefiled testimony in exhibits that have taken place
                                                                      time has long come and gone for objections to this
 6
                                                                 6
      on behalf of the applicant. We've had Mr. McInturff
                                                                      exhibit, and I think we covered all that earlier.
 7
      change numbers in his road his transportation
                                                                 7
                                                                              JUDGE NEWCHURCH: Occasionally one of
 8
      analysis surveys. We've had any number of things like
                                                                 8
                                                                      the parties will object to a document and only because
 9
      that occur. More recently, even with TJFA,
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                                                                      they seek voir dire. And, Mr. Terrill, I can't
10
      Mr. Chandler had an exhibit which was admitted into
                                                                10
                                                                      remember you doing that with regard to BK-7.
      evidence, and I believe the leniency provided by Your
11
                                                                11
                                                                              MR. TERRILL: I'm sorry. Say that
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                                                               12
      Honor was to the extent that if there needed to be
                                                                      again, Your Honor.
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                                                               13
      additional cross-examination, that certainly all
                                                                              JUDGE NEWCHURCH: When you filed your
14
      parties would have that opportunity.
                                                               14
                                                                      objections to the prefiled testimony, did you
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                                                               15
                                                                      specifically include an objection to BK-7 and a
               So, with that caveat, I'm thinking we
16
      probably could move forward, as much as we've done in
                                                               16
                                                                      request to voir dire the witness?
17
                                                                17
      the other witnesses, go ahead and admit it into the
                                                                              MR. TERRILL: No, I didn't, but I will
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                                                               18
                                                                      tell you what happened. In looking at this, it
      record. And to the extent any of the parties feel the
19
                                                               19
      necessity for additional time for cross-examination,
                                                                      purports on its face, it looks like it's an Allied
20
                                                                      Waste, meaning BFI document. I think in reality it's
      we would certainly tender Dr. Kier for that purpose.
                                                               20
21
               JUDGE NEWCHURCH: Mr. Renbarger, just to 21
                                                                      not, though, and I would like to ask Mr. Kier about
22
                                                               22
      be clear maybe I should address this to Dr. Kier.
                                                                      that. In other words, it's not coming from the
23
                                                                23
      On top of your revised BK-3, there's a cover. It
                                                                      applicant in this case, which is what it appears on
                                                                      its face. In reality, I think it's something
24
                                                                24
      looks like this is a memo just to explain the changes.
25
                                                                25
                                                                      different than that.
      Is that right?
                                               Page 1584
                                                                                                               Page 1586
 1
         A That is correct. So they don't have to hunt.
                                                                 1
                                                                              MR. RENBARGER: May I make a
 2
               MR. RENBARGER: It is for purposes of
                                                                 2
                                                                      representation also on that, Judge?
 3
      the parties to understand what changes actually appear
                                                                 3
                                                                              JUDGE NEWCHURCH: Yes, sir.
 4
                                                                 4
      on BK-3 in the proposed substituted exhibit.
                                                                              MR. RENBARGER: If I remember correctly
 5
                                                                 5
               JUDGE NEWCHURCH: I think Mr. Renbarger
                                                                      and we'll certainly double-check that to make sure
 6
      is correct on this. I've allowed nearly every witness
                                                                 6
                                                                      that we are accurate, but if my recollection serves me
 7
                                                                 7
      to make corrections to numbers that they've gotten
                                                                      correctly, I believe this did come from a file that
 8
      wrong somewhere along the way, and I suppose if it
                                                                 8
                                                                      was included under the heading of Lee Kuhn, who was an
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      required all of that to come in and gone to their
                                                                 9
                                                                      Allied Waste representative and who was produced to
10
      credibility, but we haven't proceeded that way. So
                                                                10
                                                                      TJFA and the other parties during the discovery
11
                                                               11
      I'm going to overrule those objections, find that
                                                                      process.
12
      there is good cause for the revision, and BK-1 through
                                                               12
                                                                              MR. TERRILL: Your Honor, I'll skip voir
13
      8, as described by Mr. Renbarger during my questions a
                                                               13
                                                                      dire if you want me to and let me just tell you what
14
      little bit earlier, are all admitted.
                                                               14
                                                                      the issue is. This document, although it purports to
15
               (Exhibit TJFA Nos. BK-1 through BK-8
                                                               15
                                                                      come from Allied because of the fax cover sheet, I
16
                                                               16
                                                                      think in reality what it is is it's a copy that got
      admitted)
17
               MR. TERRILL: Your Honor, I have one
                                                               17
                                                                      into BFI's hands of the report that was done by PBS&J
18
                                                               18
                                                                      for Applied Materials and worked its way into BFI's
      further objection.
19
               JUDGE NEWCHURCH: Yes, sir.
                                                               19
                                                                      hands. I don't know how. Although it purports to be
20
               MR. TERRILL: And it's with respect to
                                                               20
                                                                      from BFI, I think in reality it's that PBS&J report
21
      Exhibit 7. I don't have an objection to the first
                                                               21
                                                                      done for Applied Materials, which we objected to and
22
                                                               22
      page of that, which is from an allied representative.
                                                                      which Your Honor sustained those objections earlier.
23
                                                               23
                                                                      I think that's the reality of what the following pages
      But if I could briefly take the witness on voir dire
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                                                               24
                                                                      behind the fax cover sheet are. That's what I was
      on the remaining pages, I'd like to clarify something,
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                                                               25
                                                                      hoping to ask Mr. Kier about.
      if I could.
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19 (Pages 1583 to 1586)

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pleadings to the Court, I believe when the city of

agreements with each other. I understand the concept

JUDGE NEWCHURCH: I don't agree it's

of a friendly cross. At some point, though, it seems

like they have the opportunity to bolster a very

expanding the scope in this particular case.

friendly party's prefiled testimony. So I object to

outside the scope. I think cross is unlimited. It's

Austin offered its settlement, that they had

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Page 1587 Page 1589 friendly. It's very friendly. You'll get to follow JUDGE NEWCHURCH: Well, okay. That may up on it. Objection overruled. 2 all be true, and you may want to ask about that, but 2 3 MR. BLACKBURN: Thank you, Your Honor. the time to object to BK-7 has long passed, and so I'm 3 4 going to overrule that objection, and BK-1 through 8 4 JUDGE NEWCHURCH: Go ahead. 5 5 are all admitted. Q (BY MR. BLACKBURN) The other question I have 6 MR. RENBARGER: At this time, Judge, we 6 is with regard to Exhibit BK-7. On the basis of BK-7 7 would pass the witness for cross-examination. 7 and other information that you have reviewed, did you 8 JUDGE NEWCHURCH: Mr. Blackburn? 8 form a professional opinion about the existence of 9 9 groundwater contamination moving onto the Applied MR. BLACKBURN: Yes, I have a couple of 10 10 questions. Material site? 11 **CROSS-EXAMINATION** 11 A Yes, sir, I did. 12 12 BY MR. BLACKBURN: Q And what was that? 13 Q Good morning, Dr. Kier. 13 A The constituents identified tentatively 14 A Good morning, sir. 14 identified I have to make it clear are such that 15 Q Were you here during the testimony of Mr. I 15 they would not have come from Applied Materials, nor 16 think it was Carel? 16 could they have come from the gasoline station that 17 17 A Yes, sir. might have been there, nor from the Leif Johnson body 18 18 shop. They are very strange, semi-volatile Q And were you here for testimony when it was 19 19 identified that there were organic hazardous constituents that well, obviously are not on the 20 constituents that were identified at MW-30? 20 ordinary 8270 list because they're not ordinarily 21 21 seen. And they can only be tentatively identified A Yes, sir. 22 Q Were you previously aware of that? 22 because there's not much information on them. But 23 23 A Yes, sir. they can't come from those other facilities. They 24 24 Q Is that indicative of leakage from the have to come from one of the neighboring landfills, 25 25 landfill in your opinion? most likely Austin Community landfill, given its Page 1590 Page 1588 1 A Well, it could be either well, it's leakage 1 history. 2 of something. Whether it's landfill gas or leachate 2 Q Now, having said that, what is the relevance, 3 is, in my opinion, rather irrelevant because EPA 3 if any, of that information relative to a hearing on 4 4 doesn't distinguish between the two. If it came from Sunset Farms? 5 landfill gas and got into the groundwater, it's still 5 A This may get a little lengthy, and I 6 contamination in the groundwater. 6 apologize. These constituents are not normally 7 7 transported well in water. That they have moved so Q And so it is your opinion that it is 8 contamination in the groundwater? 8 far indicates that the hydraulic conductivity of those 9 A Yes, sir. The only way it was discovered was 9 clays, the Taylor clays, has radically changed. This 10 by sampling the groundwater, so it must be in the 10 is not unexpected given that both drum and bulk waste 11 11 groundwater. industrial waste were disposed of at Austin Community 12 MR. CARLSON: Judge, I have a procedural 12 landfill in roughly '71, '72 time frame. They were 13 objection here. The questions that Mr. Blackburn is 13 dumped in unlined pits. The presumption then was that 14 asking are outside the scope of this witness' prefiled 14 it would evaporate. Unfortunately, that was an 15 15 testimony. These two parties are not only aligned, erroneous presumption, and we have found through later 16 16 testing that pure solvents desiccate clays and but they have previously represented to you in some

20 (Pages 1587 to 1590)

drastically change the hydraulic conductivity. Strong

acids -- when they say "spent acid," they don't mean

Spent acids also radically change the

that it's not acidic. They mean it's dirty. So they

structure of the clay. And if you put any highly

flocculate. What that means is instead of sitting

there like layered picture cards in a deck, the way

saline water in there, it will cause the clays to

couldn't use it in the process anymore.

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clays usually do, they turn and go this way. And this creates large gaps in the clay structure that makes the hydraulic conductivity much greater. This would negate any calculations of travel times based on other tests around either BFI or Austin Community landfill and show, in reality, what is happening.

Now, some of this may have moved on or through BFI. I'm not saying it came from BFI. But based on both geochemical analyses, the work that I've done in the past, and groundwater data that are in the application and we were provided through discovery, it appears that some of the water from Austin Community landfill transverses through the BFI landfill. And this would not be picked up by any of the analyses that have been performed by BFI.

Q And in that regard, is there any recommendation that you have to the Administrative Law 17 Judge with regard to what could or should be done with 18 19 regard to this issue?

A I mean, we're dealing with a permit application, and that's his purview at this point. Thus my recommendation would be or at least comment 22 would be that the monitoring program proposed the standard monitoring program that is in the rules of testing for certain metals and testing for volatile

Page 1593

1 Mr. Chandler. Are you familiar with Mr. Chandler's 2 testimony?

A Not overly. I did not read his prefiled testimony, nor was I here for all of his testimony

Q Okay. Are you aware that he has an opinion or he has provided an opinion that mounding is occurring beneath the Sunset Farms landfill?

A Yes.

Q Okay. Looking at the two opinions, you seem to have relied on the same application materials to come to that determination -- well, let me back up. You also agree that mounding is occurring beneath the Sunset Farms landfill. Is that correct?

A Yes.

Q And do you know whether or not you looked at the same application materials as Mr. Chandler to come to that determination?

A I have to presume so.

Q Okay. Well, let's talk about the application materials that you looked at. Can you identify what you looked at in the application? I know you've already done it in your prefiled, but can you talk me through what you looked at in the application to help you come to that determination?

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organics, if this landfill were in isolation and not affected by its neighbor or potentially affected by its neighbor, that would be quite adequate.

However, in that it sits next to Austin Community landfill, it inherits its location, and each landfill has to be permitted based on its site-specific characteristics. Therefore, my comment and recommendation to the Administrative Law Judge is that the monitoring program as proposed in the application is inadequate to protect human health and the environment.

MR. BLACKBURN: Thank you. Pass the witness.

JUDGE NEWCHURCH: Let's see. I think, Ms. Noelke, you're next.

MS. NOELKE: I pass. JUDGE NEWCHURCH: Ms. Talley? MS. TALLEY: No questions, Your Honor. JUDGE NEWCHURCH: Ms. Mann? **CROSS-EXAMINATION**

BY MS. MANN:

Q Good morning, Dr. Kier. I'm Christina Mann. I'm with the Public Interest Counsel, and I have some questions related to the initially related to the testimony that is very similar between you and

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1 A There are at least three things that come to 2 mind as I sit here. The first is dang. I just slipped on three of them. The first is the 3 4 cross-sections in Attachment 4 and Attachment 2 that 5 indicate groundwater levels as of December 1999. 6 There is no qualification as to their projection. 7 There is no qualification as to why they're there. 8 They're just there for illustrative purposes. They 9 are labeled, at least approximate, for December 1999. 10 As is in my prefiled testimony, I took those water 11 levels on a cross-section and made a groundwater map 12 or actually had Ms. Kagen do that.

> Q So those groundwater levels that you found in Section 4 right?

A Attachment 4.

Q -- Attachment 4, thank you of the application, you took those groundwater levels that were indicated by what I understood earlier as a dashed line on the cross-section?

A I think it was on the cross-section, the same. Without looking at it, my memory is it was the same symbol that would normally be used for an intermittent stream, that is, a dash, two dots, dash, two dots.

Q And you took that to be an accurate

21 (Pages 1591 to 1594)

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divide, but it makes no never mind in terms of whether

And then the third reason is that the

entire perimeter of the landfill, all the monitoring

wells have been designated as point of compliance

wells and even labeled downgradient in that all of

one can draw from that is that there is mounding

these wells are downgradient. The only inference that

it came from the landfill or not.

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Page 1595 Page 1597 representation of the actual conditions at the site? 1 within the landfill. There's a side issue, but unless 1 2 2 A I took it at face value. you ask me, I won't go there. 3 3 Q So because all of the wells were determined to be point of compliance and, therefore, since a 4 A The documents were signed and sealed either 4 5 5 by a professional engineer or professional point of compliance well is supposed to be 6 6 downgradient and the entire site is encircled by point 7 Q Okay. Are those typically how would 7 of compliance wells, it's your position or do I someone determine the groundwater let me back up. 8 8 understand your position that the water is all moving 9 9 Strike that. away from the site towards the boundary of the site 10 10 because that's where all the point of compliance wells Those dashed lines represent what the 11 111 actual groundwater levels are underneath the site. Is are? Is that correct? 12 12 that correct? A Yes. Given the definition of a point of 13 13 A Or within it. compliance, given the definition of downgradient, 14 Q Or within it. 14 there can be no other conclusion. 15 A They don't specify. 15 Q Do you agree that all the point of compliance 16 16 Q Okay. And so I think I've understood that all the wells that are labeled as point of compliance 17 there's been some suggestion that it's sort of a 17 are, in fact, downgradient, or do you have a position 18 predicted potentiometric surface. Would that be a 18 on that? 19 19 A Well, ultimately it is the ED who determines 20 A Well, it is a potentiometric surface. It 20 the point of compliance. There is a proposed point of 21 21 compliance in the permit application. That proposed doesn't matter you can use that term either to 22 22 describe a water table, which would be within the point of compliance is surrounds the entire 23 23 landfill, or a piezometric surface, a pressure landfill. That's really all I can tell you. 24 surface, which is beneath the landfill. For my 24 Q Okay. If you just looked at the map and 25 25 purposes, it doesn't make a difference. these wells were not labeled anything and they were Page 1596 1 Q Okay. So I'm just trying to make sure I 1 just dots, are all of those dots, which are, in fact, 2 understand. If those lines are intended to represent 2 what the applicant is purporting to be point of 3 whether or not that is the actual physical 3 compliance are all of those dots actually 4 characteristics of the groundwater would be with or 4 downgradient from the site? 5 5 without the landfill. Is it your understanding it's A I think so. I'd say there's a high 6 the actual representation of the groundwater levels 6 probability of it. I think that's the word I used in 7 7 my deposition or the set of words I used. Can I with the landfill? 8 A In that at least part of it was shown to be 8 prove it to you? No. 9 within the landfill, yes. I didn't quite finish my 9 Q Okay. Mr. Blackburn asked you some questions 10 answer from about three questions ago. 10 related to your review of some material or some 11 11 Q I'm sorry. Go ahead and continue your water samples from the Applied Materials site. Is 12 12 that correct? answer. 13 A All right. In addition, there were a number 13 A That is correct. 14 of groundwater maps in Attachment 4. I believe all of 114 Q And you stated that it's your position that 15 them maybe one of them didn't but all of them 15 it's likely that contamination has changed the 16 showed what I would call groundwater mounding. It 16 hydraulic conductivity of the clays? 17 might have been described as a ridge or a groundwater 17 A That is correct.

22 (Pages 1595 to 1598)

Q And he asked you about perhaps beefing up or

about maybe you would beef up the monitoring system,

you responded with a question to one of his questions

A Well, really his question wasn't so much

about beefing up the monitoring wells, but what are

would be adequate. That's how I took his question.

the analyses that would be performed on samples that

the monitoring wells. Do you recall that?

18

19

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some testing of the hydraulic conductivity of the

clays that you believe may have been changed?

very thorough investigation.

A Very definitely. I think there needs to be a

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Page 1601 Page 1599 Q And is hydraulic conductivity tested in any 1 Q And that 2 of the bore samples that have been the subject of a 2 A And that's how I answered it, I think. 3 3 lot of discussion? There was a lot of bore sampling. Q And that's for the groundwater itself? 4 A There were some hydraulic conductivity tests 4 A That's correct. 5 5 made, but they were in a very limited area, where at Q Can you conduct geologic sampling to confirm 6 your suggestion that the hydraulic conductivity of the 6 one time it was proposed to expand laterally expand 7 actual clays has changed? 7 the landfill and deepen it, just a small portion of 8 A Yes, ma'am. 8 it. But that was abandoned, and so the current 9 Q Would that be something that would be helpful 9 testing the most recent testing, and I think the 10 to determine whether or not the previous samples were 10 only testing in the application I may be wrong on 11 11 that came from that small area. adequate? 12 12 A Samples of what? Q You testified that there's a surface 13 Q Previous sampling plan is adequate -- water 13 watercourse beginning on site. What surface 14 well sampling plan? 14 watercourse are you referring to? 15 15 A You mean in terms of spacing? A I may not have the name exactly. I think it 16 16 Q Sure, in terms of spacing to get a better flows into Gilliland Creek. It passes through Applied 17 17 Materials. It's the one on that they dealt with idea of how the water is actually moving underneath 18 with respect to CLOMRs or LOMRs or whatever they were 18 the site. 19 19 for changing the floodplain. There were others, but A Certainly that would assist. My reticence is 20 20 not that I don't know where I want to go. It's just they got filled in. 21 21 trying to put it into good words. We have a Q Okay. I'm a little bit confused about 22 22 monitoring system proposed in the application, but groundwater flow and how it reacts to having an 23 there is absolutely no justification in the 23 artificial intrusion, the landfill, and how it reacts 24 24 application for the positions of the monitoring wells. around that. Does it go around it? Does it go under 25 25 it? It just goes how does that work? There's nothing. Nothing is stated anywhere in the Page 1602 Page 1600 1 application about what is the position. There was a 1 A Okay. If we had groundwater before the site, 2 lot of testimony earlier about, well, there's no more 2 it would more or less mimic topography, which also 3 than 600 feet. Well, that would be real neat if we 3 more you know, it and it also, on a rough basis, 4 4 the weathered or unweathered zone interface, which we were perhaps doing this under the post-March 2000 5 5 rules, which I thought we were going to be, at least can get into a little bit more, if you want, where the 6 6 permeability changes, that also more or less mimics in that part in my prefiled testimony, and even in 7 7 topography. So it would normally flow along that. my deposition. 8 But I have since discovered a little out 8 That's without the landfill. 9 that had been slipped into 330.2A, I think, that says 9 Once you put the landfill in there, in 10 if you're going to expand capacity, you don't have to 10 theory, you have created a bathtub that is 11 meet those requirements in the post-2006 rules until a 11 sufficiently impermeable. The groundwater, at least 12 year afterwards. That wasn't in any of the drafts 12 minimally, doesn't come into the landfill site, but if 13 that I read that I thought were final. So I made a 13 it were not into the unweathered shale, could flow 14 mistake on that. But given that this is now under the 14 underneath it, or it would have to go around it. Is 15 15 current set of rules, there is no justification given that clear? 16 16 for the positions of the wells. That was a long Q So, if either a portion or all of the 17 answer to a short question. 17 landfill is in that unweathered portion, it would go 18 18 around it? Q Okay. 19 A That's what happens when you get piled higher 19 A It would have to go around it. 20 20 Q But if it's in the weathered portion, it and deeper. 21 21 would likely go under it? Q So that means so would you suggest doing

23 (Pages 1599 to 1602)

A Under it and around it.

A And, in theory, you shouldn't be getting

anything out of the landfill because of the liner and

22

23

24

25

Q

Okay.

25

because you have no place to bring it in you can't

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Page 1605
                                              Page 1603
      whatever cover you have. I say in theory. Not much,
                                                               1
                                                                    -- it doesn't move along and then suddenly jump up and
 2
      anyway. Minimally.
                                                               2
                                                                    come back down again. It has to do that, you have
 3
        Q You state that you had two major problems,
                                                               3
                                                                    to have a source from below or a source from above.
 4
      kind of problems -- two problems with the permit
                                                               4
                                                                    There are no other choices. It's very unlikely it
 5
      application that you felt the permit application did
                                                               5
                                                                    came from below based on the geology of the site and
 6
      not meet the MSW rules. The first is what we've been
                                                               6
                                                                    really the hydrogeology. It has to come from above as
 7
      talking about, that you believe the landfill is a
                                                               7
                                                                    illustrated in the application.
 8
      source of groundwater recharge. Does that mean that
                                                              8
                                                                      Q Okay. And because you believe or because
 9
      you think water is coming from within the landfill and
                                                              9
                                                                    it's your opinion that water is coming from above and
10
      going to the natural groundwater either beside it,
                                                             10
                                                                    is, therefore, most likely leachate is that correct?
11
      laterally, or underneath it?
                                                             11
                                                                      A If it comes out of the landfill, it's by
12
                                                             12
        A Yes. Let me explain.
                                                                    definition leachate.
13
                                                             13
        O Sure.
                                                                      Q Okay. That since the monitoring systems
14
                                                                    haven't picked up any contamination that would support
        A If it at least in the pre-Subtitle D, and
                                                             14
15
                                                             15
                                                                    that position, then the groundwater systems are not
      my understanding or at least in the post-Subtitle D,
16
      and in my understanding in the pre-Subtitle D,
                                                             16
                                                                    functioning I'm sorry groundwater monitoring
17
                                                             17
      although it's not fully, properly shown on the boring
                                                                    systems are not functioning properly. Is that --
18
      logs, the bottom of the landfill does not go into the
                                                             18
                                                                      A They're not functioning as to their intent.
19
                                                             19
      unweathered zone. All right. So, it has an
20
                                                             20
      opportunity to go underneath. All right. If you have
                                                                      A Which is to detect the release of
21
                                                             21
      a groundwater high within the footprint of the
                                                                    contamination from the site.
22
                                                             22
      landfill, that groundwater high can only come from
                                                                      O But to be clear, it would have to for that
23
                                                             23
      below or above.
                                                                    position to be validated, your first the predicate
24
                                                             24
                                                                    would have to be true, that there's leachate moving
              Now, below is defined as an aquiclude,
25
                                                             25
      something that does not transmit much water. So it
                                                                    from within the landfill out of the landfill. Is that
                                                                                                           Page 1606
 1
      can't come from below, and you're left with the only
                                                               1
                                                                    correct? For the second part of your --
 2
      conclusion, that it had to come from above. You
                                                               2
                                                                      A Given the data and the information in the
 3
      cannot have a high in the footprint of the landfill
                                                               3
                                                                    application, that's your own choice.
 4
                                                               4
      without that.
                                                                      Q Okay.
 5
                                                               5
        Q What do you mean by "footprint of the
                                                                            MS. MANN: I have no further questions.
 6
                                                               6
                                                                            JUDGE NEWCHURCH: Mr. Shepherd?
      landfill"?
 7
                                                               7
                                                                            MR. SHEPHERD: No questions.
        A The area occupied by the waste management
 8
      unit.
                                                               8
                                                                            JUDGE NEWCHURCH: Mr. Terrill?
 9
        Q Okay. The hole in the ground?
                                                               9
                                                                               CROSS-EXAMINATION
10
        A That's correct.
                                                             10
                                                                    BY MR. TERRILL:
11
        Q Okay. So there's no way to get water inside
                                                             11
                                                                      Q Dr. Kier, I'm Paul Terrill. I'm the lawyer
12
      the landfill, is what we're talking about inside the
                                                             12
                                                                    for Giles Holdings. They're the landowner that owns
13
      actual landfill unless there's communication?
                                                             13
                                                                    most of the land where the BFI landfill is.
14
                                                             14
                                                                      A Yes, sir, I knew that.
        A No. What I'm saying is you have two choices.
15
      Remember I said that the groundwater levels shown in
                                                             15
                                                                      Q And you've been here for at least several of
16
      the application are either they are potentiometric
                                                                    the days of the hearing. Correct?
                                                             16
17
      surface okay or result in one. That either
                                                             17
                                                                      A Correct.
18
      illustrates a water table or it illustrates a
                                                             18
                                                                      Q Dr. Kier, do you have your exhibits there
19
      piezometric surface. It doesn't distinguish. So it
                                                             19
                                                                    with you?
20
      either illustrates the water level in the landfill or
                                                             20
                                                                      A Which the ones from my prefiled?
21
      it illustrates the water level pressure level
                                                             21
                                                                      Q Yes, sir.
22
                                                             22
      underneath the landfill.
                                                                      Α
23
                                                             23
                                                                          Can you turn to Exhibit No. 7, please?
               So, if you can't increase the pressure
24
                                                             24
                                                                          Yes. I'm there already.
      level or water level once it's inside the footprint
```

24 (Pages 1603 to 1606)

Okay. The first page of that exhibit is a

25

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	Page 1607		Page 1609
1	fax cover from Allied Waste to Kevin Carel. Is that	1	Q Yes, sir. Now, just in looking at this, I
2	correct?	2	don't see that you have the gradient marked on here.
3	A Correct.	3	Is that correct?
4	Q And then what follows that and you	4	A Well, I don't have it in numerical form, but
5	understand that Allied is related to the applicant,	5	it's shown by the contours.
6	BFI. Correct?	6	Q All right. Well, let me ask you to do this
7	A Yes.	7	because at least in the reports that I'm familiar
8	Q Now, what follows that is seven pages.	8	with, I typically see hydrogeologists draw arrows in
9	Correct?	9	the directions of the gradient. And let me ask you to
10	A Yes, if my math is correct.	10	draw the predominant gradient direction on the BK-3.
11	Q And this is not a report that you prepared.	11	A Okay.
12	Correct?	12	MR. RENBARGER: Mr. Terrill, would you
13	A That is correct.	13	prefer to have a colored pen, something different than
14	Q And this is not a report that BFI or its	14	red or blue, just so there isn't a confusion as to his
15 16	experts prepared. Correct?	15	markings versus the others?
16	A As far as I know.	16 17	MR. TERRILL: I think that's a fine
17 18	Q Well, let me ask you this. Do you know who	18	idea. May I approach the witness?
19	prepared this? A I do now. I didn't at the time I did my	19	JUDGE NEWCHURCH: Yes. Please do. I believe we had a green the other day.
20	prefiled testimony.	20	MR. CARLSON: I've got a nice burnt
21	Q Okay. It's safe to say, then, you weren't	21	orange.
22	involved in any form or fashion in the testing,	22	A Good color.
23	analysis, or other reporting that is involved in this	23	MR. CARLSON: It might be a little more
24	report that's Exhibit 7. Correct?	24	University of Tennessee than Texas here.
25	A Correct.	25	A Yes, that would be.
	Page 1608		Page 1610
1	Q And as I understand your testimony your	1	MR. TERRILL: All right. I'm going to
2	prefiled testimony, you were simply pointing out that	2	bring my map up here with me so I can see what you're
3	BFI was aware of this report. Is that correct?	3	doing. If you would, with your burnt orange or
4	A I know that was at least one of the issues.	4	maybe that's University of Tennessee orange, actually
5	I can't remember all right now. If you call me back	5	colored pen, will you draw in the direction of the
6	to the prefiled testimony, I'll refresh my memory.	6	predominant groundwater gradient?
7	Q Well, I think it speaks for itself, but	7	A Can I put it off to the side as predominant?
8	that's we can move on. The bottom line is it's not	8	Because if I were to draw it explicitly on this, you
9	your report and you weren't involved in any form or	9	would have several arrows.
10	fashion with the report. Correct?	10	Q Yes, that's fine with me.
11	A Correct.	11	A Do you want me to put my initials on that?
12	Q In your prefiled testimony, there's some	12	Q Sure. All right. Now, Dr. Kier, you
13	discussion about the gradient the groundwater	13	mentioned that there are other gradients as well. Let
14	gradient. Do you recall that?	14	me ask you to explain where those other gradients are.
15	A Yes.	15	A All right. There's a gradient, based on this
16	Q Let me ask you, what is the direction of the	16	map, that moves northward or northeastward, and I'm do
17	groundwater gradient on the property that's the	17	you want me to put dashed lines?
18 19	subject of the BFI landfill? A There are multiple directions	18 19	Q Sure. A There's a gradient that moves more or less
20	A There are multiple directions. Q Okay. Let's start with the predominant.	20	A There's a gradient that moves more or less more eastward and turns and goes down into Austin
21	A The predominant direction is to the east,	21	Community landfill. There's a gradient that goes
22	more or less, southeast if you want.	22	westward onto the neighboring property. So,
23	Q Let me ask you to do this. Can you take your	23	functionally, groundwater flows in all those
24		24	directions out of the landfill.
25	A Oh, mine?	25	Q Except as I look at your map here, it looks
43			

25 (Pages 1607 to 1610)

23

24

25

B-16, are you?

A Well, probably not, but it is there is on

right above B-16, there is shown a groundwater level.

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Page 1611 Page 1613 like it does not flow this direction, which is --1 Q Okay. 2 A Try northwest. 2 A And it's stated to be December 1999. 3 Q -- northwest. All right. It does not flow 3 Q And it's your testimony, it's your 4 understanding that that is a measurement of the to the northwest? 4 5 5 A Well, you'll see that based on the data, I groundwater level at that location, B-16, in or under 6 only had in the landfill. And so we dashed the 6 the landfill. Is that what you're saying? 7 contour up here because it's inferred. I have no data 7 A I am saying I can't tell you where it came 8 to constrain it. So I cannot tell you whether it does 8 from. I am saying that the application has 9 or does not. I simply infer that it comes around and cross-sections. And I can show them to you if you 9 10 ioins this other. 10 want to produce one. 11 111 Q Let me ask you a question about that. These Q No. We've talked about them a lot earlier. 12 12 contour lines that you've drawn on your original BK-3 A Okay. And they show groundwater levels. 13 that are in blue, those were not based on your 13 Okay. All right. 14 measurements of the landfill. Correct? It's from the 14 A They don't distinguish how they got there. 15 15 application? They just said, "December 1999, approximate 16 A Yes. 16 groundwater level." 17 17 Q Were you here for the testimony of Q And as I understand it, those lines are 18 Mr. Terrill? inferred based on measurements that are taken around 18 19 the perimeter of the landfill. Is that correct? 19 20 A No. sir. What I did was take the 20 Q All right. Did you hear the testimony from 21 21 cross-sections that are in Attachment 4 that go both him and I think another witness talked about this as 22 22 let's make it northwest to southeast and northeast to well about the measurements taken at the perimeter 23 southwest or make it simple, east-west, north-south. 23 of the landfill and those being inferred lines? 24 And where they show the groundwater level crossing the 24 A Yes, I heard him say that. 25 cross-section, we've plotted that based on those 25 Q Okay. Do you have new reason to doubt that Page 1612 Page 1614 1 1 testimony? cross-sections. 2 Q Okay. I want to be clear about this. You're 2 A In doing so in making that statement, he 3 not saying the measurements were taken from here is 3 violated the most basic principle of hydrogeology or 4 what I'm going to do. I'm going to mark on this map. 4 any geology. If they were inferred, they should have 5 I'm going to put a No. 1 just right here just for 5 been displayed as inferred. They were not. They were 6 representative purposes on the 640 contour line. 6 shown as solid lines. They were signed and sealed 7 7 well, his weren't, but Mr. Snyder's were. And as any A Uh-huh. 8 Q You're not saying that there was a 8 beginning geologist learns in basic geology lab, if 9 measurement of the groundwater level at that location, 9 you show a solid line, that is your best 10 No. 1, saying that it's 640. Correct? 10 interpretation. If you simply infer it, you dash it. 11 A No, sir. I you're correct. I had the 11 If you really want to show it as concealed, you might 12 level at B-16 or a level I had the level at B-16, 12 dot it or something else. These are standard 13 based on the cross-sections. procedures that every geologist and engineer knows 14 14 and, frankly, are on the Geoscientists Practice Act Q Okay. 15 A Okay? I had to level --15 16 Q Well, let me stop you there. Let's talk 16 Q All right. Now, you answered a question 17 about B-16. When you say from the cross-sections, 17 different than what I asked. I understand you 18 you're saying where that line you're saying that 18 disagree with how he did it. But you heard what he 19 B-16 is from the cross-section line. Correct? 19 said, and you heard BFI's other witnesses, I suppose, 20 A It's on the cross-section, yes. 20 saying that those aren't actual measurements. They're 21 21 Q Okay. But you're not saying that there was inferred lines. Do you have reason to doubt that? 22 an actual groundwater measurement of that amount at 22 A I took them at face value in the application.

All right. What I'm asking you is different

26 (Pages 1611 to 1614)

And at face value, with signed and sealed documents, I

believe I took them correctly.

23

24

25

	Page 1615		Page 1617
1	than that. Now that you've heard their explanation,	1	representation?
2	do you doubt that that's what they actually represent?	2	A No.
3	A They may not have meant it to, but they did.	3	Q Okay. How is it unfair? I mean, there are
4	And that's in the application, which is the subject of	4	actual measurements that go into determining the
5	this proceeding.	5	velocity. Correct?
6	Q Okay. So you're saying you do doubt that he	6	A There is an actual measurement of hydraulic
7	was telling the truth when he said those were inferred	7	conductivity. There is an actual measurement of water
8	lines?	8	levels. The porosity is generally assumed because we
9	A No, I'm not saying that. I'm saying that	9 10	don't have actual measurements.
10 11	because of the way they were displayed both in	11	Q Do you have any disagreement with the porosity assumption?
12	Mr. Terrill's groundwater maps and in Mr. Snyder's groundwater maps, and on the cross-sections in the	12	A I don't know. I don't know what it is. I
13	application, signed and sealed documents in the	13	didn't care.
14	application, signed and seared documents in the application, that they have told me explicitly that	14	Q You haven't looked at it?
15	that's their best position of the contour, and that's	15	A Huh-uh.
16	the water surface. And it's the application, not what	16	Q And you haven't made any actual measurements
17	they say trying to get out of it later on subject to	17	of the groundwater velocity yourself, have you?
18	this proceeding.	18	A No. One has a little difficulty measuring
19	Q All right. Let's switch subjects. I think	19	groundwater velocity.
20	we beat that one to death. All right.	20	Q All right. Now, during your testimony, you
21	Are you familiar with the groundwater	21	raised an issue about the I'm going to say implied
22	gradient velocity measurements that have been taken	22	increase in velocity of the groundwater movement based
23	and testified to in this case?	23	on changes in the subsurface clays. Did I say that
24	A Yes.	24	correctly?
25	Q All right. The testimony, at least as I	25	A Close enough for starters.
	Page 1616		Page 1618
1	recall it, earlier in the hearing was that it was in	1	Q My understanding of your testimony is there's
2	the neighborhood of five to ten feet per year. Is	2	been some sort of change in the subsurface clays which
3	that your recommendation?	3	you think is because of some sort of industrial waste,
4	A Close. I think he said six to ten, but we	4	solvents, acids, and that has changed the speed of
5	won't quibble.	5	groundwater movement. Is that a fair representation
6	Q All right. Why don't you go ahead and write	6	of your testimony?
7	six to ten in the direction of the gradient there.	7	A Yes. It's changed it not everywhere, but
8	A Okay. Now, you understand I don't	8	where the clays have been impacted by those materials.
9 10	necessarily agree with it?	9 10	Q All right. No. 1, where are the acids and
11	Q Yes. That's fine. We'll talk about that in just a minute.	11	solvents that you speculate have caused this change in groundwater velocity?
12	A Okay.	12	A Are you asking me where they are today or
13	Q And is it your understanding that that is	13	where they were put?
14	measured based on actual measurements taken of	14	Q Both. Let's start where they were put.
15	groundwater movement?	15	A They were put in what Waste Management they
16	A It is based on slug tests.	16	were largely put in what Waste Management calls its
17	Q Is that a "yes"?	17	industrial waste management unit. There was a firm,
18	A Do I need to go into no. I've got to tell	18	Industrial Waste Materials Management, that put them
19	you how it was based on.	19	there.
20	Q All right. Go ahead.	20	Q All right.
21	A It's not based purely on measurements. It's	21	A There are some that are outside that area
22	based on slug tests and water levels and an estimate	22	were put outside that area.
23	of the porosity.	23	Q Now, just so that the record is clear, you're
24	Q It's based on measured data, and then an	24	not saying that any of these solvents or acids were in
25	amount is inferred from that. Is that a fair	25	BFI's landfill. Correct?

27 (Pages 1615 to 1618)

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		1	
	Page 1619		Page 1621
1	A I'm unaware that they were, if they were.	1	per year, do you have any idea how many years or
2	Q And everything that you're basing your theory	2	decades it would take to get from BFI's landfill to
3	on is based on the acids and solvents that might have	3	the Applied Materials' well?
4	been put in Waste Management's landfill. Correct?	4	A Well, I haven't personally done the math, but
5	A That is correct.	5	I think I heard Mr. Snyder say it would be over 100
6	Q And by the way, did you look at you know	6	years or around 100 years, which would be an
7	that Travis County has a closed landfill right next to	7	impossibility, but that's assuming his six to ten feet
8	the Waste Management landfill. Correct?	8	is correct.
9	A Yes.	9	Q Okay. Have you attempted let me ask it a
10	Q Did you look at any of the wastes that were placed into that landfill?	10	different way. From the Allied from the Waste
11 12	-	11 12	Management landfill, assuming the six to ten feet per
13	A To the extent that they're known, yes. Q Is that a lined or an unlined landfill?	13	year, what time frame would it take for those
14	Q Is that a lined or an unlined landfill? A Oh, it's unlined.	14	constituents to get from Waste Management to Applied Materials' well?
15	Q Okay. So back to my question about your	15	A I haven't done that calculation. It would be
16	theory on acids and solvents getting into the clays.	16	a useless one.
17	Where are they now in your theory, where are they	17	Q This theory that you have that the
18	now?	18	groundwater velocity has increased, have you seen any
19	A Well, that's a very interesting question. It	19	actual measured data that supports your theory?
20	appears that they've made it across Applied Materials'	20	A Yes, to the extent that tests have shown that
21	property. How far across Lake Walter E. Long they	21	strong acid and even field measurements have shown
22	have gone, I don't know because I have no data.	22	that strong acids will desiccate clays and drastically
23	Q Okay. How far is it from the industrial pit	23	change their hydraulic conductivity.
24	in the Waste Management landfill to Applied Materials?	24	Q That wasn't my question. Let me ask it a
25	A I haven't measured it.	25	different way. Okay?
	Page 1620		Page 1622
1	Q No idea?	1	Have you seen any actual measurements of
2	A Well, I would guess at least 1,000 feet.	2	groundwater velocity that support your theory that
3	Q Okay. Since you haven't measured it, I'm	3	there has been an increase in groundwater velocity?
4	probably safe in saying this, but let me just ask it.	4	A All right. We'll narrow it down to that
5	You haven't tried to calculate what the velocity of	5	little bit. And that is yes, because we have found
6	the groundwater would be to get from the Waste	6	constituents, or somebody has found constituents, on
7	Management industrial disposal site to where it was	7	Applied Materials that cannot have come from Applied
8	picked up on Applied Materials' wells. Correct?	8	Materials. Some of them are upgradient of even all
9	A No. That really would be an impossible	9	
		1	their facilities. But they're strange chemicals and
10	calculation because we have no idea when the material	10	would not have been generated by anything Applied
11	that was found at Applied Materials was placed there.	11	would not have been generated by anything Applied Materials or any other known facility, gasoline
11 12	that was found at Applied Materials was placed there. Was it yesterday or not yesterday just before	11 12	would not have been generated by anything Applied Materials or any other known facility, gasoline station, car body shop, would ever produce.
11 12 13	that was found at Applied Materials was placed there. Was it yesterday or not yesterday just before they sampled it, or did it come ten years before.	11 12 13	would not have been generated by anything Applied Materials or any other known facility, gasoline station, car body shop, would ever produce. Q Dr. Kier, you're not answering my question.
11 12 13 14	that was found at Applied Materials was placed there. Was it yesterday or not yesterday just before they sampled it, or did it come ten years before. Q Now, on the other hand, if you took do you	11 12 13 14	would not have been generated by anything Applied Materials or any other known facility, gasoline station, car body shop, would ever produce. Q Dr. Kier, you're not answering my question. You're inferring something based on something that was
11 12 13 14 15	that was found at Applied Materials was placed there. Was it yesterday or not yesterday just before they sampled it, or did it come ten years before. Q Now, on the other hand, if you took do you know the distance between the BFI landfill and Applied	11 12 13 14 15	would not have been generated by anything Applied Materials or any other known facility, gasoline station, car body shop, would ever produce. Q Dr. Kier, you're not answering my question. You're inferring something based on something that was found in a well. I'm asking a simpler question.
11 12 13 14 15 16	that was found at Applied Materials was placed there. Was it yesterday or not yesterday just before they sampled it, or did it come ten years before. Q Now, on the other hand, if you took do you know the distance between the BFI landfill and Applied Materials' site?	11 12 13 14 15 16	would not have been generated by anything Applied Materials or any other known facility, gasoline station, car body shop, would ever produce. Q Dr. Kier, you're not answering my question. You're inferring something based on something that was found in a well. I'm asking a simpler question. Have you seen any measured data
11 12 13 14 15 16	that was found at Applied Materials was placed there. Was it yesterday or not yesterday just before they sampled it, or did it come ten years before. Q Now, on the other hand, if you took do you know the distance between the BFI landfill and Applied Materials' site? A It's whatever the right-of-way is for Giles	11 12 13 14 15 16 17	would not have been generated by anything Applied Materials or any other known facility, gasoline station, car body shop, would ever produce. Q Dr. Kier, you're not answering my question. You're inferring something based on something that was found in a well. I'm asking a simpler question. Have you seen any measured data supporting the idea that the groundwater velocity
11 12 13 14 15 16 17	that was found at Applied Materials was placed there. Was it yesterday or not yesterday just before they sampled it, or did it come ten years before. Q Now, on the other hand, if you took do you know the distance between the BFI landfill and Applied Materials' site? A It's whatever the right-of-way is for Giles Road plus 50 feet, more or less.	11 12 13 14 15 16 17	would not have been generated by anything Applied Materials or any other known facility, gasoline station, car body shop, would ever produce. Q Dr. Kier, you're not answering my question. You're inferring something based on something that was found in a well. I'm asking a simpler question. Have you seen any measured data supporting the idea that the groundwater velocity movement is something much greater than six to ten
11 12 13 14 15 16 17 18	that was found at Applied Materials was placed there. Was it yesterday or not yesterday just before they sampled it, or did it come ten years before. Q Now, on the other hand, if you took do you know the distance between the BFI landfill and Applied Materials' site? A It's whatever the right-of-way is for Giles Road plus 50 feet, more or less. Q Now, have you measured the distance between	11 12 13 14 15 16 17 18	would not have been generated by anything Applied Materials or any other known facility, gasoline station, car body shop, would ever produce. Q Dr. Kier, you're not answering my question. You're inferring something based on something that was found in a well. I'm asking a simpler question. Have you seen any measured data supporting the idea that the groundwater velocity movement is something much greater than six to ten feet per year?
11 12 13 14 15 16 17 18 19 20	that was found at Applied Materials was placed there. Was it yesterday or not yesterday just before they sampled it, or did it come ten years before. Q Now, on the other hand, if you took do you know the distance between the BFI landfill and Applied Materials' site? A It's whatever the right-of-way is for Giles Road plus 50 feet, more or less. Q Now, have you measured the distance between the BFI landfill and where there were some	11 12 13 14 15 16 17 18 19 20	would not have been generated by anything Applied Materials or any other known facility, gasoline station, car body shop, would ever produce. Q Dr. Kier, you're not answering my question. You're inferring something based on something that was found in a well. I'm asking a simpler question. Have you seen any measured data supporting the idea that the groundwater velocity movement is something much greater than six to ten feet per year? A Well, yes, but you just don't like my answer.
11 12 13 14 15 16 17 18	that was found at Applied Materials was placed there. Was it yesterday or not yesterday just before they sampled it, or did it come ten years before. Q Now, on the other hand, if you took do you know the distance between the BFI landfill and Applied Materials' site? A It's whatever the right-of-way is for Giles Road plus 50 feet, more or less. Q Now, have you measured the distance between	11 12 13 14 15 16 17 18	would not have been generated by anything Applied Materials or any other known facility, gasoline station, car body shop, would ever produce. Q Dr. Kier, you're not answering my question. You're inferring something based on something that was found in a well. I'm asking a simpler question. Have you seen any measured data supporting the idea that the groundwater velocity movement is something much greater than six to ten feet per year? A Well, yes, but you just don't like my answer. That is, if you have these constituents over at
11 12 13 14 15 16 17 18 19 20 21	that was found at Applied Materials was placed there. Was it yesterday or not yesterday just before they sampled it, or did it come ten years before. Q Now, on the other hand, if you took do you know the distance between the BFI landfill and Applied Materials' site? A It's whatever the right-of-way is for Giles Road plus 50 feet, more or less. Q Now, have you measured the distance between the BFI landfill and where there were some constituents reported on Applied Materials' monitor	11 12 13 14 15 16 17 18 19 20 21	would not have been generated by anything Applied Materials or any other known facility, gasoline station, car body shop, would ever produce. Q Dr. Kier, you're not answering my question. You're inferring something based on something that was found in a well. I'm asking a simpler question. Have you seen any measured data supporting the idea that the groundwater velocity movement is something much greater than six to ten feet per year? A Well, yes, but you just don't like my answer. That is, if you have these constituents over at Applied Materials and they could only have come from
11 12 13 14 15 16 17 18 19 20 21	that was found at Applied Materials was placed there. Was it yesterday or not yesterday just before they sampled it, or did it come ten years before. Q Now, on the other hand, if you took do you know the distance between the BFI landfill and Applied Materials' site? A It's whatever the right-of-way is for Giles Road plus 50 feet, more or less. Q Now, have you measured the distance between the BFI landfill and where there were some constituents reported on Applied Materials' monitor wells? A No, I have not measured those distances.	11 12 13 14 15 16 17 18 19 20 21 22	would not have been generated by anything Applied Materials or any other known facility, gasoline station, car body shop, would ever produce. Q Dr. Kier, you're not answering my question. You're inferring something based on something that was found in a well. I'm asking a simpler question. Have you seen any measured data supporting the idea that the groundwater velocity movement is something much greater than six to ten feet per year? A Well, yes, but you just don't like my answer. That is, if you have these constituents over at
11 12 13 14 15 16 17 18 19 20 21 22 23	that was found at Applied Materials was placed there. Was it yesterday or not yesterday just before they sampled it, or did it come ten years before. Q Now, on the other hand, if you took do you know the distance between the BFI landfill and Applied Materials' site? A It's whatever the right-of-way is for Giles Road plus 50 feet, more or less. Q Now, have you measured the distance between the BFI landfill and where there were some constituents reported on Applied Materials' monitor wells? A No, I have not measured those distances.	11 12 13 14 15 16 17 18 19 20 21 22 23	would not have been generated by anything Applied Materials or any other known facility, gasoline station, car body shop, would ever produce. Q Dr. Kier, you're not answering my question. You're inferring something based on something that was found in a well. I'm asking a simpler question. Have you seen any measured data supporting the idea that the groundwater velocity movement is something much greater than six to ten feet per year? A Well, yes, but you just don't like my answer. That is, if you have these constituents over at Applied Materials and they could only have come from Waste Management, that is a measure of groundwater

28 (Pages 1619 to 1622)

	Page 1623		Page 1625
1	Q Okay. Let's put aside your inference that	1	MR. RENBARGER: I think there may be
2	one came from the other. I'm talking about	2	some confusion as to the pre- and post-2006 MSW rules
3	measurement of water movement itself.	3	that appears at least from this outsider listening in
4	A You're asking has anyone tested and run tests	4	to the questioning, there may be a little disconnect
5	to ascertain the hydraulic conductivity? Is that what	5	there.
6	you're asking?	6	Q (BY MR. TERRILL) All right. I assumed,
7	Q I'm asking whether	7	maybe wrongly so, that you were that you were
8	A That might have been changed.	8	reviewing this based on your earlier testimony with
9	Q I'm asking whether you have.	9	the understanding that the rules that were in effect
10	A Oh. Certainly not.	10	at the time the application was filed are what this
11	Q All right. Now, has anyone else come up with	11	application will be judged by.
12	any measurements saying that it's anything other than	12	A That's my assumption, yes.
13	1 7	13	Q All right. They're in compliance with those
14		14	rules the monitoring plan is in compliance with
15		15	those rules, isn't it?
16	, ,,,	16 17	A And my answer doesn't change. In terms of
17 18	two basic complaints about the landfill, one of which		the constituents that they plan to have analyzed for,
19	C ,	18 19	it probably meets the rules. But in terms of the placement of the monitoring wells and the
20	least your theory that the landfill is leaking. And then your second complaint, as I understand it, is	20	justification for that placement, it does not.
21	that the monitoring plan is insufficient. Correct?	21	Q And so what is your recommendation of what
22	A Correct.	22	additional requirements?
23	Q Now	23	A There needs to be two things. One is to meet
24	A I say it's highly probable it's leaking,	24	the rules. One is a justification for where those
25	because I can't come up with any other reason.	25	wells are placed. Simply giving a distance isn't
	· ·		Page 1626
	Page 1624		
1	Q All right. The monitoring plan as I	1	sufficient under the current rules. It may not be
2	understand your testimony, you have what I'll call a	2	under the post-2007 rules either. That's another
3	professional disagreement about whether the plan meets	3	story.
4	the intent of the agency's rules but not is that	4	Second, this application has designated
5	correct?	5	no upgradient wells. That is a requirement under the
6	A I don't know. I don't think anybody asked	6	rules. You must have an upgradient well, and there
7	the other witnesses the questions that would elicit	7	isn't one in this application. There are none that
8	the kind of so I could make a comparison.	8	are designated. Every single monitoring well is
9 10	Q Well, my question is a little bit more	9	designated as a downgradient well, so it doesn't meet
11	1 1 1 1	10 11	the rules.
12	that the plan itself complies with the TCEQ rules and regulations for monitoring. Correct?	12	Q And that's because there's a well there are
13		13	wells that completely encircle the perimeter of the property. Correct?
14		14	A Correct.
15	landfill in isolation. Insofar as the placement of	15	Q Who is your client in this case?
16	the monitoring wells, there is absolutely no	16	A TJFA.
17	justification for the placement, which is required	17	Q Have you been to TJFA's property?
18	under the rules that this application is being	18	A Yes.
19	processed.	19	Q How many times?
20	Q I'll ask it again. The rules, as they are	20	A I would have to say innumerable. I have no
21	written, it complies with the monitoring plan rules,	21	idea.
22	doesn't it?	22	Q Innumerable?
23	A Not the way you ask the question.	23	A Uh-huh.
24	MR. RENBARGER: Mr. Terrill, if I may.	24	Q More than ten?
25	MR. TERRILL: Sure.	25	A Oh, easily.

29 (Pages 1623 to 1626)

	Page 1627		Page 1629
1	Q How far is it from the landfill?	1	Q Dr. Yuliana, he worked reviewing this
2	A How far is what from what landfill?	2	application as well. Correct?
3	Q TJFA's property.	3	A Yes.
4	A Oh, you're talking about are you talking	4	Q And that was his assignment through you as a
5	about	5	subcontractor?
6	Q Okay. I wasn't talking about the TDS	6	A The financial part came through me. The
7	landfill.	7	instructions did not necessarily come through me. The
8	A Okay.	8	same with Mr. Neyens.
9	Q And I know it gets confusing.	9	Q That, presumably, came from Mr. Gregory.
10	A All right. Well, it was confusing because	10	Correct?
11	TJFA also has property surrounding its own landfill,	11	A Yes, or one of his representatives.
12	and I have been to that.	12	Q Now, Dr. Yuliana reviewed the BFI application
13	Q All right.	13	as well. Correct?
14	A Okay? And I've been to the TJFA property at	14	A Portions of it.
15 16	other landfills. But this particular one, no, I have not been to.	15 16	Q And I think he does the groundwater chemistry work. Is that correct?
16 17		17	A Yes, he's a hydrogeologist.
18	Q All right. How much are you paid an hour? A \$160.	18	Q And he has not offered any testimony in this
18 19	Q And how much have you been paid for this	19	case. Correct?
20	case?	20	A Correct.
21	A I don't know.	21	Q And how much were his bills? How many like
22	Q Ballpark it.	22	in tens of thousands, how much did he spend looking at
23	A Well, it's difficult to ballpark because my	23	the application?
24	invoices do not just include myself.	24	A I'm going to guess and it's a pure guess
25	Q What does that mean?	25	between ten and 20. I mean, you've got the invoices,
	Page 1628		Page 1630
1	A Well, for simplicity, the work that Jim	1	so you can add it up yourself.
2	Neyens did he's not a witness in this case, but the	2	Q I don't have them. I don't disagree that
3	work that he did was billed through my firm. It was	3	somebody else perhaps sitting to my right might have
4	my contract with him or TRC, and the work that	4	them, but I don't.
5	Dr. Yuliana, who is not a witness in this case, was	5	A I'm sure he'll be glad to give them to you.
6	billed through my firm, as well as my one and only	6 7	MR. TERRILL: Right. I'll pass the
7 8	associate.	8	witness. JUDGE NEWCHURCH: We'll go ahead and
9	Q Okay. If you include their amounts, what do those bills add up to?	9	break for lunch now because we have to be back at 1:30
10	A I still don't know.	10	sharp because we have time certain witnesses. So
11	Q Ballpark.	11	we'll be in recess until 1:30.
12	A I don't know. Somewhere between 50 and	12	(Recess from 12:06 p.m. to 1:35 p.m.)
13	\$100,000.	13	(1000000 110111 12.000 p.iii. to 1.33 p.iii.)
14	Q Okay. Now, Mr. Neyens, he wasn't called by	14	
15	TJFA as a witness, but he did, in fact, review the	15	
16	application and prepare prefiled testimony. Correct?	16	
17	A Yes.	17	
18	Q And TJFA chose not to call him, but that	18	
19	didn't mean that he wasn't working on this case.	19	
20	Right?	20	
21	A That is correct.	21	
22	Q And what was the other name? Dr. Yuliana?	22	
23	A Yuliana.	23	
24	Q Was it Doctor or Mister?	24	
25	A Doctor.	25	

30 (Pages 1627 to 1630)

TCEQ DOCKET NO. 2007-1774-MSW

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Page 1631
                                                                                                           Page 1633
                AFTERNOON SESSION
                                                                    two exhibits. That is her prefiled testimony and
 2
              TUESDAY, JANUARY 28, 2009
                                                               2
                                                                    attached exhibit.
 3
                                                               3
                                                                            JUDGE NEWCHURCH: Any objection?
                  (1:35 p.m.)
 4
             (Exhibit NNC Nos. BEST-1 through BEST-8,
                                                               4
                                                                            MR. CARLSON: None from BFI.
 5
      BWI-1, BWI-2, ER-1 through ER-7, EW-1, EW-2, JB-1
                                                               5
                                                                            JUDGE NEWCHURCH: Then JWE-1 and 2 are
 6
      through JB-3, JWE-1, JWE-2, MCO-1, MCU-1, MCU-2, MM-1
                                                               6
                                                                    both admitted.
 7
                                                               7
                                                                            (Exhibit NNC Nos. JWE-1 and JWE-2
 8
             JUDGE NEWCHURCH: Let's go on the
                                                               8
                                                                    admitted)
 9
      record. It's 1:35 p.m. Are there any preliminary
                                                               9
                                                                            MR. BLACKBURN: The third is Barbara
10
      matters this afternoon?
                                                              10
                                                                    Winchell. Her prefiled testimony is Exhibit BWI-1,
11
             MR. BLACKBURN: Well. Your Honor, I
                                                             11
                                                                    and there is an attached Exhibit BWI-2. I move
12
                                                             12
      don't know if it's preliminary, but I think we were
                                                                    admission for those exhibits.
13
                                                             13
      going to take some of our many witnesses out of order.
                                                                            JUDGE NEWCHURCH: Any objection to that?
14
             JUDGE NEWCHURCH: That's what we're
                                                             14
                                                                            MR. CARLSON: No objection.
15
                                                             15
                                                                            JUDGE NEWCHURCH: BWI-1 and 2 are both
      going to do next. I was just asking about procedural
16
                                                             16
      type things. So, by prior agreement, we are going to
                                                                    admitted.
17
                                                                            (Exhibit NNC Nos. BWI-1 and BWI-2
      interrupt the cross-examination of Dr. Kier, and we're
                                                              17
18
                                                              18
      going to go to NNC's case.
                                                                    admitted)
19
                                                              19
             And, Mr. Blackburn, first of all, did
                                                                            MR. BLACKBURN: Okay. The fourth is
20
      you have an opening statement?
                                                             20
                                                                    Marcelina Cook. That is slightly different in that
21
             MR. BLACKBURN: No, Your Honor. I'll
                                                             21
                                                                    it's been agreed that she can be admitted without
22
                                                             22
      just go ahead and move forward.
                                                                    cross-examination or without live testimony, but there
23
                                                              23
             JUDGE NEWCHURCH: Okay.
                                                                    are some deposition excerpts, I believe, that the
24
                                                              24
                                                                    counsel for BFI would like to introduce. But I move
             MR. BLACKBURN: Let me start by saying I
25
      think by prior agreement there are, first of all,
                                                              25
                                                                    admission of Exhibit MCO-1, which is the only exhibit
                                                                                                           Page 1634
                                              Page 1632
 1
      three witnesses that I believe it's been agreed that
                                                               1
                                                                    attached to her which is her prefiled testimony.
 2
      their testimony will be admitted into the record
                                                               2
                                                                    And I believe that with that agreement, we can go
 3
      without there being the necessity of their testifying,
                                                               3
                                                                    forward.
 4
      and I have given copies of the exhibits to the court
                                                               4
                                                                            JUDGE NEWCHURCH: Mr. Reed, would you
                                                               5
 5
                                                                    like to make that offering now or later?
 6
               One of those witnesses is Marion
                                                               6
                                                                            MR. REED: That would be fine, Your
 7
      Childress-Usher. She has Exhibits MCU-1 and MCU-2,
                                                               7
                                                                    Honor. I'm ready to do that now.
 8
      and I move admission for those two exhibits. That's
                                                               8
                                                                            JUDGE NEWCHURCH: Okay. Why don't we
 9
      her prefiled testimony and the exhibit attached to it.
                                                               9
                                                                    just clear up Ms. Cook once and for all, then. So
10
               JUDGE NEWCHURCH: Okay. I'm just
                                                              10
                                                                    where are those exhibits, please?
11
                                                             11
      looking for my copy of it. Marion Childress-Usher,
                                                                            MR. REED: I'd like to enter her
12
      and you've marked these exhibits as 1 and 2. Okay.
                                                             12
                                                                    Deposition Exhibit 162. I'd also like to enter
13
              MR. BLACKBURN: Yes. Your Honor.
                                                             13
                                                                    Page 13 of her deposition, Lines 4 through 14 I have
14
              JUDGE NEWCHURCH: And is it correct that
                                                             14
                                                                    copies and her deposition, Page 20, Lines 7 through
15
                                                             15
      those could be admitted without objection or without
                                                                    16.
16
                                                              16
                                                                            MR. CARLSON: Do you want to mark those
      necessity for Ms. Childress-Usher to testify?
17
              MR. CARLSON: Correct, Your Honor.
                                                             17
                                                                    as BFI exhibits? Would this be easier?
18
              JUDGE NEWCHURCH: Then the motion to
                                                             18
                                                                            JUDGE NEWCHURCH: Can we make them one
19
      admit MCU-1 and 2 is granted.
                                                             19
                                                                    exhibit? Just make that BFI 12. Is that right?
20
               (Exhibit NNC Nos. MCU-1 and MCU-2
                                                             20
                                                                            MR. CARLSON: Yes.
21
                                                              21
                                                                            JUDGE NEWCHURCH: So let's make that BFI
      admitted)
22
              MR. BLACKBURN: The next of those
                                                              22
                                                                    12.
23
                                                              23
                                                                            (Exhibit BFI No. 12 marked)
      witnesses is Jennifer Wells. I believe the same
24
                                                              24
                                                                            JUDGE NEWCHURCH: All right. So
      agreement exists with Jennifer Wells. Her exhibits
25
      are JWE-1 and JWE-2, and I moved admission for those 25
                                                                    Page 13, Page 20, and a map.
```

31 (Pages 1631 to 1634)

	Page 1635		Page 1637
1	MR. REED: Yes, Your Honor.	1	Farms landfill site?
2	JUDGE NEWCHURCH: And that's going to be	2	A I do.
3	BFI collectively, BFI-12. Am I to understand	3	Q Could you tell us just kind of generally
4	there's no objection to BFI-12 being admitted?	4	where it is and how close or how far away from the
5	MR. BLACKBURN: No objection.	5	landfill?
6	JUDGE NEWCHURCH: Without objection, BFI	6	A Our land is approximately one-fourth mile
7	12 is admitted.	7	west of the BFI landfill on Blue Goose Road.
8	(Exhibit BFI No. 12 admitted)	8	Q And what is the size of your land?
9	MR. BLACKBURN: And the next is Jeremiah	9	A 119 acres.
10	Bentley, which is JB-1, JB-2, and JB-3, the prefiled	10	Q And have you described your testimony that
11	testimony and two attachments. I asked the court	11	you are interested in presenting to this Court in the
12	reporter to go ahead and date stamp that before I	12	exhibit that's in front of you, JAW-1, and the
13	talked with Mr. Reed. Mr. Reed does want to offer	13	attachment, JAW-2?
14	deposition testimony with regard to Mr. Bentley. I'm	14	A Yes.
15	certainly in agreement with that. He does not have	15	Q And is that true and correct to the best of
16	that prepared yet, and I presume, since we're handling	16	your knowledge?
17	these as separate BFI exhibits, whenever he assembles	17	A Yes.
18	this, he'll pass it out. And we'll just simply he	18	MR. BLACKBURN: Move admission JAW-1 and
19	will offer it, and I there would certainly be no	19	2.
20	objection on our part to that, because that's our	20	JUDGE NEWCHURCH: I think there were
21	agreement. So, with that, I offer JB-1 through 3.	21	objections early on. Correct?
22	JUDGE NEWCHURCH: With that agreement,	22	MR. BLACKBURN: I think we addressed all
23	is there no objection to the admission of JB-1, 2, and	23	of those objections, if I'm not
24	3?	24	JUDGE NEWCHURCH: Okay. Those have all
25	MR. REED: No objection.	25	been addressed? That's what I'm clearing up.
	Page 1636		Page 1638
1	JUDGE NEWCHURCH: And those are all	1	MR. BLACKBURN: I believe these have
2	admitted.	2	been conformed to the objections and rulings.
3	(Exhibit NNC Nos. JB-1, JB-2 and JB-3	3	JUDGE NEWCHURCH: Got you.
4	admitted)	4	MR. CARLSON: That's our understanding
5	MR. BLACKBURN: Next I'd like to proceed	5	as well, Judge.
6	to the live witnesses that are here, and I'd like to	6	JUDGE NEWCHURCH: Okay. Any further
7	start off with Mr. John Wilkins, please. John, if	7	objection, then, to JAW-1 or 2?
8	you'd come up and take a seat up here, please.	8	(No response)
9	JUDGE NEWCHURCH: Mr. Wilkins, you'll be	9	JUDGE NEWCHURCH: Then they are both
10	over here next to the court reporter, and you'll need	10	admitted.
11	to take the oath.	11	(Exhibit NNC Nos. JAW-1 and JAW-2
12	(Exhibit NNC Nos. JAW-1 and JAW-2	12	admitted)
13	marked)	13	MR. BLACKBURN: I pass the witness and
14	JUDGE NEWCHURCH: Mr. Blackburn?	14	tender him for cross-examination.
15	PRESENTATION ON BEHALF OF	15	JUDGE NEWCHURCH: Let's see. TJFA?
16	NORTHEAST NEIGHBORS COALITION	16	MR. RENBARGER: Thank you, Judge. Just
17	JOHN A. WILKINS,	17	very quickly.
18	•	18	CROSS-EXAMINATION
19		19	BY MR. RENBARGER:
20		20	Q Mr. Wilkins, good afternoon.
21	Q Would you state your name, please, sir?	21	A Good afternoon.
22	A John A. Wilkins.	22	Q My name is Bob Renbarger. I represent an
23	Q And where do you live, Mr. Wilkins?	23	entity called TJFA, L.P., which is a party to these
24	A 803 Cutlass, Lakeway, Texas.	24	proceedings. I understand you own 119 acres a quarter
25	Q And do you own property near the BFI Sunset	25	mile west of the BFI landfill facility. Is that

32 (Pages 1635 to 1638)

	Page 1639		Page 1641
1	correct?	1	often than that.
2	A Correct.	2	Q Okay. And you state that you had complained
3	Q Is that an investment property?	3	of odors to BFI about five years ago. You said you
4	A I suppose you would classify it as that.	4	haven't complained since then. Have you ever talked
5	Q When you say "you suppose you could," are you	5	to anyone besides a representative of BFI about any
6	holding the property for investment?	6	odor issues?
7	A Yes.	7	A I talked to my tenant.
8	Q And when	8	Q To your tenant? But never anyone from TCEQ?
9	A I inherited the land, so	9	A No.
10	Q I see. What are your intentions as far as	10	Q And you only complained the once to BFI?
11	the future use of the land?	11	A Yes.
12	A Hopefully to sell it someday.	12	Q Were the odors particularly strong the time
13	Q Have you ever attempted to sell it in the	13	you complained, or was that just
14	last five years?	14	A Yes. They were very strong.
15	A I've never listed it with a real estate	15	Q Okay. Have they ever been that strong since?
16	broker.	16	A No.
17	Q Is there any particular reason for that?	17	Q Had you smelled odors before the time you
18	A Because of the two dumps that are near it.	18	complained?
19	There was never any interest.	19	A Yes, I had.
20	Q Have you actually solicited to see if there's	20	Q So you go out there about once a month, you
21	any interest in anyone purchasing the land?	21	testified. Do you have an approximation of what the
22	A No. One real estate company called, oh, a	22	frequency is that you have an odor issue when you're
23	year and a half ago, and they were mildly interested,	23	out there?
24	even put a contract on it, but then they learned about	24	A Well, it's been better lately. But when the
25	Waste Management purchasing the tract adjoining us,	25	wind is out of the east, sometimes, even lately, I can
	Page 1640		Page 1642
1	and they backed out.	1	pick up a whiff of odor.
2	Q I see. So is it your view as you sit here	2	Q So you notice the odor more when the wind is
3	today that the existence of the landfill properties in	3	blowing?
4	proximity to your 119-acre tract has inhibited the use	4	A From the east.
5	or commercial sale of your property?	5	Q From the east. Okay.
6	A Yes.	6	MS. MANN: I have no further question.
7	MR. RENBARGER: I pass the witness.	7	JUDGE NEWCHURCH: Mr. Shepherd?
8	JUDGE NEWCHURCH: Ms. Noelke?	8	MR. SHEPHERD: No questions.
9	MS. NOELKE: No questions, Your Honor.	9	JUDGE NEWCHURCH: Mr. Terrill?
10	JUDGE NEWCHURCH: Mr. Morse?	10	MR. TERRILL: No questions.
11	MR. MORSE: No questions, Your Honor.	11	JUDGE NEWCHURCH: Mr. Carlson?
12	JUDGE NEWCHURCH: Ms. Mann?	12	CROSS-EXAMINATION
13	CROSS-EXAMINATION	13	BY MR. CARLSON:
14 15	BY MS. MANN: O Good ofternoon, My name is Christina Mann	14 15	Q Good afternoon, Mr. Wilkins. I have just a few questions for you.
16	Q Good afternoon. My name is Christina Mann. I'm an attorney in the Public Interest Counsel at	16	*
16 17	TCEQ. I just have a couple of questions about how	17	I understand that you're technically not the owner of the property in an individual capacity.
18	often you go out to the property and what your	18	Is that correct?
19	perceptions are when you're there.	19	A That's correct.
20	So you live in Lakeway, but you own this	20	Q You are the trustee for a trust that owns the
21	property, and you are renting it to someone who runs	21	property?
	cattle out there. Is that correct?	22	A Yes. It's my dad bought it as trustee, and
			12 100. It's my dad cought it us trustee, and
22		23	he deeded it to me as trustee.
		23 24	he deeded it to me as trustee. Q So you serve in the capacity as trustee with

33 (Pages 1639 to 1642)

	Page 1643		Page 1645
1	A Correct.	1	A Oil and gas landman.
2	Q Okay. And there are some other beneficiaries	2	Q You said "landman." Could you explain for
3	of that trust that have a beneficial interest in the	3	the Judge what a landman does?
4	property we're talking about?	4	A A landman typically deals with oil and gas
5	A Correct.	5	interest, research title in the courthouse, determine
6	Q That would be what percentage of the	6	who owns the property, and then, on behalf of the oil
7	property do you own? Is it 30 percent?	7	and gas company, tries to buy an oil and gas lease
8	A 30.	8	from the landowner.
9	Q And your sister would be a beneficial owner	9	Q Do you have your own company, sir?
10	of another 30 percent. Correct?	10	A No.
11	A Correct.	11	Q Okay. So you go out and scout out properties
12	Q And then there are some other individuals who	12	for oil and gas purposes. Right?
13	own the other have a beneficial interest in the	13	A Yes.
14	other 40 percent. Is that correct?	14	Q And then do you actually attempt to purchase
15	A Correct.	15	desirable properties in your own name or in the name
16	Q Now, you testified you live in Lakeway.	16	of a company you formed?
17	Right?	17	A No.
18	A Correct.	18	Q Are there other companies who you use to
19	Q On the other side of the county from the	19	purchase the properties?
20	landfill. Right?	20	A To purchase the leases?
21	A Correct.	21	Q Or leases, in that case.
22	Q So I'll use the term "owner" loosely here	22	A Yes. You do that for the oil company.
23	based on what we said, but you are an absentee owner	23	Q All right. Now, are we talking about oil and
24	of this property. Right?	24	gas wells?
25	A Correct.	25	A Well, hopefully.
	Page 1644		Page 1646
1	Q Okay. You do have a tenant on the property.	1	Q Okay. That's what
2	Right?	2	A That's the end result.
3	A Correct.	3	Q It makes it a little bit more profitable for
4	Q And there is a single residence on the	4	you and everybody else. Isn't that right?
5	property?	5	A Yes.
6	A Yes.	6	Q Okay. And you do this, what, in the
7	Q And your tenant uses that property for	7	La Grange area? Is that what I understand?
8	agricultural purposes. Isn't that correct?	8	A Yes.
9	A Correct. He lives in the house and rents the	9	Q Okay. When you're going out and scouting oil
10	rest of the land for cattle grazing.	10	and gas wells to purchase or purchase for somebody or
11	Q It's a cattle operation. Right? There isn't	11	help them purchase, do you go around to the adjoining
12	any sort of row crops?	12	the owners of the adjoining properties and tell them
13	A No.	13	what you're doing?
14	Q You say "no," but there are no row crops.	14	A Well, typically, you call the person who owns
15	Right?	15	the oil and gas rights. Sometimes you don't even
16	A No row crops.	16	drive out. Nowadays, you use the phone.
17	Q Now, you've had the same tenant for 25 years	17	Q If there's a piece of property adjacent let's
18	out there, haven't you?	18	say you're looking at a particular piece of property
19	A That's correct.	19	for oil and gas purposes. Okay?
20	Q That's a pretty good turnover rate for a	20	A Okay.
21	landlord, isn't it?	21	Q And there's a piece of property right next
22	A Yes.	22	door that you're not interested in. Do you understand
23	Q Are you happy with that?	23	that scenario?
24	A Yes.	24	A Yes.
25	Q What do you do professionally, sir?	25	Q Do you contact the person next door that has

34 (Pages 1643 to 1646)

		1	DOCKET NO. 2007 1774 MSW
	Page 1647		Page 1649
1	the piece of property you're not interested in and	1	A No.
2	tell them what you're doing?	2	Q Okay. So your tenant uses a septic system.
3	A Typically, no.	3	Is that correct?
4	Q Do you consider the potential impacts of what	4	A Yes, but I'm not for certain.
5	you or your clients are doing with respect to the	5	Q Do you know if the city of Austin even can
6 7	adjoining properties?	6	provide water or wastewater services out to your
8	A Well, if you're just leasing, you don't do	7 8	property at this point in time? A No. I think we do have city water. It's
9	that. If you're if the company ultimately drills a well, someone else in the oil and gas company might	9	Pflugerville, I believe.
10	call them I think they would and notify them of	10	Q Not city of Austin?
11	what's going on.	11	A No.
12	Q Okay. You leave that to engineers. Right?	12	Q The last couple of questions. I believe you
13	A Yes, someone else in the chain of command.	13	have a little bit of testimony in your prefiled about
14	Q And your assumption when you do this is that	14	some vultures that you've seen or buzzards on the
15	the oil and gas well that's being drilled, if one	15	power line?
16	occurs, has been properly permitted through the	16	A Yes.
17	Railroad Commission. Is that correct?	17	Q Do you know how many roosts or flocks of
18	A That's correct.	18	buzzards there are up and down that transmission line
19	Q And properly engineered. Right?	19	through Central Texas?
20	A Correct.	20	A No.
21	Q Just a few questions about the property you	21	MR. CARLSON: I pass the witness.
22	or your trust owns. It's 119 acres. Is that correct?	22	JUDGE NEWCHURCH: Mr. Blackburn, is
23	A Yes.	23	there redirect?
24	Q It's located on the corner of is it Cameron	24	MR. BLACKBURN: No, Your Honor.
25	Road and Blue Goose?	25	JUDGE NEWCHURCH: Thank you,
	Page 1648		Page 1650
1	A Cameron, Blue Goose, and Springdale.	1	Mr. Wilkins. You're excused.
2	Q Okay. Springdale borders it on the left. Is	2	A Thank you, sir.
3	that right?	3	MR. BLACKBURN: I'd like to call Bob
4	A Right. On the west side.	4	Andrews.
5	Q And on the west side of your property, the	5	(Exhibit NNC Nos. RGA-1 and RGA-2
6	119-acre tract, there's a utility easement, isn't	6	marked)
7	there?	7	ROBERT G. ANDREWS,
8	A That's correct.	8	having been first duly sworn, testified as follows:
9	Q It's a large transmission line that goes	9	DIRECT EXAMINATION
10	through that easement?	10	BY MR. BLACKBURN:
11	A Correct.	11	Q Mr. Andrews, have you had a chance to look at
12	Q Dozens of feet high?	12	the exhibit that is in front of you marked RGA-1?
13	A Yes.	13	A Yes, sir.
14 15	Q Okay. That's an LCRA power line, isn't it?	14	Q And is there an attachment to that marked
16	A No. It's a city of Austin. Q Oh, city of Austin. Okay. And as far as the	15 16	RGA-2? A Yes.
17	topography of your property, it's kind of up and down,	17	
18	isn't it?	18	
19	A Yes. In front, it's fairly level. In the	19	please? A Robert Glen Andrews.
20	back, it's up and down. On the west side that you're	20	Q And where do you live, Mr. Andrews?
21	referring to, there is a creek.	21	A At 6815 Ashprington Lane in Austin, Texas,
22	Q It's a pretty varied topography. Correct?	22	part of the Harris Branch subdivision.
23	A Yes.	23	Q And where is Harris Branch located relative
24	Q That property is not currently serviced by	24	to the Sunset Farms landfill?
25	any sort of public wastewater utility, is it?	25	A North and a little bit east, less than a mile
<u> </u>	y F more mader additely, to ter		

35 (Pages 1647 to 1650)

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Page 1651 Page 1653 away. developer or the homebuilder, whoever it was that was 1 1 2 2 handling the sale of homes there, pointed out that the Q And is Exhibit RGA-1 and 2 are they your 3 prefiled testimony and a questionnaire that you filled 3 landfill was there but would eventually fill up and out regarding the Sunset Farms landfill? 4 4 close and indicated that that probably was a matter of 5 5 A Yes, sir. just a few years. 6 Q And is this testimony true and correct to the 6 Q And that was, again, back 18 years ago when 7 best of your knowledge? 7 you moved into the subdivision? 8 A Yes, sir. 8 A Yes, sir. 9 MR. BLACKBURN: I move admission of 9 Q Did the representations that the landfill 10 10 would close in just a few years, did that in any way RGA-1 and 2. 11 11 color your decision to purchase a residence in Harris JUDGE NEWCHURCH: Any objection? 12 12 MR. REED: No. Branch? 13 13 JUDGE NEWCHURCH: They are both A It left a feeling of expectation that the one 14 admitted. 14 major detraction from that development would 15 15 (Exhibit NNC Nos. RGA-1 and RGA-2 eventually go away. We felt like the development was 16 16 in a good area. It was located near a major highway. admitted) 17 17 MR. BLACKBURN: Pass the witness. They had plans for schools and parks, so there were 18 JUDGE NEWCHURCH: Mr. Renbarger? 18 lots of positive things about buying in Harris Branch 19 19 MR. RENBARGER: Just very briefly. at that time. The one major negative that we saw was 20 **CROSS-EXAMINATION** 20 the landfill, and with expectations that in a few 21 21 BY MR. RENBARGER: years that would fill up and close, yeah, I think it 22 22 O Good afternoon, Mr. Andrews. did have an impact on our decision. 23 23 A Good afternoon. Q Okay. Given what's taken place now over the 24 Q How long have you lived in the Harris Branch 24 last 18 years and the fact that we're sitting in this 25 25 subdivision? courtroom today talking about an expansion of this Page 1652 Page 1654 1 A About 18 years. 1 same landfill, would it be fair to say that your 2 Q Any plans to move? 2 expectations of that landfill going away have been 3 A Not that I know of. 3 pretty much disappointed? 4 4 Q Over the course of the 18 years of your A Yes, sir. 5 5 residency in Harris Branch, if you could, just MR. RENBARGER: Pass the witness. 6 summarize what, if any, complaints that you may have 6 JUDGE NEWCHURCH: Ms. Noelke? 7 7 about the Sunset Farms landfill. MS. NOELKE: No questions, Your Honor. 8 A I guess the primary complaint would be the 8 JUDGE NEWCHURCH: Mr. Morse? 9 odors, especially when the wind blows from the south. 9 MR. MORSE: No questions, Your Honor. 10 It carries that odor up into the Harris Branch area, 10 JUDGE NEWCHURCH: Ms. Mann? 11 which the whole development kind of sits a little 11 CROSS-EXAMINATION 12 bit lower than the landfill. So, when the wind blows 12 BY MS. MANN: 13 it up there, it kind of settles into the development 13 Q Good afternoon. My name is Christina Mann. 14 area and kind of lingers when it's there. 14 I'm with the Public Interest Counsel. I have a 15 15 Also, the trucks coming in and out of question about -- if you could help me understand how 16 the landfill, driving through the development area I the truck traffic is routed through the neighborhood 16 17 don't really think the roadways there were built for 17 or eventually makes its way through the neighborhood. 18 truck traffic, so they have, I feel, contributed to 18 From what road to what road is it cutting through? 19 the deterioration of the major roadway through the 19 A The major part of the development that you 20 20 see truck traffic on is the Harris Branch Boulevard. development. 21 21 Over the last oh, I'd say two years, three years, Q Mr. Andrews, have you had any expectation of 22 22 when the Sunset Farms landfill might close? that traffic has significantly declined. 23 A When we bought our home there, we knew the 23 Early on when we were there, there were 24 24 landfill was there. You had to drive right by it to a lot of trucks that came through that area. For 25 25 get into the development. The representatives of the whatever reason, in the last few years, the landfill

36 (Pages 1651 to 1654)

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truck traffic has declined significantly. But I think early on they contributed to what we're living with now on that Harris Branch Boulevard, which is a deteriorated roadway.

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Q So is Harris Branch Boulevard a shortcut between two other roads?

A Yes. I don't really know where the trucks were going to or from, but they would come out of and go into the landfill down Harris Branch Boulevard.

Q Okay. You said the truck traffic has gotten a little better gotten significantly better recently. Are you still noticing mud and dirt on Harris Branch Boulevard?

A Not on Harris Branch Boulevard, but on Blue Goose Road and on Highway 290. Anytime it rains, the roads are very muddy. I've actually seen cars spin out making the turn off of Harris Branch or Blue Goose Road onto Highway 290. It's a 90-degree turn with a yield sign at the traffic line, and a lot of cars approach that and make a continuous moving turn onto 290, and I've seen cars do complete 360s on the mud slick 290 part.

Q Okay. How can you tell is it your opinion that the mud and dirt is from the it looks like you conclude it's from the landfill trucks. What leads

Page 1657

has increased over the years, but not so many of them coming through the housing area anymore.

Q Do you have do you know whether the reason for that is that BFI might have prohibited its trucks from going through the neighborhood area?

A I have no idea why the truck traffic in the development has decreased. I know that during some of the homeowners' meetings where BFI representatives were there, that issue was brought up with their representatives. And so we just see that as a positive thing that occurred over the years.

Q Have you noticed whether the trucks that you used to let me see. I'll try this again. Have you noticed whether you still see BFI trucks in the neighborhood?

A I've never seen a truck that I could specifically identify as being a BFI truck.

Q And with respect to the mud on the roads, are you aware of whether BFI uses a wheel wash in their facility to wash mud off of the tires of the trucks?

A I have seen written materials that indicated that that type of effort was going to be made at the landfill, but I don't have any personal knowledge that they ever installed that equipment.

Q Do you remember when we spoke in your

Page 1656

you to that conclusion?

A As you drive south on Blue Goose Road, the roadway is completely mud-free until you get to the entrance/exits to the landfill, and then the mud starts to show up, and it continues to go south on Blue Goose Road and then east and west on Highway 290 until the mud comes off of whatever is tracking it.

MS. MANN: I have no further questions. JUDGE NEWCHURCH: Mr. Shepherd? MR. SHEPHERD: No questions. JUDGE NEWCHURCH: Mr. Terrill? MR. TERRILL: No questions, Your Honor. JUDGE NEWCHURCH: Mr. Reed? CROSS-EXAMINATION

BY MR. REED:

Q Good afternoon, Mr. Andrews. How are you?

A I'm doing great. Thanks.

Q I'm going to take this a little bit out of order from my outline, but let's talk about the truck traffic since we're on that subject. You mentioned a few minutes ago that you don't notice nearly as many trucks in the area as you used to. Is that correct?

A Not in the Harris Branch area. I think the amount of trucks coming and going out of the landfill onto the Blue Goose Road area probably, if anything,

Page 1658

deposition saying that you thought that the mud on the road was a much less significant problem now that they used sweepers out on the roads?

A Yes. The sweepers have been a significant improvement. And I don't recall when they started the sweeper operation, but since that has been in place, that does make a big difference in the roadway.

Q And you stated in your prefiled that the conditions that caused your concerns had not gotten either better or worse over the course of the 18 years. Is that correct? I can point you to Page 2, Line 10, of your prefiled, if you'd like.

A I think, in that regard, it's probably the odor issue has not changed a lot. As I indicated, the road conditions, the mud on the roads have gotten better, and the amount of traffic in that area has gotten better in recent years, but --

Q So you're testifying right now that, in general, things have gotten better with respect to the landfill with the exception of odor?

A From my perspective, yes, sir.

Q Do you recall, when taking your deposition, telling me that you believe that the odor problems have been less frequent in the past few years than they had been in past?

37 (Pages 1655 to 1658)

	Page 1659		Page 1661
1	A Yes, less frequent. And I don't know how	1	MR. REED: That's all I have. Pass the
2	much of that is due to wind conditions and how much of	2	witness.
3	it is attributable to efforts by BFI, but I have not	3	JUDGE NEWCHURCH: Mr. Blackburn?
4	personally noticed the odor as much as often. But	4	MR. BLACKBURN: Yes.
5	when it is there, it's just as distinct as it's ever	5	REDIRECT EXAMINATION
6	been.	6	BY MR. BLACKBURN:
7	Q Do you remember telling me in your deposition	7	Q Mr. Andrews, just a couple more questions.
8	that you also thought it was less noticeable most of	8	These odors that you've smelled in the last couple of
9	the time than it used to be?	9	years, could you describe them? What does it smell
10	A Less often, yes. I don't know that it I	10	like?
11	don't know that it's any less distinct.	11	A Something between well, I don't know. I
12	Q I would like to show you a little bit from	12	guess baby poop.
13		13	MR. REED: I've got a ten-month-old.
14	•	14	That's not good.
15		15	Q (BY MR. BLACKBURN) Do you smell the odor
16		16	outside of your house or inside of your house or both?
17		17	A In the times of the year when it's
18		18	comfortable to have the house open, you can smell it
19		19	inside the house. There are days that we would open
20	this issue has been discussed and talked about, my	20	our house because the weather would permit that, but
21	recollection is that over the years, it has gotten	21	we don't because we can smell the landfill on those
22	less frequent. And even when we do smell it, it is,	22	days. But if you, you know, just if you go outside,
23	most of the time, less noticeable than it was in	23	you're going to smell it, but if you are running the
24	earlier years, but there are times when it was still	24	air conditioner inside the house, you don't smell it.
25	just as significantly noticeable."	25	Q But if you open your windows or you otherwise
23		23	
	Page 1660		Page 1662
1	Q And we were talking about odors at this point	1	open your house up, you
2	in your deposition?	2	A You're going to smell it, yes.
3	A Right.	3	MR. BLACKBURN: Thank you. Pass the
4	Q Mr. Renbarger was asking you questions about	4	witness.
5	your expectation if the landfill would close a few	5	JUDGE NEWCHURCH: Is there any other
6	minutes ago.	6	cross-examination?
7	A Yes.	7	MR. REED: One last question.
8	Q Was it a sales representative that told you	8	RECROSS-EXAMINATION
9	this?	9	BY MR. REED:
10	A Yes.	10	Q Are you aware of whether there's a lift
11	Q Has anyone from BFI ever represented to you a	11	station near your house?
12	specific closure date?	12	A A lift station?
13	A No.	13	Q Yes. Do you know what a lift station is?
14	Q Has anybody from BFI ever represented	14	A You're talking about as far as sewage?
15	anything else about when the landfill would close?	15	Q Yes, sir.
16	A To me personally?	16	A No, I'm not aware of whether there's one or
17	Q Yes, sir.	17	not.
18		18	MR. REED: Nothing further.
19	Q Has anybody from BFI ever represented to you	19	JUDGE NEWCHURCH: Okay. Thank you,
20	whether they would or would not ever seek an expansion		Mr. Andrews. You're excused.
21	of the property?	21	MR. BLACKBURN: I'd like to call Delmer
22	A No.	22	Rogers.
	Q Have you ever spoken to anybody from BFI and	23	JUDGE NEWCHURCH: Welcome, Mr. Rogers.
23		24	
	asked the question about when they would close? A Not specifically.	24 25	Please have a seat. (Exhibit NNC Nos. DR-1 through DR-3

38 (Pages 1659 to 1662)

	Page 1663		Page 1665
1	marked)	1	(Exhibit NNC Nos. DR-1 through DR-3
2	DELMER D. ROGERS,	2	admitted)
3	having been first duly sworn, testified as follows:	3	MR. BLACKBURN: I pass the witness, Your
4	DIRECT EXAMINATION	4	Honor.
5	BY MR. BLACKBURN:	5	JUDGE NEWCHURCH: Mr. Renbarger?
6	Q Would you state your name for the record,	6	MR. RENBARGER: No questions of the
7	please?	7	witness, Judge.
8	A Delmer D. Rogers.	8	JUDGE NEWCHURCH: Ms. Noelke?
9	Q And where do you live, Mr. Rogers?	9	MS. NOELKE: No questions, Your Honor.
10	A In the Speyside subdivision in the Harris	10	JUDGE NEWCHURCH: Mr. Morse?
11	Branch neighborhood.	11	MR. MORSE: No questions.
12	Q And is that relatively near right near	12	JUDGE NEWCHURCH: Ms. Mann?
13	Sunset Farms?	13	CROSS-EXAMINATION
14	A About a mile and a half.	14	BY MS. MANN:
15	Q And I have placed in front of you an exhibit	15	Q Good afternoon. You indicate January 2007 as
16	identified as DR-1. Have you had a chance to take a	16	both the time you began taking photographs and the
17	quick look at that?	17	time period that odors became an issue for you
18	, ,	18	according to your answer on Line 25, Page 2 of your
19	filed and so on.	19	testimony. Do you recall that?
20	Q So this printed the printed prefiled	20	A Yes.
21	testimony, which is DR-1, you've taken a look at it,	21	Q Did something was there a specific event in
22	and it's what you put together?	22 23	January 2007 that made you notice this, or were you
23 24	A Yes.	24	outside more?
2 4 25	Q And there is a an affidavit that is Exhibit DR-2. And is that your affidavit?	25	A Well, that is about the time that I began to drive more down one specific road that is by the
25		23	·
	Page 1664		Page 1666
1	A No. 2. Yes, it is.	1	landfill.
2	Q And then there is a collection of photographs	2	Q Okay. And why did you begin to drive down
3	that I think are collectively identified as	3	that one specific road?
4	Exhibit DR-3. And did you take those photographs?	4	A To avoid truck traffic and the intersections
5	A Yes.	5	of Giles Road and 290, particularly.
6	Q And there's some handwritten notes underneath	6	Q Okay. On Page 3 of your testimony, I'm
7	the various photographs. Are those your notes as	7	wondering if a couple of words were inverted. Lines 6
8	well?	8	and 7 you state that I'll let you get there. You
9	A Yes, they are.	9	state at the very end of Line 6, "The heat was related
10 11	Q And there's also dates that are indicated on	10	to the odors and the south wind magnified the
12	there. Did you place those dates there? A Yes.	11 12	problem." Would it be more correct if the odors
13	Q To the best of your knowledge, are these	13	would it be more correct if the odors were related to the heat, or did you mean the heat was
14	photographs as you took them? You've not doctored the	14	related to the odors?
15	photographs or anything, have you?	15	A Well, related to the heat in the summertime,
16	A No. Of course not.	16	particularly.
17	Q To the best of your knowledge, is this	17	Q Okay. So did you actually mean the odors
18	information true and correct in what it purports to	18	were related to the heat and the south wind? I just
19	be?	19	want to make sure
20	A Yes.	20	A Well, I would say yes.
21		21	Q Okay. And you noticed it more when the wind
22	of Exhibits DR-1, 2, and 3.	22	was blowing. Is that correct?
23	JUDGE NEWCHURCH: Any objections?	23	A Noticed it more in the summertime. Is that
24	(No response)	24	what you mean?
25	JUDGE NEWCHURCH: They are all admitted.	ا ۔	Q Right. You noticed the odors more when the

39 (Pages 1663 to 1666)

		1	
	Page 1667		Page 1669
1	south wind was blowing. Is that correct?	1	approximately the location of the landfill?
2	A Yes. Because the road Blue Goose Road is	2	A Yes.
3	on that side of the landfill where the southerlies	3	Q Okay. If testimony from outside of your
4	would be blowing.	4	testimony shows that Marcelina Cook lives where that
5	Q Okay. And were odors a problem when the wind	5	circle is with the MC next to it, would you agree that
6	was still, when there was no wind?	6	she lives roughly between you and the landfill?
7	A Were the odors what? I'm sorry.	7	A Yes.
8	Q A problem. Did you notice the odors when	8	MR. REED: I would like to go ahead and
9	there was little to no wind?	9	offer this.
10	A Well, at times, it was very strong.	10	JUDGE NEWCHURCH: So this will be
11	Q Have you seen grackles on the face of the	11	BFI-13, I believe. And is there objection to BFI-13?
12	landfill or just around the landfill?	12	(No response)
13	A No. I've seen them in the landfill, as well	13	(Exhibit BFI No. 13 marked)
14 15	as on the telephone and electric wires and so on.	14	JUDGE NEWCHURCH: Then it is admitted.
16	Both, I would say.	15	(Exhibit BFI No. 13 admitted) Q (BY MR. REED) In your prefiled testimony,
17	Q Okay.	16 17	you mentioned you believe that odor is a problem, and
18	MS. MANN: I have no further questions. Thank you.	18	we've talked about that a little bit here.
19	JUDGE NEWCHURCH: Mr. Shepherd?	19	A Sure.
20	MR. SHEPHERD: No questions.	20	Q When you gave your deposition, do you
21	JUDGE NEWCHURCH: Mr. Terrill?	21	remember telling me that odors are at their worst in
22	MR. TERRILL: No questions.	22	the summertime?
23	JUDGE NEWCHURCH: Mr. Reed?	23	A Yes.
24	TOPOLINE WEITERCHI. IM. Reca.	24	Q Suppose also by later testimony it is shown
25		25	that Mrs. Cook testified that odors are the worst in
	Page 1668		Page 1670
1	CROSS-EXAMINATION	1	the wintertime. If that's the case, and if the
2	BY MR. REED:	2	landfill is the source of the odors, does it seem
3	Q Mr. Rogers, how are you, sir?	3	inconsistent to you that two people that live in a
4	A I'm fine.	4	more or less straight line from the landfill would
5	Q Just a few questions for you. I'd like to	5	believe odors are worse at opposite times of the year?
6	show you a Google map of your area. You'll note	6	A That would be pretty difficult to ascertain
7	there's some marking on that. Setting those marks	7	on my part, because Space Side is more downhill, and
8	aside for a minute, does this look like an accurate	8	the winds I can't explain that. I don't know.
9	map of your area?	9	Q Do you remember, when we took your
10	A Relatively accurate, yes.	10	deposition, telling me that BFI is covering their
11	Q On that you'll notice there's a circle with	11	waste more rapidly than they did in the past and that
12	the letters DR next to them.	12	you believe that because of that, odors have gotten
13	A Yes.	13	better?
14	Q Is that roughly where you live?	14	A Yes.
15	A Yes.	15	Q I'd like to talk to you about some of the
16	Q Do you know Mrs. Marcelina Cook? She's also	16	pictures that you attached to your prefiled testimony
17	a witness in this proceeding.	17	as well.
18	A No, I don't.	18	A Okay.
19	Q You'll note there's a circle in there with	19	Q I believe you have your prefiled testimony
20	the initials MC by them. Do you see that?	20	with you. Would you take a look at the exhibit marked
21 22	A Yes. O And then further down you'll see there's a	21 22	DR-3? A Okay.
23	Q And then further down you'll see there's a location that's marked BFI.	23	Q Let me go back. Are those the photographs
24	A Yes.	24	you submitted with your prefiled?
l~ -		25	A Yes.
25	O The location marked BFI, is that	143	A 168.

40 (Pages 1667 to 1670)

	Page 1671		Page 1673
1 2	Q And are there 21 photographs included in that	1 2	are busy. And then Line 4 asks do any photos show
3	exhibit?	3	this, and you mentioned two photos there. Is that correct?
4	A There are 22 pages of DDR-3, and there's 29 I haven't counted them all. I'm not sure.	4	A Yes.
5	Q That should be fine. We may talk about that	5	Q And the second one of those is DDR-22 at the
6	a little more in a second. But you'll note that each	6	bottom showing the trash strewn about the site. Is
7	one of the pages has a number that starts with DDR at	7	there a different picture that you meant to specify
8	the bottom.	8	there?
9	A Yes.	9	A No. That's that one was I'm not sure.
10	Q So as we flip through pictures, that's the	10	But it's definitely, as I labeled it, more of the dust
11	number I'm going to refer to, so I just want to try to	11	issue.
12	make sure everybody can follow along.	12	Q Will you agree with me that that photograph
13	A Okay.	13	on the bottom of Page DDR-22 is also a picture of BFI
14	Q With respect to windblown trash, you	14	property?
15	mentioned in your prefiled that the cleanup crews are	15	A Yes.
16	usually right on it, about picking up the trash that	16	Q And that it does not show any trash outside
17	escapes the landfill. Is that correct?	17	the BFI property?
18	A Yes.	18	A No. No.
19	Q In some of the pictures in DR-3 you note	19	Q You stated in your prefiled as well that
20	document windblown trash. Is that correct?	20	there was trash on the road when you took that
21	A Yes.	21	picture. Is that correct?
22	Q Let's take a look at the picture that's	22	A Yes. Correct.
23 24	labeled DDR-14. A Okay.	23 24	Q Did you take any pictures of the trash on the road?
25	A Okay. Q The top photograph on that page, that's one	25	A Not that I put into the collection here, no.
	Page 1672		Page 1674
1	of them that you noted in your prefiled documents, the	1	Q Of the photographs that were attached to your
2	windblown trash. Is that correct?	2	prefiled, how many of them show property other than
3	A Yes.	3	property that's owned by BFI? Can you tell me that?
4	Q But that picture do you know if that	4	Feel free, if you need to thumb through
5	picture shows BFI's property only? A That's correct.	5	A Well, I don't know. I haven't counted them.
6 7	Q So it doesn't document any windblown trash	7	Q Will you take a quick look and see if you can spot which ones don't show
8	outside of BFI's property. Is that correct?	8	A Of these that are in the exhibit?
9	A Not that photograph, no.	9	Q Yes, sir.
10	Q Okay. Let's take a look at DDR-22.	10	A Oh. That shows trash outside
11	A Uh-huh.	11	Q Yes, sir, trash that's outside of BFI's
12	Q I'm sorry. I think I may have given you the	12	property.
13	wrong number there. The picture on the bottom, that's	13	A No. 4, the bottom picture. No. 10 doesn't
14	the other picture you noted in your prefiled	14	actually show the trash. It just shows the van who
15	documents, windblown trash. Is that correct?	15	has picked them up. No. That seems to be it.
16	A Yes. No, not at the bottom of 22. That's	16	Q I'd also like to talk about runoff. You
17	more of the dust issue, taken in June '08.	17	mentioned in your prefiled that you have concerns
18	Q Can you take a look at your prefiled	18	about runoff, and you mentioned that those concerns
19	testimony, please, Page 5? Line 2 of Page 5, are you	19	were erosion and leachate leaving the site. Is that
20	there?	20	right?
21	A Yeah.	21	A Yes.
22	Q Line 2 asks how often windblown trash is a	22	Q You don't have any personal knowledge of
23	problem. Correct?	23	whether runoff has ever carried leachate off the site. Is that correct?
24 25	A Yes. Q And then you answer that the cleanup crews	24 25	A Well, certainly.
ر ب	Z This then you allower that the cleanup crews	ر تا	11 Well, Certainly.

41 (Pages 1671 to 1674)

	Page 1675		Page 1677
1	Q And you	1	"windy day." Is that correct? The bottom picture on
2	A Particularly	2	DDR-19.
3	Q I'm sorry. Did I step on your answer?	3	A Yes.
4	A Well, particularly along the roads to the	4	Q Is it evident that dust is blowing off the
5	east of the landfill.	5	site in that photograph?
6	Q I'm sorry.	6	A No. That's mostly to show the plastic bags.
7	A McDonald's Road, to be specific.	7	Q So would you agree that dust really isn't a
8	Q Let me re-ask the question. I'm not sure	8	constant problem at the landfill, it's an occasional
9	we're talking about the same thing. Do you have any	9	problem?
10 11	personal knowledge of whether leachate has ever	10 11	A Yeah, when the wind is blowing. Q Are you aware of whether you live near a lift
12	escaped the site? A No, I do not.	12	station?
13	Q And have you ever seen runoff carry sediment	13	A Whether I live what?
14	off of the site?	14	Q Do you know what a lift station is?
15	A Only on Giles Road.	15	A No. What is that?
16	Q Do you recall in your deposition telling me	16	Q It doesn't matter. We'll just strike the
17	that you didn't had never seen sediment being	17	question.
18	carried off the site?	18	MR. REED: That's all I have. I'll pass
19	A Yes. Right.	19	the witness.
20	Q You do remember having said that?	20	JUDGE NEWCHURCH: Did you want to offer
21	A Yes.	21	this?
22	Q Okay. You also mentioned in your prefiled	22	MR. REED: I'm sorry. Yes. I'd like to
23	that trucks are often broken down on the side of the	23	offer BFI-14.
24	road?	24	(Exhibit BFI No. 14 marked)
25	A Yes, I said that.	25	JUDGE NEWCHURCH: Is there any
	Page 1676		Page 1678
1	Q In fact, you've only seen two or three BFI	1	objection?
2	trucks broken down on the side of the road during the	2	(No response)
3	time you've lived there. Is that correct?	3	JUDGE NEWCHURCH: So, without objection,
4	A Yes.	4	BFI-14 is admitted.
5	Q Would that be over two to three years?	5	(Exhibit BFI No. 14 admitted)
6	A Just over those two or three years.	6	MR. REED: Thank you, Your Honor. I
7	Q Okay. Have you ever seen an accident	7	pass the witness.
8	involving a BFI vehicle?	8	JUDGE NEWCHURCH: Mr. Blackburn?
9	A No, I have not.	9	MR. BLACKBURN: Just a couple of
10	Q We talked about DDR-22 a second ago and dust.	10	questions.
11	Would you turn back to that picture? Your notation	11	REDIRECT EXAMINATION
12	there says that dust is a constant problem. Is that	12	BY MR. BLACKBURN:
13	right?	13	Q Mr. Rogers, would you turn to Page DDR-0111?
14	A Yes.	14	A Yes.
15	Q Would you take a look at the other picture on	15	Q And at the top of the page, there is a
16 17	that page?	16	photograph dated June '07. Do you see that?
	A Uh-huh.	17 18	A Yes. O Where was that photograph taken from?
18 19	Q Does that show the BFI landfill in the background?	19	Q Where was that photograph taken from? A From the Blue Goose Road.
	A Yes.	20	Q Now, Blue Goose Road is between the landfill
2.0		21	and the Harris Branch subdivision. Is that correct?
20 21	() 1)0 you see any dust being carried in on that		and the Harris Dianen subartision. Is that contect:
21	Q Do you see any dust being carried up on that photograph?		A Yes.
21 22	photograph?	22	A Yes. O So if you were driving to and from the
21			A Yes. Q So, if you were driving to and from the subdivision along Blue Goose Road, you would have seen

42 (Pages 1675 to 1678)

4 5 6 7	A Yes. Q And on Page 22 of your photographs on the	1	Page 1681 little early for a break, so I think we'll proceed for
2 3 b 4 5 6 7	Q And on Page 22 of your photographs on the		nttle early for a break, so I tillik we'll proceed for
3 b 4 5 6 7		2	a while here.
4 5 6 7		3	MR. CARLSON: Judge, can I move that
5 6 7	A Yes.	4	easel over here for just a moment?
6 7	Q where was that photograph taken from?	5	MR. BLACKBURN: If it's okay, Your
7	A It was taken also from the Blue Goose Road.	6	Honor, I'm going to step out for just a second and
	Q So, once again, this would be the scene that	7	talk to my people, but you can go on without me. I'm
8 y	you would pass if you were going to and from the	8	not concerned about that.
	Harris Branch subdivision along Blue Goose Road?	9	JUDGE NEWCHURCH: Very good. Thank you.
10	A Right. Yes.	10	Off the record while we reorganize.
11	Q In some photographs that were taken on a	11	(Brief recess)
	windy day, like the photographs that are shown on the	12	JUDGE NEWCHURCH: Okay. Let's go back
	pottom picture on BFI No. 14, where you said this was	13	on the record. Dr. Kier has returned to the witness
	primarily a picture to take photographs of plastic	14	stand, and you're still under oath. When we broke,
	pags, were there other places on the landfill on this	15	Mr. Terrill had completed his cross-examination, so
	lay where dust was a problem?	16	it's BFI's turn, Mr. Carlson
17	A Oh, yeah.	17	MR. CARLSON: Thank you, Judge.
18	Q And this photograph just simply didn't point	18	PRESENTATION ON BEHALF OF TJFA, L.P. (CONTINUED)
	at those areas. Is that correct?	19	ROBERT S. KIER, Ph.D.,
20	A Correct.	20	having been previously sworn, continued to testify as
21	MR. BLACKBURN: Pass the witness.	21	follows:
22	JUDGE NEWCHURCH: Any more	22	CROSS-EXAMINATION
	cross-examination by anyone?	23	BY MR. CARLSON:
24	MR. REED: I'm sorry. I have one last	24	Q Good afternoon, Dr. Kier.
	question.	25	A Good afternoon.
	Page 1680		Page 1682
1	JUDGE NEWCHURCH: Go ahead.	1	Q You are a licensed geoscientist in Texas. Is
2	MR. REED: I was waiting to see if	2	that correct?
	anybody else did before me.	3	A That's correct.
4	RECROSS-EXAMINATION	4	Q And you've been practicing for over 30 years
	BY MR. REED:	5	in the Central Texas area. Right?
6	Q Have you heard anything about an agreement	6	A Yes.
	between BFI and the city of Austin?	7	Q Over that period of time, you've become very
8	A Yes.	8	familiar with the Taylor formation we've been talking
9	Q And are you aware of whether that agreement	9	about in this hearing and the Taylor clays. Right?
	as any provisions for how the landfill will be filled	10	A Yes.
	n order to screen the working face from the roads?	11	Q And you've also become familiar with the
12	A I have no knowledge of that.	12	general hydrogeology of the shallow groundwater in
13	MR. REED: Pass the witness.	13	that formation. Is that correct?
14	JUDGE NEWCHURCH: Anything more?	14	A Yes.
15	MR. BLACKBURN: No, Your Honor.	15	Q As well as the deeper groundwater in that
16		16	formation. Correct? Oh, excuse me. The deeper
	You're excused.	17	groundwater in the Central Texas area?
18	A Okay.	18	A I'm not quite sure to what you're referring,
19	JUDGE NEWCHURCH: Mr. Blackburn?	19	but
20	MR. BLACKBURN: That's all the witnesses	20	Q I'm talking about aquifers that are in layers
	we had agreed to take out of order at this point in	21	below Travis County the geologic layers below Travis
	ime, so, with that, I guess we will momentarily rest	22	County.
	intil we are raised again.	23	A Okay. Yes.
24	JUDGE NEWCHURCH: Okay. So we are going	24	Q You are generally familiar with those as
25 to	o go back to the testimony of Dr. Kier and it's a	25	well. Right?

43 (Pages 1679 to 1682)

	Page 1683		Page 1685
1	A Yes.	1	same people, yes.
2	Q Now, you were retained in this matter by	2	Q If you're going out to the office to meet
3	TJFA's attorneys to provide services as a testifying	3	with Mr. Hobbs on TJFA business, does he have a
4	expert witness. Is that correct?	4	different office for his TJFA business?
5	A Yes.	5	A I don't know.
6	Q And I asked a couple of questions of	6	Q You've never been to an office that says,
7	Mr. Chandler yesterday that I'm going to ask of you.	7	"Dennis Hobbs, TJFA," have you?
8	What is your understanding of what TJFA is?	8	A No. But I don't think his office says
9	A My limited understanding is it's a real	9	anything different. It's just an office.
10	estate holding company.	10	Q Okay. Would it be fair to say TJFA, TDS, and
11	Q Do you have any sense of TJFA's business	11	TDSL are all part and parcel of the same physical
12	model other than the fact that it holds limited real	12	complex? Is that correct?
13	estate holdings?	13	A Repeat that, please, to make sure I clearly
14	A No.	14	understand it?
15	Q Now, I believe Mr. Terrill asked you about	15	Q Is it fair to say, in your experience, if
16	meetings you may have had with TJFA over recent times.		you're doing business with either TJFA, TDS, TDSL,
17	·	17	Mr. Gregory, Mr. Hobbs, you go the same place, and
18 19		18	it's all one in the same place for your purposes?
20	A Of course, I've been at TJFA's offices frequently.	19 20	A I can answer that to the limited extent that
21	Q Okay. Are they located on Carl Road in	21	we use the same conference room.
22	southern Travis County?	22	Q Now, Mr. Terrill asked you one or more questions about your understanding of the properties
23	A Yes.	23	that TJFA holds. Do you recall those questions?
24	Q Is that the same office complex where the	24	A Yes.
25	TDS, Texas Disposal, offices are at?	25	Q Okay. Do you have a specific recollection of
	Page 1684		Page 1686
1	A Yes.	1	how many properties TJFA holds?
2	Q And the same offices where the Texas Disposal	2	A Oh, I don't know that I know all of them.
3	System landfill offices are at, at least the off-site	3	Q Is it your understanding that TJFA holds one
4	offices?	4	property within a mile of the Williamson County
5	A I get confused without refreshing the	5	landfill near Hutto?
6	difference between TDS and TDSL. I think TDS is the	6	A That's my memory. It could be incorrect.
7	parent company and TDSL is just a subentity, but I	7	They might have two. I can't remember.
8	can't remember for sure.	8	Q Do you have a knowledge that TJFA owns a
9	Q The building you go to, does it have the	9	property near the Sunset Farms landfill?
10	letters TJFA outside in front?	10	A I believe they have two.
11	A No. I don't think it has any letters.	11	Q Okay. Do you know where those properties are
12	Q Okay. Is that the same building where	12	physically located?
13	Mr. Bobby Gregory offices?	13	A In general, yes.
14	A Yes.	14	Q Okay. Tell me what you think generally?
15	Q Is that the same business where Mr. Dennis	15	A Well, the one is is more or less at the
16	Hobbs offices?	16	northwest corner of the landfill where Blue Goose Road
17	A Yes.	17	makes a little S bend, and the other is off Springdale
18	Q Okay. You've done business for Mr. Gregory	18	Road.
19	and TDS and TDSL in the past, haven't you?	19	Q And have you been to the one on the northwest
20	A Yes.	20	corner before?
21	Q So you go to the same place and transact with	21	A I wouldn't say I've physically been to it.
22	the same people generally when you're doing work for	22	I've certainly been by it many times.
23 24	TDS or TJFA. Is that fair to say?	23 24	Q What sort of activity have you seen in terms
24 25	A Well, at different times it may be different people, but generally I'm dealing with some of the	25	of either residential or agricultural on that particular property?
	people, out generally 1 in dealing with some of the	ددا	particular property:

44 (Pages 1683 to 1686)

	Page 1687		Page 1689
1	A Well, there's a house on it. I always	1	Q All right. Do you know what the legal
2	thought it was a pretty neat house.	2	relationship, with the qualification again that you're
3	Q It's your understanding there's a house on	3	not a lawyer, is, if any, between TJFA and Texas
4	that property?	4	Disposal Systems?
5	A I think. But I may be wrong. It may be the	5	A Again, I can't give the lawyer type answer.
6	next-door neighbor.	6	My understanding, which could be wrong, is that well,
7	MR. CARLSON: May I approach?	7	I think Mr. Gregory is at least a partial owner of
8	JUDGE NEWCHURCH: Yes, sir.	8	TDS.
9	(Exhibit BFI No. 15 marked)	9	Q My question is a little different. I'm
10	MS. NOELKE: Is this 15?	10	asking if you have an understanding of the legal
11		11	relationship, if any, between TJFA and Texas Disposal
12	Q (BY MR. CARLSON) Dr. Kier, I've handed you a	l .	System?
13	1 3 1	13	A My understanding is there isn't any.
14	•	14	Q Do you have strike that. Now, Texas
15		15	Disposal System is frequently
16		16	referred to as TDS. Right?
17	j j	17	A Yes.
18		18	Q And the entity that owns the landfill in
19		19	Creedmoor is actually called Texas Disposal System
20	an 11-acre property. Do you see that in the upper	20	landfill it's either LLC or Inc., I believe. Does
21	left-hand corner?	21	that sound right to you?
22	A Yes.	22	A I think, but to tell you the truth, I've not
23 24	Q Okay. As you look at this, does this kind of	23	kept up on all the different entities.
25	refresh your recollection about the size and nature of the property on the northwest corner of the BFI	24 25	Q Is it kind of fair to say that you look at
25	the property on the northwest corner of the BF1	∠ 5	all the operations down there and just kind of think
	Page 1688		Page 1690
1	landfill that is owned by TJFA?	1	of them as TDS?
2	A Well, yes. I'm either wrong about the house	2	A Well, I know there are differences. I know
3	or they didn't think it was worth anything.	3	the hauling company is different than the landfill
4	Q Okay. This does not reflect any	4	company, and I know the operating company is different
5	improvements. Is that correct?	5	than the owner of the landfill. But unless I really
6	A That's correct.	6	work at it or study up on it, I don't remember exactly
7	Q So, if there's a house on that, we're not	7	the proper names.
8	talking about Elvis' mansion, are we?	8	Q Okay. From the Bob Kier perspective, it's
9	A I guess not.	9	just kind of TDS?
10	Q And it reflects that it actually has an ag	10 11	A Well, no. I guess it's kind of I know that there are different entities, legal entities, that
11 12	1 2	12	operate the hauling company, another one operates the
13	Q Okay. I take it from your prior conversation	13	landfill, another one that owns the landfill, and
14	• •	14	another one that owns all the other companies, and
15		15	there may be more that I don't even know about.
16		16	Q Do you have an understanding that Mr. Gregory
17	· · · · · · · · · · · · · · · · · · ·	17	is both a at least a partial owner and officer of
18	· •	18	the companies that do the waste hauling, own and
19		19	operate the landfill and own and operate the
20	A Right.	20	landfill?
21	Q But I'm asking you just in a lay in your	21	A I have no idea.
22	understanding as a layperson, what's your	22	Q Now, you've done work for Mr. Gregory and TDS
23	understanding of the legal relationship, if any,	23	on and off for over 20 years. Isn't that correct?
24	between TJFA and Mr. Gregory?	24	A Yes.
25	A I believe Mr. Gregory owns TJFA.	25	Q As I understand it, you were a consultant for

45 (Pages 1687 to 1690)

	Page 1691		Page 1693
1	TDS or some TDS-related entity in the late 1980s and	1	correct?
2	early 1990s in connection with the original permit	2	A Yes. I may be vague on the time, but I
3	application for the Creedmoor site?	3	remember the lawsuit.
4	A Yes.	4	Q And that lawsuit, at least in part, involved
5	Q And that site is located in southern Travis	5	claims by TDS that Waste Management or its agents had
6	County. Right?	6	disparaged TDS's business?
7	A Yes.	7	A That's my understanding.
8	Q And it's located in the Taylor formation.	8	Q And the nature of that claim of
9	Correct?	9	disparagement, and let me know if I'm wrongis that
10	A Yes, or group, or whatever you want to call	10	you buzzing?
11	it.	11	A Yeah. It's time for me to take a pill. Do
12	Q Taylor clays?	12	you mind if I take a pill?
13	A It would be easier that way.	13	JUDGE NEWCHURCH: Off the record.
14	Q Okay. Now, you were also, I believe, a	14	(Recess from 3:00 p.m. to 3:15 p.m.)
15	project manager for the Subtitle D modification for	15	JUDGE NEWCHURCH: Back on the record.
16	the TDSL site in the 1990s. Is that correct?	16	Mr. Carlson?
17	A Correct.	17	Q (BY MR. CARLSON) Dr. Kier, before that
18	Q And you were here when I showed Mr. Chandler	18	break, I was asking you a question or series of
19	a document that has since been marked as at least part	19	questions about a lawsuit between TDS and Waste
20	of that modification. Correct?	20	Management in the late 1990s. I believe we left off
21	A I was here, yes, I think, but I have since	21	at some point about the nature of that suit, and it's
22	seen the document.	22	your understanding that that suit involved claims of
23	Q In addition to being project manager, you	23	business disparagement by TDS against Waste Management
24	were responsible for preparing parts of that that had	24	or some combination of agents or representatives of
25	to do with site geology and hydrogeology. Is that	25	Waste Management. Is that fair to say?
	Page 1692		Page 1694
1	correct?	1	A Yes.
2	A Yes.	2	Q Okay. And the nature of the disparagement
3	Q Now, I understand that Mr. Gregory or TDS if	3	claims had do with statements attributed to Waste
4	you can tell me who, that's great hired you, I	4	Management or its representatives about the liner at
5	assume, in the late 1990s to do an investigation of	5	the TDS landfill. Is that correct?
6	the Austin Community landfill site. Is that correct?	6	A At least it included that, yeah. I can't
7	A Yes. It might have started almost I don't	7	remember all of it.
8	know, mid '90s. I can't remember for sure.	8	Q That was a component of it. Right?
9	Q Okay. Do you recall if that was Mr. Gregory	9	A Yes.
10	• • •	10	Q Correct me if I'm wrong, I don't want to
11	Systems, or do you just not have a recollection?	11	misstate what was going on in that lawsuit, but
12	A I don't know.	12	basically the claim that TDS made was that Waste
13		13	Management had not described or insinuated that the
14	ultimately prepared and addressed to Mr. Gregory as	14	TDSL liner was not Subtitle D compliant or didn't
15	exhibit is it BK-8 with your prefiled testimony?	15	satisfy the performance standards of Subtitle D. Is
16	A Yes. They were memos to him.	16	that fair to say?
17		17	A I'm not sure they even mentioned performance
18		18	standards. I think the allegation was that they had
19		19	gotten a special waiver.
20	A I honestly don't remember the juxtaposition	20	Q In a nutshell, TDS was saying, "You
21	of when I started to work and when actual litigation	21	mischaracterized our liner system, Waste Management."
22	took place.	22	Right?
23	Q There was a lawsuit between Texas Disposal	23	A As far as I know, yes.
24	Systems and Waste Management in the Travis County	24	Q Did you serve as a consultant or testifying
25	state district court in the late 1990s. Is that	25	expert witness in that lawsuit at some point in time?

46 (Pages 1691 to 1694)

	Page 1695		Page 1697
1	A No. I was a testifying witness.	1	recommendation. I believe what I've stated is that it
2	Q Did you testify in court?	2	doesn't meet the municipal solid waste regulations.
3	A Yes.	3	Q All right. In addition to everything else
4	Q When did you testify in court?	4	we've talked about that you've done for the TDS
5	A When they told me to.	5	companies and for TJFA over the last few years, your
6	Q What year?	6	company has overseen the groundwater monitoring at the
7	A I have no idea.	7	TDSL landfill from the time it opened until very
8		8	recently. Is that correct?
9	Q 2000? A Whenever it was.	9	A Until a few years ago, yes.
10		10	Q For almost 20 years. Right?
	Q In the last several years you've also served as a consultant for TJFA in several challenges it has	11	A Yes.
		12	
	mounted to permit amendment applications for MSW		Q Okay. Over the years, in connection with all
	facilities in Central Texas. Right?	13	these engagements we've just been talking about, could
14	A There were two. I was actually retained by	14	you estimate for us in general terms how much
	the attorneys.	15	compensation you have received from any combination of
16	Q Okay. With that caveat, you were retained by	16	Mr. Gregory, TDS, TDSL, or any company that you know
	the attorneys to serve as a consultant in connection	17	to be owned or controlled by Mr. Gregory?
	with TJFA's challenge of the Waste Management or the	18	A I have no idea.
	Williamson County landfill near Hutto. Correct?	19	Q Would that number total into the several
20	A Yes, I think you've properly characterized	20	hundreds of thousands of dollars, sir?
	it.	21	A It might.
22	Q And you served as a consultant for TJFA's	22	Q Didn't you testify in your deposition that
	attorneys in connection with the proposed expansion of	23	you estimated it would be several hundred thousand
	the Comal County landfill, which I think now is called	24	dollars?
25	the Mesquite Creek landfill in Comal County. Correct?	25	A I don't remember the exact words, but I'm
	Page 1696		Page 1698
1	A Yes.	1	sure you can quickly point me in the right direction.
2	Q And you're a testifying expert that's been	2	Q Okay. I may do that, sir. Now, if I
3	retained by TJFA's attorneys in this case, obviously?	3	understand your testimony that you gave in deposition
4	A I hope so.	4	correctly, Mr. Gregory hired you sometime in the 2004
5	Q And you're you've been designated as and	5	or 2005 time frame to take a look at BFI's
6	are working on the opposition of the expansion of the	6	application. Is that correct?
7	Austin Community landfill here in Travis County as	7	A What I was retained to do is simply monitor
8	well. Correct?	8	it and keep him informed.
9	A Yes.	9	Q And you did that?
10	Q Now, in each of these cases, TJFA was	10	A Yes.
11	challenging the expansion of an existing landfill. Is	11	Q At that time, you didn't know whether or not
12	that correct?	12	Mr. Gregory or any of his companies were planning to
13	A Yes.	13	actually challenge BFI's proposed expansion. Is that
14	Q In any of those you offered observations of	14	fair?
15	opinions to TJFA lawyers in those cases. Correct?	15	A I didn't know. My assumption was that there
16	A Strictly to the attorneys.	16	would be no challenge.
17	Q Okay. Were you ever designated as a	17	Q Okay. You didn't know, did you?
	testifying expert in either the Comal County or the	18	A No, sir.
	Williamson County?	19	Q Okay. Do you recall monitoring the
20	·	20	application as it was working its way through the
21	•	21	administrative and technical review processes?
	and the Austin Community landfill case that, in your	22	A Yes.
	opinion, the permit application should be denied. Is	23	Q And did you provide comments on the proposed
	that correct?	24	application to Mr. Gregory?
25	A I don't know if I made such an out-and-out	25	A Verbal.

47 (Pages 1695 to 1698)

	Page 1699		Page 1701
1	Q Okay. And, to your knowledge, were those	1	very briefly, Judge?
2	comments used or incorporated in any sort of public	2	JUDGE NEWCHURCH: Off the record.
3	comments that were made by or an behalf of Mr. Gregory	3	(Brief recess)
4	or TDS or any other entity in matters before the	4	JUDGE NEWCHURCH: Back on the record.
5	Commission prior to referral of this case to SOAH?	5	MR. CARLSON: I apologize. I thought I
6	A Given the way you asked the question, I don't	6	had 11 copies. For the record, it's Deposition
7	know.	7	Exhibit 121 from Mr. Kier's deposition. I'll have him
8	Q Okay. Do you remember meeting with	8	identify the document.
9	Mr. Chandler and discussing the application on	9	Q (BY MR. CARLSON) Dr. Kier, will you review
10	occasion in this 2006, 2007 time frame?	10	what has been is under Tab 121 is it 121?
11	A I believe all our conversations were by	11	A Yes.
12	telephone.	12	Q of your deposition?
13	Q One of the two of you guys put together a	13	A All right.
14	chart of comments regarding the proposed application.	14	Q Do those appear to be true and correct copies
15	Is that correct?	15	of the invoices that you brought to your deposition
16	A Yes.	16	that had been subpoenaed?
17	Q Okay. Was that you or was that Mr. Chandler?	17	A Yes.
18	A He added he started it, and I guess I added	18	Q Okay. Now, your contract was with TJFA's
19	to it, now that you remind me.	19	attorneys. Is that correct?
20	Q And you forwarded that to whom?	20	A Yes.
21	A I'm sure I forwarded it to Mr. Gregory and	21	Q Okay.
22	probably Mr. Newton.	22	A To the extent there's a contract.
23	Q All right. At some point you were actually	23	Q Okay. You have at least some sort of verbal
24	formally retained to become a testifying expert	24	arrangement?
25	witness in this matter. Is that correct?	25	A That's correct.
	Page 1700		Page 1702
1	A Yes.	1	Q And you billed TJFA through its attorneys for
2	Q And do you recall that to be in the May 2008	2	your own services in this matter. Is that correct?
3	time frame?	3	A Well, my bills, as you can see, went to the
4	A Yes.	4	attorneys.
5	Q And you were retained to look into matters	5	Q Okay. Your hourly rate in this matter has
6	pertaining to geology and hydrogeology and groundwater	6	been \$160 per hour. Is that correct?
7	monitoring?	7	A Yes.
8	A Yes.	8	Q Okay. Now, you have a sole proprietorship.
9	Q Anything else?	9	Is that correct?
10	A Not that I can think of. I suppose if I'd	10	A Correct.
11	come up with some things that I needed to look at,	11	Q Your daughter also works for you. Is that
12	they would have listened to me.	12	right?
13	Q Okay. You've done that in the last eight or	13	A Ms. Kagen.
14	nine months?	14	Q She's a licensed professional geoscientist?
15	A Yes.	15	A Yes.
16	Q And do you recall in your deposition I	16	Q And she became a licensed professional
17	subpoenaed your invoices for your testifying expert	17	geoscientist relatively recently?
18	services in this matter?	18	A Well, my by standards, yes.
19	A Yes.	19	Q Okay. What are your standards timewise?
20	Q Okay. And you provided me with copies of	20	A Mr. Chandler said based on the admission of a
21	your invoices for the May through November time frame.	21	document that half our work is considered, what,
22	Is that correct?	22	antique business records or something like that.
23	A Well, I provided them to the attorney, and I	23	Q Crustacea Era business records?
24	suspect he provided them to you.	24	A Yeah.
25	MR. CARLSON: Can we go off the record	25	Q In any event, did your daughter actually get

48 (Pages 1699 to 1702)

	Page 1703		Page 1705
1	her license at some point in this May to December,	1	little grief. But I added Mr. Yuliana's hours, and I
2	November time frame?	2	concluded that he had billed for 156.5 hours between
3	A She took the test in October. She found out	3	May and the end of November, at least reflected in the
4	she passed in December.	4	bills. Does that sound about right?
5	Q Is that the test you were talking about a	5	A I don't know.
6	little bit earlier in your	6	Q Okay. What was his hourly rate? Do you want
7	A Yes.	7	to look in there?
8	Q testimony?	8	A Yes, please.
9	A Yes.	9	MR. RENBARGER: Mr. Carlson, while he's
10	Q Okay. And her hourly rate was initially \$90,	10	taking a look at that, I'm not sure where we're going
11	but it looks like it bumped up to \$100 after she got	11	with this, but we're really not talking much about
12	her license. Is that correct?	12	BFI's landfill application, so I was wondering how
13	A Yes.	13	much longer we were going to talk about invoices.
14	Q Okay.	14	MR. CARLSON: Not long but a little bit
15	A Or about then.	15	more.
16	Q Now, you testified earlier you included or	16	MR. RENBARGER: Okay.
17	included in the bills you submitted to TJFA's	17	A His would have been 120 an hour.
18	attorneys were bills that were essentially	18	Q (BY MR. CARLSON) All right. Again, by my
19	pass-through bills involving Dr. Yuliana. Correct?	19	math, Dr. Yuliana, through your firm, billed a total
20	A Yes.	20	of \$17,440 for his services. Does that sound about
21	Q And also Mr. Neyens and his firm. Is that	21 22	right?
22 23	correct? A Correct.	23	A I don't know.
24		24	Q Could you look through your invoices for the June entries for Dr. Yuliana, please?
25	Q Okay. I did a little bit of math, and I added the amounts that you charged TJFA's attorneys	25	A Okay. I'm in June.
	· · · · · · · · · · · · · · · · · · ·	23	·
	Page 1704		Page 1706
1	solely for your own personal services and those of	1	Q And do you see Dr. Yuliana's time entries
2	your daughter for the invoices reflected in Deposition	2	there?
3	Exhibit 120 that were from May to the end of November,	3	A Yes.
4	and I came up with a figure of \$35,286.83. Does that	4	Q What was his entry for June 12th?
5	sound about right to you?	5	A "Examined correlations between TDS and
6	A 35 grand?	6	various IM concentrations."
7	Q Yes, sir.	7	Q Does his bill strike that. What does his
8	A Probably.	8	entry for June 23rd say?
9	Q Okay.	9	A "Plotted analytical results for organic
10 11		10	compounds and trace metals."
12		11 12	Q What does his entry for June 27th say?
13		13	A There isn't one. Q Do you see one that says "Reviewed
14		$\frac{13}{14}$	Q Do you see one that says "Reviewed organic/trace metal"
15		15	A Yeah, but that's June 25th.
16		16	Q Okay. There's my Elgin math of sorts, I
17		17	guess. Could you read the June 25th entry?
18		18	A "Reviewed organic/trace metal contaminant
19		19	data and summarized results."
20		20	Q And does Dr. Yuliana's bill reflect that he
21		21	was doing work on the BFI project?
22	A I don't know.	22	A Probably not specifically, but I knew where
23	Q Now, again, if you'll trust my Elgin math,	23	it was going because he keeps them separate.
24		24	Q Look in the upper left. Do you see some
25	people from Elgin around here. I'm going to catch a	25	reference to BFI?

49 (Pages 1703 to 1706)

	Page 1707		Page 1709
1	A Upper left? Of what?	1	JUDGE NEWCHURCH: Is the question clear?
2	Q Of the time entries you were looking at.	2	A No.
3	A Oh. On June 15th to 17th, yes, there is a	3	JUDGE NEWCHURCH: Why don't you repeat
4	reference to BFI.	4	the whole question.
5	Q All right. Now, Dr. Yuliana never filed	5	MR. CARLSON: All right.
6	there was no prefiled testimony that was filed by or	6	Q (BY MR. CARLSON) The \$90,000 that we've been
7	on his behalf in this hearing. Is that correct?	7	talking about, assuming that's a correct figure, that
8	A To my knowledge, yes.	8	wouldn't include any bills that you submitted to TJFA
9	Q Okay. And you never mention Dr. Yuliana in	9	for work that you performed during the monitoring,
10	your prefiled testimony, do you?	10 11	reviewing, and commenting phase of the application before this thing was referred to SOAH. Right?
11 12	A No.	12	A During the monitoring phase, I was not
13	Q Okay. And you don't reference any of Dr. Yuliana's work product in your prefiled testimony,	13	working for TJFA.
14	do you?	14	Q Who were you working for?
15	A That's correct. I do not.	15	A TDS or one of its entities.
16	Q In fact, have you reviewed the prefiled	16	Q Isn't it true, in fact, that when the invoice
17	testimony of TJFA's other expert witnesses?	17	that you first submitted to TJFA's attorneys for your
18	A No.	18	work on this project as a testifying expert was
19	Q You didn't look at Pierce Chandler's?	19	actually cut by TDS
20	A No.	20	A I'm sorry. What?
21	Q Okay. Now, Mr. Neyens' work was also billed	21	Q You submitted a bill for your May time frame.
22	through your firm. Correct?	22	Correct?
23	A Correct.	23	A Yes.
24	Q Do you have any reason to dispute that his	24	Q To TJFA's attorneys. Correct?
25	bill for his work and his firm's work in this time	25	A Yes.
	Page 1708		Page 1710
1	frame was \$37,636.75?	1	Q You got paid. Right?
2	A I have no way of knowing, so	2	A Yes.
3	Q If you'll trust my math, do you have any	3	Q In the form of a check?
4	reason to dispute that over \$90,000 was billed through	4	A Yes.
5	your firm alone in this May through November 2008 time	5	Q And the check was from TDS and not TJFA. Is
6	frame?	6	that correct?
7	A You added it up. I didn't.	7	A Not to my knowledge.
8	Q Okay.	8	Q Didn't you testify about that in your
9	A I have no idea.	9	deposition?
10	Q Now, assuming that's the right number, that	10	A I testified that I accidentally got a check
11	wouldn't include your fees for December, January of	11	from TDS for one of the two jobs I'm working on. I
12	this year. Correct?	12	couldn't retrieve it fast enough before my wife
13	A Correct.	13	quickly deposited it. And so I wrote a check in
14	Q That wouldn't include any fees that you	14	reimbursement for it since it would have been an
15 16	charge either Mr. Gregory, TJFA, TDS, or any other entity for your monitoring, review, and commenting of	15 16	error. O Okay Dr Kiar will you look at Evhibit
16 17	the application prior to referral to SOAH. Is that	17	Q Okay. Dr. Kier, will you look at Exhibit BFI-15?
18	correct?	18	
19	MR. RENBARGER: Objection; assuming	19	A Is there some clue where it is? Q That's the TravisCAD detail.
20	facts not in evidence. I think the witness has	20	A Oh. Yes. Excuse me.
21	testified he was doing this work on behalf of TJFA,	21	Q Do you see where it has the total appraised
22	not Mr. Gregory or TDS or anybody else.	22	value for the 11-acre property on 5510 Blue Goose
23	MR. CARLSON: I'll limit my question to	23	Road?
24	TJFA.	24	A Well, there are several entries, but there is
25	MR. RENBARGER: Thank you.	25	a column saying "appraised value." Is that the one.
_	- · · · / · · · ·		O Tr-

50 (Pages 1707 to 1710)

		Т	
	Page 1711		Page 1713
1	Q You see the column in the upper left says	1	clays.
2	"value information" and then later on it says "2008	2	You worked on the Ellis County project?
3	certified"?	3	A Yes.
4	A Yes.	4	Q Were you the project manager?
5	Q Okay. Then you look at the bottom of that	5	A No.
6	column, it says "total value" on the left and then has	6	Q Okay. What was your role?
7	a number. Do you see that?	7	A More of a QA/QC or technical advisor.
8	A I see total value, yes.	8	Q Okay. Let me limit this to matters in which
9	Q All right. What's that number?	9	you were working for the applicant, then. Okay? Are
10	A 89,792.	10	there any other facilities where you worked for the
11 12	Q Okay. So, at least from Travis County's	11 12	applicant on an application involving a facility that
13	perspective for the 2008 certified appraised value, this particular property was worth slightly under	13	was planned to be located or was already located in the Taylor formation? TDSL is one of them. Right?
$\frac{13}{14}$	\$90,000. Is that correct?	14	A Right. I'm just rattling down through them.
15	A Yes.	15	TDSL is one. I can't think of the others. The first
16	Q Okay. One last question about this document.	16	was for the firm Lloyd, Gosselink, of course.
17	Look in the upper right-hand corner under the entry	17	Q Anything else?
18	"property details."	18	A About that project?
19	A Yes.	19	Q No. Any other facilities that you can
20	Q Okay. Do you see the D date entry right	20	recall?
21	under property	21	A No. I think the Waco one was in Pepper
22	A Oh. I didn't realize what that was.	22	Shale, which is a little lower than the Taylor or its
23	Q Okay. If you look over at the far right-hand	23	equivalent. That would have been for the city of
24	side, it says 11-23-2004. Correct?	24	Waco.
25	A I guess that's what it means.	25	Q All right. Let's move on. You've also been
	Page 1712		Page 1714
1	Q Okay. It appears, at least according to this	1	hired by either protestants or attorneys for
2	document, that the property was deeded over on	2	protestants for protests at at least four facilities
3	December 23rd, 2004. Correct?	3	that are located in the Taylor formation. Right?
4	A Well, I have to admit lacking knowledge in	4	Williamson County, Comal County, Sunset Farms, and the
5	how these things are presenting. I'm presuming that's	5	Austin Community site. Is that correct?
6	what it means, but I don't know for sure.	6	A Yes. Excuse me. Yes.
7	Q And when did you start looking at the BFI	7	Q And then I understand that you were the
8	application for monitoring, review, and commenting	8	project manager for the North Texas 121 project that's
9	purposes?	9	come up in various discussions in this hearing.
10	A Sometime after it was declared	10	Correct?
11	administratively complete.	11	A Yes.
12	Q You don't recall the exact time frame?	12	Q At your deposition, you and I discussed some
13	A No, sir.	13	very basic concepts about the Taylor formation and the
14	MR. CARLSON: Judge, at this time we	14	Taylor clays and the hydrogeology of the shallow
15	offer BFI-15.	15	groundwater in the Taylor clays. Do you recall that
16	JUDGE NEWCHURCH: Any objection?	16	discussion?
17	MR. RENBARGER: None.	17	A Yes.
18	JUDGE NEWCHURCH: It is admitted.	18	Q Okay. You weren't here yesterday, were you,
19	(Exhibit BFI No. 15 admitted)	19	for Mr. Chandler's direct or cross-testimony?
20	Q (BY MR. CARLSON) Let's shift gears a little	20	A No.
21	bit and talk briefly about other consulting projects	21	Q Let me just run through some basic concepts
22 23	that you've worked on, Dr. Kier. I'm particularly	22	and see if you agree with these regarding the basically geology and hydrogeology of the clays in
23 24	interested in projects that you've worked on MSW projects for facilities that were located in the	24	this formation. Do you agree that the formation runs
25	we'll call it the Taylor formation or the Taylor	25	north/south through the central part of the state of
	To It can it the Taylor formation of the Taylor	1	stan anough are centar part of the state of

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Page 1715 1 Texas? 2 A More or less, yes. 3 Q Roughly along I-35. Right? 4 A Yeah, parallel. Do you want to know the 5 reason? 1 A Yes. 2 Q Do you agree that the u 3 serves as the confining unit for 4 A The underlying confining that 5 Q Yes, sir. You agree that the u	or shallow groundwater?
2 A More or less, yes. 3 Q Roughly along I-35. Right? 4 A Yeah, parallel. Do you want to know the 5 reason? 2 Q Do you agree that the u 3 serves as the confining unit for 4 A The underlying confining to 5 Q Yes, sir. You agree that the u 4 A The underlying confining to 5 D Yes, sir. You agree that the u	or shallow groundwater?
3 Q Roughly along I-35. Right? 4 A Yeah, parallel. Do you want to know the 5 reason? 3 serves as the confining unit for 4 A The underlying confining to 5 Q Yes, sir. You agree that	or shallow groundwater?
4 A Yeah, parallel. Do you want to know the 5 reason? 4 A The underlying confini 5 Q Yes, sir. You agree that	
5 reason? 5 Q Yes, sir. You agree that	
6 Q I'd be interested, but I also want to move 6 the upper unweathered Taylor	
7 forward. 7 uppermost aquifer for regulate	ory groundwater
8 A Okay. 8 monitoring purposes?	
9 Q Okay. The formation itself doesn't change 9 A Yes, normally.	
very much across the state, does it? 10 Q Do you agree that the s	
11 A Oh, there are some different changes. You 11 that we've just been talking ab	
get some sand in it as you go north. In fact, a piece 12 source of drinking water in Tr	
of it is an aquifer, the name of which escapes me at 13 A I wouldn't call it prima	
the moment, and it tends to have more and more calcium 14 Q Do you agree that the g	
carbonate in it as you move north. 15 the weathered Taylor tend to 1	mimic the natural
Q Let me narrow it down a little bit. Let's 16 topography?	
talk about the Taylor clays in the Hays, Travis, and 17 A In general, yes.	
	hat groundwater we're
19 A All right. 19 thinking in terms of the weath	
20 Q Is it fair to say that the soils and clays in 20 unweathered down below it	~
21 that area are very consistent? 21 sink towards that weathered/u	
22 A Generally, yes. 22 then flows downhill from ther	re?
Q Would it be a fair statement to say that the 23 A Yes.	
	hat the Taylor formation
between the Austin Community, Sunset Farms, and TDSL 25 is generally considered to be of	one of the better
Page 1716	Page 1718
1 facilities? 1 formations for situating landfil	lls in Texas?
2 A Yes. 2 A Yes.	
3 Q Okay. And the Taylor formation 3 Q You were designated as	s a testifying expert in
4 A Excuse me. I try to leave out adverbs like 4 this case in May of 2008?	
5 very. 5 A I don't know when I wa	s designated. That's
6 Q The Taylor formation generally consists of a 6 when I got started on it.	
7 weathered layer at the ground level that overlays an 7 Q So your prefiled was pr	epared and filed
8 unweathered layer. Is that correct? 8 sometime in November of 200	08?
9 A Yes. There is commonly a transition zone 9 A Yes.	
that is either put with the weathered layer or the Q So you had six months:	in which to investigate
11 unweathered layer depending on someone's bent. But 11 matters and consider things that	at would be put in your
there is a transition zone. There's not just an 12 prefiled. Correct?	
13 absolute plane. 13 A I wish.	
Q Okay. In the vicinity of Travis County, this 14 Q Well, in raw terms, you	did have that, didn't
transition that you're talking about generally occurs 15 you?	
somewhere between let's say 30 to 50 feet underneath 16 A Well, from start to finis	h, yes. But it
the natural ground surface. Correct? 17 certainly wasn't six months we	orth of time.
A Generally, but it depends on how much erosion 18 Q Okay. But you had an o	opportunity to review
19 has taken place. 19 the prefiled testimony that BFI	I had submitted prior to
Q But that's a good rule of thumb at least. 20 preparation of your prefiled. C	Correct?
21 Right? 21 A Yes.	
22 A Yeah, in the valleys, you tend to have it 22 Q Okay. And, in fact, you	u had an opportunity
deeper and the hilltops more because of the erosion. 23 that predated even the 2003 or	2004 time frame to get
24 Q You agree that the fully unweathered Taylor 24 to know the soil and groundwa	ater in and around Sunset
25 is highly impermeable? 25 Farms and ACL and Applied N	Materials as far back as the

52 (Pages 1715 to 1718)

	Page 1719		Page 1721
1	late 1990s. Correct?	1	A Yes.
2	A Probably mid-1990s.	2	Q Okay. Let's talk about your landfill is
3	Q Based on the work you had performed for	3	leaking opinion first. That is a pretty serious
4	Mr. Gregory. Right?	4	allegation, isn't it?
5	A Correct.	5	A I guess it could be.
6	Q So when I asked you in your deposition if	6	Q Okay. Well, you were involved in a lawsuit
7	every opinion you were planning to offer in the case	7	roughly ten years ago in which an allegation was made
8	was included in your prefiled testimony, you told me	8	that a liner was mischaracterized. Right?
9	it was. Do you recall that testimony?	9	A Yes.
10	A Yes.	10	Q And there wasn't even an allegation of
11	Q Okay. And do you agree with that as we sit	11	leakage in that case, was there?
12	here today?	12	A No. There might have been an implication,
13	A I think so.	13	but no allegation.
14	Q Okay. Now, as I understand your prefiled	14	Q All right. So it's kind of fair to say that
15	testimony, you've got two basic opinions you're	15	the allegation you're making might even be stronger
16	offering. Would you turn to Page 7, please?	16	than an allegation that a liner was misdescribed.
17	A Okay.	17	Fair enough?
18	Q Those two opinions are summarized at the	18	A I don't know.
19	bottom of Page 7. Is that correct?	19	Q You just don't have an opinion one way or the
20	A Yes, that's correct.	20	other?
21	Q Okay. So your first opinion, as I understand	21	A No.
22	it, is that to you it appears that leachate is	22	Q Okay. Apparently Waste Management excuse
23	mounding inside of the landfill. Is that correct?	23	me TDS was fairly offended by the description of
24	A Well, that's what the information shows, yes.	24	their landfill liner. Right?
25	Q Okay. And that this mound of leachate that	25	A Yes.
	Page 1720		Page 1722
1	you claim exists is recharging groundwater outside the	1	Q Enough to sue?
2	landfill. Right?	2	A Yes.
3	A Yes.	3	Q And it spent, what was it, six or seven years
4	Q Recharging	4	in litigation with Waste Management?
5	A Likely.	5	A Well, it's not over yet.
6	Q Recharging being shorthand for leaking?	6	Q Okay. So ten years?
7	A That could be, yeah.	7	A I don't know how long it will be.
8	Q All right. And that this contaminated	8	Q Now, in your prefiled testimony, as I
10	groundwater that's leaked out of the landfill is moving off site?	10	understand it, the sole basis that you provide now
11	A Correct.	11	I'm talking about the prefiled testimony is based on various cross-sections that were contained in
12	Q Fair enough?	12	Attachments 2 and 4 of the application that depict
13	A Yes.	13	groundwater elevations. Is that right?
14	Q That's a broad summary of your No. 1 opinion?	14	A That's the principal basis. The groundwater
15	A Yeah, with a highly probable in there.	15	level maps show similar
16	Q It doesn't say "highly probable."	16	Q Well, let's look at that. Could you I
17	A I know, but that was what we talked about in	17	think you pointed to some of the geologic
18	deposition.	18	cross-sections. Correct?
19	Q I'm talking about what's in your prefiled.	19	A Yes.
20	A Okay.	20	Q That were prepared by Mr. Snyder and his
21	Q And your second opinion is that the	21	firm?
22		22	A Yes.
23	the groundwater sampling and analysis plan, may meet	23	Q Would you open up the application I believe
24	the technical requirements of the rules but perhaps	24	it's Volume 2 to APP 000 starting at Page 708.
25	not their intent. Is that a fair summary?	25	A Excuse me. I have too much stuff up here

53 (Pages 1719 to 1722)

	Page 1723		Page 1725
1		1	
1 2	right now. MR. RENBARGER: What page number,	1 2	line with the black carrots on it. Right? A Yes.
3	please?	3	Q The key indicates it says, "Groundwater
4	MR. CARLSON: APP 000 starting at 708,	4	level from December 1999 (approximate)." Right?
5	but I'm going to point him to 711.	5	A Right.
6	MS. NOELKE: 708?	6	Q And this line that you're talking about is
7	Q (BY MR. CARLSON) I'd like you specifically,	7	what you believe is evidence of water or leachate
8	Dr. Kier, to look at APP 000711.	8	inside the landfill. Right?
9	A Okay. I have it.	9	A Well, as I said, it's either leachate it's
10	Q It's Figure 4C.4. Right?	10	either a water table or it's the pressure surface
11	A Correct.	11	beneath the landfill. It doesn't discriminate between
12	Q And it's a geologic cross-section that was	12	the two.
13	prepared and sealed by Mr. Snyder. Right?	13	Q Your contention, at least in your deposition,
14	A Correct.	14	was that did not this line did not reflect a
15	Q It reflects a cross-section for C-C prime	15	potentiometric surface?
16	across the roughly the southern third of the Sunset	16	A No. It does reflect the terminology
17	Farms site. Right?	17	probably gets you. It does reflect a potentiometric
18	A Yes.	18	surface. It
19	· · · · · · · · · · · · · · · · · · ·	19	Q Let me interrupt. You're saying that even if
20	yeah, the documents in the application that serve as	20	it represents a potentiometric surface, you're saying
21	the source for your contention that the landfill is	21	it also represents an actual level of water inside the
22	leaking. Right?	22	landfill? That's your contention, isn't it?
23	A Yes.	23	A Sir, a potentiometric surface and a water
24 25	Q Okay. And if I understand your testimony	24	table can be one and the same thing.
25	correctly, you're looking specifically at a dashed and	25	Q Okay. I just wanted to make sure that's
	Page 1724		Page 1726
1	dotted line that runs kind of through the middle of	1	clear. And that's your position, is that this
2	what's represented as the landfill and has on either	2	represents both a potentiometric surface and a water
3	the left or the right-hand side an inverted black	3	level?
4	triangle. Is that right?	4	A Well, they're one in the same unless they
5	A Yes.	5	also are trying to show a piezometric surface, which
6	Q And you're saying, as I understand it, that	6	is a pressure surface. The only difference between a
7	that line is reflective of mounding of either water or leachate inside the landfill. Correct?	7 8	water table and a piezometric surface is a piezometric
8	A Yes.	9	surface is a pressure an imaginary pressure surface reflecting what the pressure would be at equilibrium
10		10	with atmospheric pressure just as the water table is
11	that line?	11	at equilibrium with atmospheric pressure.
12	A For that line, it's groundwater level from	12	Q Let's cut to the chase. Is it your
13	December 1999, approximately.	13	contention that this line that we're talking about,
14	Q Okay. And just to make sure, you're basing	14	the dashed/dotted line, represents actual leachate
15	your opinion on other similar drawings in the	15	levels inside this landfill?
16	application in this series of drawings. For example,	16	A It is either inside or underneath. And I
17	if we turned to 712 right?	17	don't know which, because he didn't say.
18		18	Q Let me make sure this is clear. I'm talking
19	Q Actually, that's a redundant C-C prime, isn't	19	in terms of leachate leachate.
20	it?	20	A Okay.
21	A Yes.	21	Q The definition of leachate is water that's
22	Q Okay. Why don't we try the F-F prime	22	come in contact with waste. Right?
23	cross-section? It would be APP 000715.	23	A Yes, passed through.
24	A Okay.	24	Q Okay. Is it your contention, sir, that this
25	Q Okay. This one also has the dotted/dashed	25	dotted line right here is reflective of an actual

54 (Pages 1723 to 1726)

1 leachate level inside this landfill unit? 2 A It could, or it could be the groundwater 3 pressure level beneath the landfill. 4 Q In which case that would be the 5 potentiometric surface. Right? 6 A No. It would be a potentiometric surface, 7 but it would be the same as a piezometric surface. 8 Q They're synonymous. Right? 9 A No, sometimes they're not. 10 Q Well, your colleague, Mr. Chandler, disagrees 11 writing on this. Right? 2 A Yes. 3 Q Okay. And that's information that your daughter or yourself or some combination of y to this document. Is that correct? 4 A Yes. 7 Q Okay. Now and you intended this to be for purposes of litigation. Is that correct? 8 for purposes of litigation. Is that correct? 9 A Contested case hearing, I think. 10 Q Well, your colleague, Mr. Chandler, disagrees 11 writing on this. Right? 2 A Yes. 3 Q Okay. And that's information that your daughter or yourself or some combination of y to to this document. Is that correct? 4 A Yes. 7 Q Okay. Now and you intended this to be for purposes of litigation. Is that correct? 9 A Contested case hearing, I think. 10 Q All right. This is litigation, I think. 11 Fair enough? Now, neither you nor your daughter or yourself or some combination of y to this document. Is that correct? 9 A Contested case hearing, I think. 11 Variation of y to this document. Is that correct? 12 A Yes. 13 Q Okay. Now and you intended this to be for purposes of litigation. Is that correct? 14 Contested case hearing, I think. 15 A Correct. 16 A Yes. 17 Q Okay. Now and you intended this to be for purposes of litigation. Is that correct? 18 A Contested case hearing, I think. 19 A Contested case hearing, I think. 10 Q All right. This is litigation, I think. 11 Fair enough? Now, neither you nor your daughter or yourself or some combination of y to this doughter or yourself or some combination of y to this doughter or yourself or some combination of y to this doughter or yourself or some combination of y to this doughter or yourself or some combination of y to this doughter or y	ou added
2 A It could, or it could be the groundwater 3 pressure level beneath the landfill. 4 Q In which case that would be the 5 potentiometric surface. Right? 6 A No. It would be a potentiometric surface, 7 but it would be the same as a piezometric surface. 8 Q They're synonymous. Right? 9 A No, sometimes they're not. 10 Q Well, your colleague, Mr. Chandler, disagrees 11 with you. Were you here this morning? 12 A No. Not all of it. 13 Q I believe I asked him the record may stand 14 me corrected. I asked him if piezometric and 2 A Yes. 3 Q Okay. And that's information that your daughter or yourself or some combination of y to this document. Is that correct? 4 A Yes. 5 to this document. Is that correct? 6 A Yes. 7 Q Okay. Now and you intended this to be for purposes of litigation. Is that correct? 9 A Contested case hearing, I think. 10 Q All right. This is litigation, I think. 11 Fair enough? Now, neither you nor your daughter or yourself or some combination of y to this document. Is that correct? 9 A Yes. 10 Q Okay. Now and you intended this to be for purposes of litigation. Is that correct? 9 A Contested case hearing, I think. 11 Fair enough? Now, neither you nor your daughter or yourself or some combination of y to this document. Is that correct? 12 Q A Yes. 13 Q Okay. Now and you intended this to be for purposes of litigation. Is that correct? 14 A Yes. 15 to this document. Is that correct? 16 A Yes. 17 Q Okay. Now and you intended this to be for purposes of litigation. Is that correct? 18 A Correct. 19 A Correct. 10 Q All right. This is litigation, I think. 11 A Correct. 10 Q Neither of you signed or dated the original BK-3, did you?	ou added
pressure level beneath the landfill. Q In which case that would be the potentiometric surface. Right? A No. It would be a potentiometric surface, but it would be the same as a piezometric surface. Q They're synonymous. Right? A No, sometimes they're not. Q Well, your colleague, Mr. Chandler, disagrees with you. Were you here this morning? A No. Not all of it. Q I believe I asked him the record may stand M Q Okay. And that's information that your daughter or yourself or some combination of y to this document. Is that correct? A Yes. Q Okay. Now and you intended this to be for purposes of litigation. Is that correct? A Contested case hearing, I think. Q All right. This is litigation, I think. Fair enough? Now, neither you nor your daughter or yourself or some combination of y to this document. Is that correct? A Yes. Q Okay. Now and you intended this to be for purposes of litigation. Is that correct? A Contested case hearing, I think. Pair enough? Now, neither you nor your daughter or yourself or some combination of y to this document. Is that correct? A Yes. Q Okay. Now and you intended this to be for purposes of litigation. Is that correct? A Contested case hearing, I think. Q All right. This is litigation, I think. Fair enough? Now, neither you nor your daughter or yourself or some combination of y to this document. Is that correct? A Yes. A Contested case hearing, I think. Q All right. This is litigation, I think. A Correct. A Correct. Q Neither of you signed or dated the original BK-3, did you?	ou added
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5 potentiometric surface. Right? 6 A No. It would be a potentiometric surface, 7 but it would be the same as a piezometric surface. 8 Q They're synonymous. Right? 9 A No, sometimes they're not. 10 Q Well, your colleague, Mr. Chandler, disagrees 11 with you. Were you here this morning? 12 A No. Not all of it. 13 Q I believe I asked him the record may stand 14 me corrected. I asked him if piezometric and 15 to this document. Is that correct? A Yes. 7 Q Okay. Now and you intended this to be for purposes of litigation. Is that correct? 9 A Contested case hearing, I think. 10 Q All right. This is litigation, I think. 11 Fair enough? Now, neither you nor your daug signed or sealed this original BK-3, did you? 12 A Correct. 13 Q Neither of you signed or dated the original Parameters. 14 Ves. 15 A Yes. 16 A Yes. 17 Q Okay. Now and you intended this to be for purposes of litigation. Is that correct? 18 Fair enough? Now, neither you nor your daughters. 19 A Correct. 10 Q Neither of you signed or dated the original Parameters. 10 Q Neither of you signed or dated the original Parameters.	e used
A No. It would be a potentiometric surface, but it would be the same as a piezometric surface. Representation of the strate of the same as a piezometric surface, Representation of the same as a piezometric surface, Representation of the strate of the same as a piezometric surface, Representation of the strate of the same as a piezometric surface, Representation of the strate of the strate of the same as a piezometric surface, Representation of the strate of the strate of the same as a piezometric surface, Representation of the strate of the	
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10 Q Well, your colleague, Mr. Chandler, disagrees 11 Q All right. This is litigation, I think. 12 A No. Not all of it. 13 Q I believe I asked him the record may stand 14 me corrected. I asked him if piezometric and 10 Q All right. This is litigation, I think. 11 Fair enough? Now, neither you nor your daug 12 signed or sealed this original BK-3, did you? 13 A Correct. 14 Q Neither of you signed or dated the original BK-3.	hter
11 with you. Were you here this morning? 12 A No. Not all of it. 13 Q I believe I asked him the record may stand 14 me corrected. I asked him if piezometric and 15 Fair enough? Now, neither you nor your daugure in the record may stand in the reco	hter
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13 Q I believe I asked him the record may stand 14 me corrected. I asked him if piezometric and 13 A Correct. 14 Q Neither of you signed or dated the origin	
14 me corrected. I asked him if piezometric and 14 Q Neither of you signed or dated the original piezometric and 14 Description of the piezometric	
12 E	nai
potentiometric surfaces were the same, and he said 15 BK-3?	
16 yes. 16 A That is correct.	
A A piezometric surface is a potentiometric 17 Q Okay. Were you here the other day wh	
18 surface. A water table is also a potentiometric 18 Mr. Adams was asking questions about placen	ient of his
19 surface. 19 seal on Attachment 4 of the BFI application?	
Q One more time. Is it your testimony, sir, 20 A No.	
21 under oath in connection with your allegation or your 21 Q Okay. A little earlier in the day you may	
22 assertion that this landfill is leaking, that this 22 reference to the Texas Geoscientist Practices A	ct. Do
23 line that we're talking about reflects an actual 23 you remember that?	
24 leachate level inside this landfill? 24 A Yes. 25 A And L and the answer doesn't differ. It 25 MR. CARLSON: May Lapproach, Ju	1 0
The time are another control to	
Page 1728 Pag	e 1730
1 either represents the level of leachate in the 1 JUDGE NEWCHURCH: Yes, sir.	
2 landfill or the pressure surface beneath the landfill. 2 (Exhibit BFI No. 16 marked)	
3 It does not the diagram or cross-section does not 3 Q (BY MR. CARLSON) Dr. Kier, I've har	nded you a
4 tell me which. 4 section of the Texas Administrative Code, Title	22,
5 Q All right. 5 Part 39, Chapter 851, Rule Section 851.156,	
6 A But in either case, it represents mounding 6 Geoscientist Seals. Is that correct?	
7 inside the landfill. 7 A Yes.	
8 Q Let's move on. Now, you prepared an exhibit 8 Q Okay. Would you turn to Subsection 16	et's
9 with your original testimony that was the subject of 9 see here (j), please?	
some discussion that's been labeled as BK-3. Do you 10 A Okay.	
11 recall that?	
12 A Yes. 12 begins with the words "all other" at the end of t	
13 Q Could you pull your original? 13 third sentence there. Would you read that sentence	ence
14 A Okay. I have a copy of it. 14 into the record, please?	
Q This is the the original BK-3 is a document 15 A As soon as I find it. Oh, third line.	
that you and your daughter collaborated on. Is that 16 That's what threw me. You said third sentence	
17 correct? 17 other geoscience work, including but not limite	d to
18 A Correct. 18 research reports, opinions, recommendations,	
Q Okay. And it's based on a document that was 19 evaluations, addenda, documents produced for	
20 originally prepared and sealed by Mr. Snyder? 20 litigation, and geoscience software shall bear the	
21 A Yes. 21 geoscientist's printed name, date, signature, and	
Q Okay. And that's Mr. Snyder's seal on the 22 designation PG or other terms allowed under 10)02.251
bottom there. Is that correct? 23 of the Act."	
A That's what it seems to indicate. 24 Q All right. Would you take a look at	
Q All right. And there's a lot of red and blue 25 Subsection (k)? Would you read that into the r	

55 (Pages 1727 to 1730)

			~
	Page 1731		Page 1733
1	please?	1	Q (BY MR. CARLSON) All right. After a short
2	A "Work performed by more than one geoscientist	2	break to clarify things, Dr. Kier, the document that's
3	shall be sealed in a manner such that all geoscience	3	been marked as BFI-17 is a copy of the original
4	can be clearly attributed to the responsible	4	Exhibit BK-3 that you prepared and submitted with your
5	geoscientist or geoscientists. When sealing plans or	5	prefiled testimony that has subsequently been
6	documents on which two or more geoscientists have	6	superseded by BK-3 after some changes. Correct?
7	worked, the seal of each geoscientist shall be placed	7	A Correct.
8	on the plan or document with a notation describing the	8	Q Okay. Well, I'd like to look at BFI-17 a
9	work done by each geoscientist responsible for the	9	little bit, the original BK-3, and see if I understand
10	charge."	10	the basis for your changes.
11	Q And, again, could you read Subsection (n)	11	A Sir, you may have an advantage if you would
12	into the record, please?	12	go to the list that was provided with BK-3 revised.
13	A Oh, there it is. "Alteration of a sealed	13	It itemizes all the changes.
14	document without proper notification to the	14	Q Yeah. I just want to make sure I understand
15	responsible geoscientist is misconduct or an offense	15	it and make sure it's clear on the record, sir.
16	under the Act."	16	A I do not have that in front of me, so I'll be
17	Q Now, the original BK-3 didn't have either	17	operating from memory.
18	your seal or your daughter's seal on it. Right?	18	Q Which are you talking about?
19	A Correct.	19	A The itemized sheet. I don't know where it
20	Q Not signed or sealed by either of you.	20	went.
21	Right?	21	(Brief recess)
22	A Right.	22	JUDGE NEWCHURCH: Back on the record.
23	Q You did put some information on Mr. Snyder's	23	Q (BY MR. CARLSON) All right. Looking at
24	drawing. Is that right?	24	BFI-17, do you see Boring B-16 in the southwest corner
25	A Correct.	25	of the landfill?
	Page 1732		Page 1734
1	Q And without any other information, how am I	1	A Yes.
2	to know what work you did, what work your daughter	2	Q Okay. The original document you prepared
3	did, and what work Mr. Snyder did?	3	shows a reading of 712 feet above sea level for the
4	A Because it's part of the sworn testimony.	4	top of the casing. Is that correct?
5	Q All right. Now, you submitted some changes	5	A Well, that's what it says, yes.
6	to this particular exhibit this morning. Correct?	6	Q All right. And I believe at some point you
7	A Correct.	7	and I concluded that 712 couldn't possibly be a
8	Q Okay. And I believe we talked about in your	8	correct number because there's not an elevation at the
9	deposition I'd just like to make sure I'm clear on	9	site, never has been, a natural elevation, that's over
10	the basis for your changes. Do you see why don't	10	700 feet. Right?
11	you let's see. I'm still looking at the original	11	A No. You're correct. 712 was taken off the
12	BK-3, the one that was has been substituted for.	12	dashed line that was the fill.
13	A Oh.	13	Q Okay. And the notation in red there
14	MR. CARLSON: Judge, I'd like there	14	indicates that this number was taken as the
15	might be a copy up there. I'd like to mark the	15	measurement from the top of a casing that had an
16	original as next in order for BFI.	16	elevation of 712 feet. Is that correct?
17	•	17	A Yes.
18	as originally filed, and you want to mark that as	18	Q Okay. And this is a boring. Right?
19	BFI-17?	19	A Right.
20	MR. CARLSON: BFI-17, Your Honor.	20	Q Not a groundwater monitoring well. Right?
21	JUDGE NEWCHURCH: Let's go off the	21	A Right.
22	record while we make sure there's a copy.	22	Q B-16?
23	(Brief recess)	23	A Yes.
24	(Exhibit BFI No. 17 marked)	24	Q Okay. And borings don't have casings, do
25	JUDGE NEWCHURCH: Back on the record.	25	they?

56 (Pages 1731 to 1734)

	MI DOCKET NO. 302 00 2170		CEQ DOCKET NO. 2007 1774 MDW
	Page 1735		Page 1737
1	A Some do. Some don't.	1	demonstration or a groundwater report I can't
2	Q Okay. The borings here didn't. Right?	2	remember, but it had a misfolded map in it you know,
3	A I don't know.	3	an eight and a half by 11 or 17 that hadn't been
4	Q Okay. Now, this isn't the only error. You	4	unfolded before it was copied, so it was not quite
5	have a list of errors that you corrected in the	5	readable. But it had enough of the western portion
6	corrected BK-3. Right?	6	that I could see that BFI had turned a corner and was
7	A Yes. There were one, two, three, four, five,	7	filling on the north half.
8	six, seven elevations that were incorrect.	8	Q In any event, you reached your conclusion
9	Q Okay.	9	that the landfill was leaking before you even knew
10	A And have been corrected.	10	that. Is that fair to say?
11	Q And they include the ones running from B-16	11	A Yes.
12	eastward, the information for B-17, B-18, B-19. Is	12	Q Okay. Now, you've testified in your prefiled
13	that correct?	13	that the landfill is leaking based on several
14	A Correct.	14	cross-sections in the application. I think we've
15	Q Okay. Each of those suggests an elevation of	15	discussed that. But you didn't even bother to review
16 17	over 700 feet. Right?	16	any recent groundwater monitoring data for the site
	A B-19 didn't, but it was close enough.	17 18	when you reached that opinion, did you?
18 19	Q All right. That says 699. Right? A Yes.	19	A Well, the most recent groundwater monitoring data provided in the application was 2005, and, yes, I
20	Q Now, if I were to take the information that	20	did look at it.
21	was included in this original Exhibit BK-3 along that	21	Q Well
22	particular line, which is the C-C prime line, I could	22	A Let me be absolutely clear here on something.
23	infer that there was a natural topographic high near	23	I reached my conclusion based on the information in
24	these borings, couldn't I?	24	the application.
25	A You might, unless you went back to the	25	Q You didn't bother you were retained to look
	Page 1736		Page 1738
1		,	
1 2	original data source.	1 2	at this application. Correct? A That is correct.
3	Q Right. But if I'm just looking at what you prepared. Right?	3	Q And you didn't even bother to look outside
4	A You might.	4	the information in the application just to confirm
5	Q I can infer that there was a natural	5	this opinion that you had reached, this serious
6	topographic high based solely on the information in	6	allegation that the landfill is leaking?
7	this document. Right?	7	A I don't understand your question, sir.
8	A Well, you could infer it, yes.	8	Q Sir, I think we've established it's a serious
9	Q That wouldn't be fair, though, would it?	9	allegation regarding the potential leakage of the
10	A Well, that's why I fixed it.	10	landfill. Fair enough?
11	· · · · · · · · · · · · · · · · · · ·	11	A We'll call it that for
12		12	Q Okay. And yet you reached this based solely
13	A Yes.	13	on the information in the application. Right?
14	Q you don't know to what extent the landfill	14	A That is correct.
15	had either been excavated or landfilled in the western	15	Q And you didn't look to any extraneous data to
16	portion of this site as of this December 1999 time	16	support or refute the opinion you had reached?
17		17	A I have now.
18		18	Q You didn't do it before you reached your
19		19	opinion and prepared your prefiled?
20	Q Okay. Did you go back and look at some	20	A That is correct. I based my prefiled
21		21	entirely on the information and data in the
22	A No.	22	application.
23	Q What did you do?	23	Q We'll get to this a little bit later. But
24	A A document that was produced from Kero	24	talking about these reports you prepared for
25	Corporation whether it was an all source	25	Mr. Gregory in the 1990s regarding the Austin

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	Page 1739		Page 1741
1	Community landfill	1	Objection overruled.
2	A Yes, sir.	2	Q (BY MR. CARLSON) I believe we had some
3	Q you spent an extensive amount of time	3	discussion of the TJFA property located at the
4	rummaging through the archives of the then it was	4	northwest corner of the property?
5	the TNRCC looking for historical groundwater data,	5	A Yes.
6	didn't you?	6	Q The Sunset Farms property?
7	A I did not personally, but someone did.	7	A Yes.
8	Q You had somebody do that for you. Right?	8	Q Will you turn to APP 000040 in the
9	A Yes.	9	application? It should be in Volume 1.
10	Q Perhaps a Dr. Yuliana type of person?	10	A Okay. I've forgotten the number.
11	A No.	11	Q It's APP and as many zeros as you want to
12	Q But nevertheless, you were actively seeking	12	look at, but look for the last two digits of 40. It's
13	groundwater data to confirm what I believe or it	13	called the Landowner's Map.
14		14	A All right.
15 16	escape of contaminates from the ACL site through the	15	Q Have you got it?
16	groundwater. Right?	16	A Yes.
17 18	A I was looking for every piece of data I could	17 18	Q Okay. Do you see up in the upper left-hand corner, which would be the northwest side of the site,
10 19	find. Q But you didn't do that here, did you?	19	there's a reference to 11.227-acre site owned by TJFA,
20	Q But you didn't do that here, did you? A No, sir. I didn't have the time.	20	LP?
21		21	A Yes.
22	Q All right.A And that wasn't the purpose of my prefiled.	22	Q Okay. That's the site that we've been
23	Q You also didn't perform any sort of	23	talking about a little earlier today, the 5510 Blue
24	calculations in connection with this opinion that you	24	Goose property. Is that correct?
25	have reached that the landfill was leaking. Is that	25	A That's one of the properties, yes.
	Page 1740		Page 1742
1	correct?	1	Q All right. As part of your tasks on this
2	A No calculations were needed.	2	particular project, were you specifically asked to
3	Q That wasn't my question, sir. You didn't	3	look at the potential groundwater impacts of the
4	prepare any, did you?	4	proposed expansion on the TJFA property?
5	A No. They were not needed.	5	A Not specifically, no.
6	Q You didn't do any groundwater modeling, did	6	Q You didn't do any sort of modeling or
7	you?	7	calculations about how any escape of contaminated
8	A No, sir. That would be an exercise in	8	groundwater would actually affect the TJFA property.
9	fiction and futility.	9	Right?
10	MR. CARLSON: Judge, I object as	10	A No. I had no basis to do so.
11	nonresponsive.	11	Q Okay. Now, isn't it true that based on your
12	JUDGE NEWCHURCH: Well, the first part	12	prefiled testimony, you strike that.
13	was no. The second part is what you're saying is	13	In your prefiled testimony, if you want
14	nonresponsive?	14	to refer to Page 9, you testified that this northwest
15		15	corner may be the only portion of the area where the
16	JUDGE NEWCHURCH: Do you have a response	16	groundwater is actually flowing onto the BF site or
17	3	17	into the BF site from off site. Correct?
18		18	A BFI site, yes.
19	just the completeness of the answer I certainly	19	Q That would be in the area of this TJFA
20	understand why Mr. Carlson would want to isolate his	20	property. Is that correct?
21	question to the yes or no answer, but I think Dr. Kier	21	A That would be correct.
22	is simply trying to give a full answer as to why he	22	Q So, in fact, groundwater flows from the TJFA
23	did not conduct either modeling or independent	23	property onto or into or underneath the BFI site.
24	calculations as being a futile exercise.	24	Correct?
25	JUDGE NEWCHURCH: I agree with that.	25	A No. That would be the only place it could,

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		_	
	Page 1743		Page 1745
1	if it does.	1	A I don't remember the exact times on the
2	Q All right. So, hypothetically, even if there	2	litigation, so I can't tell you.
3	was a leak, Mr. Gregory's property, the TJFA property,	3	Q All right. I understand the purpose of your
4	wouldn't be affected by groundwater contamination. Is	4	investigation was to try to determine if there was
5	that correct?	5	some sort of groundwater contamination that was
6	A No, not necessarily.	6	emanating from and perhaps leaving the Austin
7	Q Groundwater is coming onto the site from	7	Community landfill site?
8	Mr. Gregory's property.	8	A Well, that became the ultimate subject, but
9	A Not necessarily.	9	that's not how I started out.
10	MR. RENBARGER: Objection. I don't	10	Q Okay. And you did extensive research of
11		11	monitoring well data from the state archives in
12	E	12	connection with your investigation. Is that correct?
13		13	A Yes.
14		14	Q And those data and your review of those data
15		15	are included in these reports. Right?
16		16	A The review of it the actual I can't
17	· · · · · · · · · · · · · · · · · · ·	17	remember if the actual data are included or not.
18	_	18	Q So back in '97, '98, you apparently believed
19	=	19	that reviewing groundwater quality data was a valid
20		20	methodology for trying to detect or confirm your
21 22	the BFI property or onto or underneath the BFI	21 22	personal suspicion that there was a discharge of
23	property from this TJFA property. Right? A No, sir. You're mischaracterizing what I've	23	contaminates from the ACL facility?
24	said in my deposition and perhaps in my prefiled	23 24	A I can't answer yes or no at least not yes to that question.
25	testimony. I said if there is a place where it could	25	Q Well, why did you look at the groundwater
	Page 1744		Page 1746
1	be coming onto the BFI site, that is it, in the	1	data?
2	northwest corner, but I didn't say it was.	2	A Because I had it and I had time.
3	Q You're saying that might be upgradient, might	3	Q You actually actively went out or had
4	be downgradient?	4	somebody actively go out and get the groundwater data,
5	A And we don't have the data to know.	5	didn't you?
6	Q All right. Now, in your prefiled you	6	A I had them get every piece of data. I didn't
7	attached and referenced three reports to Mr. Gregory	7	care whether it was a piece of correspondence, a tear
8	that we've been talking about, those 1998 reports?	8	off a tablet sheet, a written submittal or anything.
9	A Yes.	9	I wanted everything.
10 11	Q Would you get those out, please?	10 11	Q And without going through each and every entry of the three memos, you've got extensive
12	A Okay. I'm there. Q Okay. Those have been marked and admitted as	12	discussion of the groundwater data that you reviewed.
13	Q Okay. Those have been marked and admitted as BK-8. Is that correct?	13	Is that correct?
14	A Yes.	14	A Yes. That was the subject of this report.
15	Q Is it fair to say that these three reports	15	Some of it has do with the gas monitoring probes and
16	•	16	landfill gas excursions, too.
17	iterations of the same report, the first in March of	17	Q Okay. And I'm looking at the would you
18	'98, another in May of '98, and then the last in	18	turn to the March excuse me the August 10th
19	August of '98?	19	report, which I believe is the final report you wrote?
20	A That would be correct.	20	It's buried in there somewhere.
21	Q Okay. And I believe we discussed these	21	A All right. I found it.
22	reports were prepared for Mr. Gregory roughly in the	22	Q It's roughly three-quarters or four-fifths of
23	time that he was in litigation excuse me that TDS	23	the way through.
24	was in litigation with Waste Management. Is that	24	A Yes, sir.
25	correct?	25	Q Has everybody found it yet? This is a report

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	Page 1747		Page 1749
1	that you authored. Right?	1	A Correct.
2	A Correct.	2	Q Now, these eight wells have been designated,
3	Q And you addressed it to Bob Gregory,	3	as far as the report is concerned, monitoring wells 1A
4	President of Texas Disposal Systems landfill. Right?	4	through 8. Is that right?
5	A Inc., yes.	5	A Yeah. There's 1A and there's 3A.
6	Q And the subject was Waste Management of Texas	6	Q Okay.
7	Austin Community landfill. Right?	7	A Those two had to be replaced. They were
8	A Yes.	8	destroyed at some point, the original ones.
9	Q Okay. And dated August 10th, 1998?	9	Q Okay. Now, according to the report, at least
10	A Yes.	10	the portions that we have, each of the eight wells
11	Q Would you turn to Page 9 of that report? Are	11	were sampled in July of 2002 for a number of things.
12	you there?	12	Is that correct? A number of parameters or
13	A Yes.	13	constituents?
14	Q Will you read the first sentence of the last	14	A Yes.
15	full paragraph on Page 9?	15	Q Including various metals and inorganic
16	A I assume you mean the one "To date"?	16	parameters?
17	Q Yes, sir.	17	A Yes.
18	A "To date, no evidence has been found that BFI	18	Q Okay. They were also each monitored
19	Sunset Farms landfill has contributed in any	19	sampled and analyzed for a suite of 52 volatile
20	detectible way to the contamination of groundwater in	20	organic compounds, or VOCs?
21	the weathered Taylor clays."	21	A I didn't count them, but it's the 8260 list.
22	Q All right. Now, you've also attached and	22	Q Using the 8260 list. Right?
23	we've discussed a little bit today the PBS&J report	23	A Yes.
24	the Applied Materials report. Is that correct?	24	Q And another suite of semi-volatile organic
25	A Yes.	25	compounds or SVOCs were sampled using the 8270 method?
	Page 1748		Page 1750
1	Q All right.	1	A Yes.
2	A That's Attachment 7.	2	Q The 8270(c)?
3	Q BK-7?	3	A Yes.
4	A Yes, sir.	4	Q And they also sampled for total organic
5	Q Would you turn to that?	5	carbon?
6	A Yes, sir.	6	A Yes.
7	Q Okay. Now, the Applied Materials site,	7	Q Which is also sometimes known as TOC?
8	that's located on the eastern side of Giles Lane. Is	8	A Yes.
9	that correct?	9	Q Then they sampled for total organic halides.
10	A Yes.	10	Correct?
11	Q Okay. And according to BK-7, which is	11	A Yes.
12	portions of a report, there was some groundwater	12	Q Which sometimes goes by the acronym TOX?
13	sampling and analysis that was done at the Applied	13	A Yes.
14	Materials site in the summer of 2002. Is that	14	Q And then they looked for total dissolved
15	correct?	15	solids. Right?
16	A Yes.	16	A Yes.
17	Q Okay. And at that time there were eight	17	Q All right. Would you turn to Page 5 of BK-7?
18		18	A Let's see. Is that 19766?
19	by Applied Materials?	19	Q Yes, sir.
20	A Yes.	20	A Okay.
21	Q Okay. If you turn to the last page of BK-7	21	Q Actually, it should be APP 019764.
22	it's a map of the Applied Materials site. Is that	22	A Okay. Excuse me.
23	correct?	23	Q Could you read the first full sentence of the
24	A Yes.	24	second paragraph?
		25	
25	Q It's labeled APP 019768. Right?	25	A "The analytical results for the metals and

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	Dog 1751		Daga 1752
	Page 1751		Page 1753
1	inorganic parameters for groundwater samples collected	1	Q And it looks like there's a little cluster of
2	in July 2002 do not reflect any major abnormalities	2	buildings right there?
3	from previously collected samples at the site."	3	A Yes.
4	Q All right. Would you turn to Page 7 of the	4	Q That's the old Diamond Shamrock station that
5 6	report, APP 019766? A Yes.	5	I used to fill up with on my way back from Elgin.
7	Q Would you read the first full sentence of the	7	Right? A Well, I can't swear to you used to fill up
8	second paragraph on that page, please, sir?	8	there, but it is an old Diamond Shamrock station, yes.
9	A "Relatively high levels of TOC were detected	9	Q Actually, I misspoke, because I didn't fill
10	in samples from wells MW-1A, MW-2, MW-5, and MW-8.	1	up on the way to Elgin. I filled up on the way to
11	However, no VOCs or SVOCs included on the laboratory's	11	Austin from Elgin. I wanted to correct that.
12	target compound list were detected."	12	A Okay. You're forgiven.
13	Q Now, that doesn't mention Monitoring Well 3A	13	Q So Monitoring Well 8 is immediately downdip
14	or Monitoring Well 4. Correct?	14	from an old gas station. Right?
15	A In terms of saying that they had relatively	15	A I believe that's the case, yes.
16	high levels. They had TOCs in them. They just didn't	16	Q So let's go back and look at Monitoring
17	have relatively high levels.	17	Well 2. Do you see that?
18	Q It doesn't mention those wells, does it, sir?	18	A Yes.
19	A No, sir, it does not.	19	Q That's roughly in the south center portion of
20 21	Q Okay. Well, let's turn back to the map at the end there. Do you see where Monitoring Well 1A is	20 21	the Applied Materials campus. Right? A Yes.
22	located there?	22	
23	A Yes, sir.	23	Q It appears that there is a rather large pond to the there are ponds, actually, to both the
24	Q Okay. I believe you and I agreed in your	24	north, northwest, and to the east. Right?
25	deposition that Monitoring Well 1A is not downgradient	25	A Yes.
	Page 1752		Page 1754
1	from Sunset Farms. Is that correct?	1	Q Okay. I believe, if you'll turn to the prior
2	A I believe that was the case. I'm operating	2	page, the other half of this map do you see that?
3	without the boundary line.	3	A Yes.
4	Q Okay.	4	Q Do you see on the right-hand side there's a
5	A Whereas I think we had it before.	5	scale?
6	Q Now, Monitoring Well 5 is located in the far	6	A Yes.
7	southwest corner there, in the triangular area.	7	Q Could you I had Mr. Jiminez leave a ruler
8	Right?	8	up there. Do you see a little ruler up there?
9	A Yes.	9 10	A Yeah. It's the neatest thing I've ever seen.
10 11	Q Okay. And that monitoring well was not downgradient from Sunset Farms, is it?	11	Q Pretty sweet, isn't it? A It is.
12	A I don't think so.	12	Q Could you take that ruler and using that
13	Q Okay. In fact, that little building	13	determine how many feet it is between Monitoring
14	represented slightly to the northwest of Monitoring	14	Well 2 in a straight line to Giles Lane?
15	Well 5, that's the old Lief Johnson Ford body shop.	15	A I'm trying to find the the scale doesn't
16	Isn't that correct?	16	exactly work, so I'm trying to work it.
17	A I think so.	17	Q Did you come up with a number yet, Dr. Kier?
18	Q Okay. Monitoring Well 5 is actually just	18	A Oh, it's about 1,350 feet.
19	immediately downdip from that, isn't it?	19	Q All right. Now, assuming for my question
20	A I believe so.	20	that groundwater monitoring or groundwater shallow
21	Q All right. And Monitoring Well 8, that's	21	groundwater in this particular area travels at a rate
22	even further to the southwest, almost at the tip	22 23	of 10 feet per year, how long would it take it to
23 24	there, by Giles Lane and the 290 intersection. Do you see that?	24	travel assuming that Monitoring Well 2 is downgradient from Giles Lane, a straight line, how
25	A Yes.	25	long would it take groundwater to travel from Giles
	100.	1	2015 Would it take product water to traver from Offes

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	Page 1755		Page 1757
1	Lane to Monitoring Well 2?	1	BFI's facility would also be upgradient of their
2	A 130 years.	2	wells. Right?
3	Q The Sunset Farms landfill has been open for,	3	A It would be the southeast.
4	what, 26 years so far?	4	Q Southeast. Yes. Thanks.
5	A 1982 close enough. That's why I've	5	A That would be the case, yes.
6	explained those things.	6	Q Now, the designation of the point of
7	Q All right. Let's talk a little bit about the	7	compliance, that's a regulatory concept, isn't it?
8	groundwater monitoring system or the proposed	8	A I guess you could look at it that way.
9	groundwater monitoring system for the vertical	9	Q TCEQ has a specific rule on point, don't
10	expansion. You've had an opportunity to review the	10	they?
11	diagram where the proposed well locations will be for	11	A Yes, but parallel to the federal Subtitle D
12	the expanded landfill?	12	rule.
13	A Yeah. I'm looking at a very small scale	13	Q All right. So it may be statutory and
14	sheet, but I have an idea a mental idea at this	14	regulatory. Is that right?
15	point.	15	A Yes.
16	Q And it's your understanding that there will	16	Q Okay. And in your experience, when you've
17	be a total of 32 monitor wells surrounding the	17	worked on a landfill application, you coordinate with
18	perimeter of the facility. Is that correct?	18	the ED, correct, to determine where a point of
19	A That's correct.	19	compliance should be defined. Right?
20	Q And there will be wells located on all four	20	A I would say by the time you go through two
21	sides of the permit boundaries, right; north, south,	21	iterations this one went through six that by the
22	east, and west?	22	time you've gone through two, you've pretty well
23	A That's correct, all downgradient.	23	established reached an agreement.
24	Q Would you agree that the maximum spacing	24	Q Okay. Now, having a point of compliance is a
25	between any two wells around the perimeter of the	25	good thing. You're monitoring groundwater that's
	Page 1756		Page 1758
1	proposed system is 600 feet?	1	leaving the site. Right?
2	A I would agree with that. I checked it.	2	A Well, that is the definition of a point of
3	Q Okay. Did you do any sort of averaging to	3	compliance.
4	determine the average distance between the wells?	4	Q You want to see what's leaving the site?
5	A No. That's irrelevant.	5	A Yes.
6	Q In other words, you didn't do it?	6	Q Okay. So the more comprehensive you are that
7	A No, sir. It's irrelevant.	7	is, the more parts of the site that you're checking to
8	Q Now, BFI has proposed to label the entire	8	make sure what's leaving the site is clean, the
9	perimeter of the landfill as the point of compliance	9	better. Right?
10	for regulatory purposes. Correct?	10	A I believe that mischaracterizes the
11	A Correct.	11	situation, if I may explain.
12	Q Okay. Now, you and I have discussed there	12	MR. CARLSON: Objection.
13	may be an upgradient, downgradient well, one that	13	Q (BY MR. CARLSON) It's better to have more
14	could be classified as both in the northwest corner of	14	let me just re-ask the question. It's better to check
15	the facility. Right?	15	more of the water that's leaving the site than less.
16	A Well, there may be a well there that could be	16	Right?
17	upgradient, or it could be downgradient, but it is, in	17	A You've got the same rationale as my
18	the application, designated as a downgradient well.	18	mother-in-law, that more is better. But that's not
19	Q And you've testified, I believe, in your	19	always the case. If more were better, then you would
20	prefiled that you believe there might be some	20	have put them on 150-foot spacing or 300-foot spacing,
21	E	21	which is what the staff really wanted.
22	the Austin Community landfill site. Is that correct?	22	Q Let me ask you this. You designed the
23	A Yes.	23	groundwater monitoring system for the TDSL site in
24 25	Q Which would mean, if you're correct, that a few of those wells along the southwest portion of	24	Creedmoor. Is that correct?
دے	icw of those wens along the southwest portion of	25	A Yes, sir.

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1 Q How many monitoring wells how big is that 2 site? 3 A Total acreage is 350 acres, I think, not all 4 of it being used for waste. 5 Q And there are presently six monitor wells for 6 that entire site, aren't there? 7 A Yes. 9 site. Correct? 9 site. Correct? 10 A I don't remember the size, but 32 wells, yes. 11 Q And currently TDS, in a similar geology and bydrogeology strike that TDS has six. Right? 13 A Well, sir, they will progress, so six isn't 14 the ultimate number. 15 Q Ultimately TDS is permitted to install 10. 16 Right? 17 A That is correct. 18 Q All right. Now, BFI is proposing to conduct detection sampling twice annually. Is that right? 19 A Yes. 10 Q Oay. It's proposing to sample for 21 A I believe that's correct, yes. 22 Q Ada, if a well is an assessment monitoring, I sthat correct? 23 is not an assessment monitoring. Is that correct? 24 A I believe that's correct, yes. 25 Q And if a well is an an adround MSW facilities. Is that correct? 26 A Yes. 27 A Yes. 28 A And other things, but they are an EPA list of the most common modern chemicals. 29 A Yes. 30 A Yes. 41 Q Now, would it for fair to say, in several portions of your prefiled testimony, that you do consistuents. Is that correct? 31 A Yes. 42 A Total acreage is 350 acres, I think, not all about the specifical your think BPI should be required to review analysis. Is that correct? 3 is not an assessment monitoring. 3 A Yes. 4 A I believe that's correct, yes. 4 Q And the Appendix I and Appendix 2 constituents. Is that correct? 5 A I many. 6 Q Now, would it for fair to say, in several portions of your prefiled testimony, that you do consed that the groundwater monitoring system as proposed for the vertical expansion may meet the minimum technical regulatory requirement or permit requirement that it review chromatograms as proposed for the vertical expansion may meet the minimum technical regulatory requirement or permit requirement that it review chromatograms as part of its groundwater in manually. Is that correct? 2 A Yes. 3 A Yes. 4 A I beli				
2 site? 3 A Total acreage is 350 acres, I think, not all 4 of it being used for waste. 5 Q And there are presently six monitor wells for that entire site, aren't there? 6 A Yes. 8 Q So BFI is proposing 32 wells for a 350-acre site. Correct? 9 site. Correct? 1 A I don't remember the size, but 32 wells, yes. 11 Q And currently TDS, in a similar geology and 12 bydrogeology strike that TDS has six. Right? 13 A Well, sir, they will progress, so six isn't the ultimate number. 14 the ultimate number. 15 Q Ultimately TDS is permitted to install 10. 16 Right? 17 A That is correct. 19 Q All right. Now, BFI is proposing to conduct detection sampling twice annually. Is that right? 19 Q All right to constituents as long as any individual well is in soassessment monitoring. Is that correct? 24 A T believe that's correct, yes. 25 Q And if a well is an assessment monitoring. 26 The nit is proposing to monitor for Appendix 2 constituents. Is that correct? 27 A Yes. 28 A And other things, but they are an EPA list of the most common modern chemicals. 29 Q It just doesn't meet the Bob Kier standard, apparently, Right? 30 Q It just doesn't meet the Bob Kier standard, apparently, Right? 31 A Parently Right? 32 A I thanks taken all kinds of industrial waste and mixed them all together, and the resulting soup of which we all thanks taken all kinds of industrial waste and mixed them all together, and the resulting soup of which we are every found. 3 A Wesh conditions and the resulting soup of which we are not fear what the sampling analysis. Is that correct? 4 A Yes. 2 you think BFI should be required that. 4 A Yes, I mentioned that. 4 A No. it in review chromacong a per to ficility in Texas that stin exe to a competion of the ant		Page 1759		Page 1761
a A Total acreage is 350 acres, I think, not all of it being used for waste. Q And there are presently six monitor wells for that entire site, aren't there? A Yes. Q So BFI is proposing 32 wells for a 350-acre site. Correct? A I don't remember the size, but 32 wells, yes. Q And currently TDS, in a similar geology and hydrogeology strike that TDS has six. Right? A Well, sir, they will progress, so six isn't the ultimate number. A Well, sir, they will progress, so six isn't the the ultimate number. Q Ultimately TDS is permitted to install 10. Right? A Yes. Q All right. Now, BFI is proposing to conduct dedetion sampling twice annually. Is that right? Q A Yes. Q And if a well is an assessment monitoring. Page 1760 then it is proposing to monitor for Appendix 2 constituents. Is that correct? A Yes. Q And the Appendix I and Appendix 2 ist, those are lists that were developed by EPA specifically to monitor groundwater in and around MSW facilities. Is that correct? A Yes. Q Now, would it be fair to say, in several proprions of your perfield testimony, that you do concede that the groundwater monitoring system as proposed for the vertical expansion may meet the minimum technical regulatory requirement or part of its groundwater sampling analysis plan? A No, sir. But I'm unaware of any other MSW facilities of facility in Texas that has a regulatory requirement or permit requirement that it review chromatograms as permit requirement that it review chromatograms as permit regularement or its facility and rof its groundwater sampling analysis plan? A No, sir. But I'm unaware of any other MSW facilities and fall landfills in Texas that has a regulatory requirement or permit requirement that it review chromatograms as permit regularement of its facility and its and sit that the sext to a competing other landfills in Texas that has a regulatory requirement or permit requirement that it review chromatograms as permit of its groundwater statest to a competing other landfills in Texas that has a regulatory requirement or permit	1	Q How many monitoring wells how big is that	1	Q One of your contentions, I believe, is that
4 of it being used for waste. Q And there are presently six monitor wells for that entire site, aren't there? A Yes. A Yes. Q And currently TDS, in a similar geology and labydrogeology strike that TDS has six. Right? A Hold sir, they ull progress, so six in't the ultimate number. Q Ultimately TDS is permitted to install 10. Right? A That is correct. A That is correct. A That is correct. A That is correct. A Pess. A Yes. A Pess. A That is correct. A That is correct. A That is correct. A Pess. A Pess. A Pess. A Pess. A That is correct. A Pess. A Pess. A Pess. A That is correct. A Pess. A Pess. A Pess. A Pess. A That is correct. A Pess. B Q Now, will repair an absessment monitoring. B Q And if a well is an assessment monitoring. B Q And the Appendix 1 and Appendix 2 constituents. Is that correct? A A Pess. A A Pess. A A Mod ther timing, but they are an EPA list of the monitor groundwater in and around MSW facilities. Is that correct? A A Rod other timing, but they are an EPA list of the most common modern chemicals. Q Now, would it be fair to say, in several portonsed for the revircial expansion may meet the minimum technical regulatory requirement of a Permitterious review chromotograms as part of its groundwater sampling analysis plan? A No. ir. But I'm unaware of any other MSW facility in Texas that sit next to a competing other landrill. MR. CARLSON: Objection to the second half as nonresponsive. It was a pretty simple question. JUDGE NEWCHURCH: Do you have a response to the objection? MR. CARLSON: At some point he can rehabilitate or redirect him. JUDGE NEWCHURCH: Right. Okay. Do you wave a response? MR. REABARGER: No. Let's just get on with it. JUDGE NEWCHURCH: All right. So objection sustained. Strike the last part of the correct of monitor groundwater in and around MSW facilities. Is that correct? A Pess. Q Now, would it be fair to say, in several portions of many be some of the proposed	2	site?	2	you think BFI should be required to review
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A Yes. Q So BFI is proposing 32 wells for a 350-acre site. Correct? A I don't remember the size, but 32 wells, yes. A Q and currently TDS, in a similar geology and hydrogeology strike that TDS has six. Right? A Well, sir, they will progress, so six isn't the ultimate number. Q Ultimately TDS is permitted to install 10. Right? A That is correct. Q All right. Now, BFI is proposing to conduct detection sampling twice annually. Is that right? A Yes. Q And right is proposing to sample for 2 Appendix I constituents as long as any individual well 3 is not an assessment monitoring. Is that correct? A T believe that's correct, yes. Q And if a well is an assessment monitoring, Page 1760 then it is proposing to monitor for Appendix 2 constituents. Is that correct? A A Constituents. Is that correct? A And other things, but they are an EPA list of permit requirement that it review chromatograms as part of its groundwater sampling analysis plan? A No, sir. But I'm unaware of any other landfill. MR. CARLSON: Objection to the second half as nonresponsive. It was a pretty simple question. JUDGE NEWCHURCH: Do you have a response to the objection? MR. RENBARGER: No. Let's just get on with it. JUDGE NEWCHURCH: Right. Okay. Do you have a response? MR. RENBARGER: No. Let's just get on with it. JUDGE NEWCHURCH: All right. So objection sustained. Strike the last part of the Page 1760 Page 1760 Page 1760 Page 1760 A I didn't phrase it that way. Q Okay. Do you agree that the monitoring wells should be screened to monitor water along the weathered/unweathered interface? A I didn't phrase it that were done. It may change. Q That's what you did or you do at TDSL. Q I just doesn't meet the Bob Kier standard, another complaint you have has to do with the specific locations of maybe some of the proposed monitoring water at the weathered/unweathered interface. Is that correct? A I have no idea what it is. And it is migratting, if A What we've identified, yes. Q All right. So objection sustained. Strike the l	5	Q And there are presently six monitor wells for	5	A Yes, I mentioned that.
8 Q So BFI is proposing 32 wells for a 350-acre 9 site. Correct? 10 A I don't remember the size, but 32 wells, yes. Q And currently TDS, in a similar geology and hydrogeology strike that TDS has six. Right? 13 A Well, sir, they will progress, so six isn't 14 the ultimate number. 15 Q Ultimately TDS is permitted to install 10. 16 Right? 17 A That is correct. 18 Q All right. Now, BFI is proposing to conduct detection sampling twice annually. Is that right? 19 A Yes. 20 A Yes. 21 Q Okay. It's proposing to sample for 22 Appendix I constituents as long as any individual well is in so than assessment monitoring. Is that correct? 24 A T believe that's correct, yes. 25 Q And if a well is an assessment monitoring. 26 Then it is proposing to monitor for Appendix 2 are lists that were developed by EPA specifically to monitor groundwater in and around MSW facilities. Is 7 that correct? 28 A And other things, but they are an EPA list of the most common modern chemicals. 29 Q Now, would it be fair to say, in several poptions of your prefile testimony, that you do concede that the groundwater monitoring system as proposed for the vertical expansion may meet the minimum technical regulatory requirements for TCEQ? A No., sic. But I'm unaware of any other landfill. 30 MR. CARLSON: Objection to the second half as nonresponsive. It was a pretty simple question. 31 MR. CARLSON: Objection to the second half as nonresponsive. It was a pretty simple question. 32 MR. CARLSON: Objection to the second balf as nonresponsive. It was a pretty simple question. 34 MR. CARLSON: Objection to the second that fire vision. MR. CARLSON: Objection to the second balf as nonresponsive. It was a pretty simple question. 34 MR. CARLSON: Objection to the second that fire vision. 35 MR. CARLSON: Objection to the second that fire vision. 36 MR. CARLSON: Objection to the second that and inflict. 37 MR. RENBARGER: No. Let's just get on with it. 38 JUDGE NEWCHURCH: Rilght. So objection sustained. Strike the last part of the weathered interface? 4 Q And the App	6	that entire site, aren't there?	6	Q All right. Are you aware of any other MSW
site. Correct? A I don't remember the size, but 32 wells, yes. Q And currently TDS, in a similar geology and hydrogeology strike that TDS has six. Right? A Well, sir, they will progress, so six isn't the ultimate number. Q Ultimately TDS is permitted to install 10. Eight? A That is correct. Q All right. Now, BFI is proposing to conduct detection sampling twice annually. Is that right? A Yes. Q Okay. It's proposing to sample for Appendix 1 constituents as long as any individual well is not an assessment monitoring. Is that correct? A Tell believe that's correct, we are lists that were developed by EPA specifically to monitor groundwater in and around MSW facilities. Is that correct? A And other things, but they are an EPA list of the most common modern chemicals. Q Own, would it be fair to say, in several portions of your prefiled testimony, that you do concede that the groundwater monitoring system as proposed for the vertical expansion may meet the minimum technical regulatory requirements for TCEQ? A I Imgs. A I didn't know I was elevated to that status, a plance of the worst common modern chemicals. A In general, yes. Q It just doesn't meet the Bob Kier standard, apparently. Right? A I didn't know I was elevated to that status, a plance of the worst common modern chemicals. A that is correct. A That is correct. A Yes. Q Okay. It's proposing to monitor for Appendix 2 ist, those are lists that were developed by EPA specifically to monitor groundwater in and around MSW facilities. Is that correct? A And other things, but they are an EPA list of the most common modern chemicals. A Il Ingm. A I didn't know I was elevated to that status, a proposed for the vertical expansion may meet the minimum technical regulatory requirements for TCEQ? A I may apparently. Right? A I didn't know I was elevated to that status, a paparently. Right? A In general, ves. Q As we sit here to an oampling andysis plan? A CARLSON: Alexal statistic that the texas that sit mext to a some proposed. It was a pretty	7	A Yes.	7	facility in Texas that has a regulatory requirement or
A Idon't remember the size, but 32 wells, yes. Q And currently TDS, in a similar geology and landfills in Texas that sit next to a competing other landfill. A Well, sir, they will progress, so six isn't the ultimate number. Q Ultimately TDS is permitted to install 10. If Right? A That is correct. Q All right. Now, BFI is proposing to conduct detection sampling twice annually. Is that right? A Yes. Q Okay. It's proposing to sample for Appendix I constituents as long as any individual well is in out an assessment monitoring. Is that correct? A Yes. Q And if a well is an assessment monitoring. Page 1760 then it is proposing to monitor for Appendix 2 constituents. Is that correct? A Yes. Q And the Appendix I and Appendix 2 is that were developed by EPA specifically to monitor groundwater in and around MSW facilities. Is that correct? A Yes. Q Ow, would it be fair to say, in several portions of your prefiled testimony, that you do concede that the groundwater monitoring system as proposed for the vertical expansion may meet the minimum technical regulatory requirements for TCEQ? A It may. A I may. Q It just doesn't meet the Bob Kier standard, apparently. Right? A I dadin't know I was elevated to that status, a landfill in Texas that sit next to a competing other landfill. A No, sir. But Fm unaware of any other landfill. A ROALSON: Objection to the second half as nonresponsive. It was a pretty simple question. JUDGE NEWCHURCH: Do you have a response to the objection? MR. REARLSON: A No Existance in that sate or redirect him. JUDGE NEWCHURCH: Right. Okay. Do you with it. JUDGE NEWCHURCH: Right. Okay. Do you shave a response? MR. RENBARGER: No. Let's just get on with it. JUDGE NEWCHURCH: Right. Okay. Do you shave a response? A Nes. Q And if a well is an assessment monitoring. Page 1762 answer. Q (BY MR. CARLSON) And as I understand, another complaint you have the sto do with the specific locations of maybe some of the proposed monitoring wells should be screened to monitor water along the	8	Q So BFI is proposing 32 wells for a 350-acre	8	permit requirement that it review chromatograms as
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A Well, sir, they will progress, so six isn't the ultimate number. Q Ultimately TDS is permitted to install 10. Right? A That is correct. Q All right. Now, BFI is proposing to conduct detection sampling twice annually. Is that right? A Yes. Q Okay. It's proposing to sample for 21 Appendix 1 constituents as long as any individual well 23 is not an assessment monitoring. Is that correct? A Thelieve that's correct, yes. Q And if a well is an assessment monitoring, 25 With at correct? A Yes. Q And if a well is an assessment monitoring, 25 With at correct? A A Yes. Q And the Appendix 1 and Appendix 2 list, those are lists that were developed by EPA specifically to monitor groundwater in and around MSW facilities. Is that correct? A And other things, but they are an EPA list of the most common modern chemicals. Q Now, would it be fair to say, in several proposed for the vertical expansion may meet the minimum technical regulatory requirements for TCEQ? A I didn't know I was elevated to that status, apparently. Right? A I didn't know I was elevated to that status, them of the most of industrial waste and mixed them all together, and the resulting soup of which we and not dea what it is. And it is migrating, if everything I've seen is correct, away from its	11	Q And currently TDS, in a similar geology and	11	landfills in Texas that sit next to a competing other
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15 Right? 16 Right? 17 A That is correct. 18 Q All right. Now, BFI is proposing to conduct detection sampling twice annually. Is that right? 19 A Yes. 20 A Yes. 21 Q Okay. It's proposing to sample for Appendix 1 constituents as long as any individual well is not an assessment monitoring. 22 A Total is correct, yes. 23 A Yes. 24 A I believe that's correct, yes. 25 Q And if a well is an assessment monitoring. 26 Page 1760 1 then it is proposing to monitor for Appendix 2 constituents. Is that correct? 27 A Yes. 28 Q And the Appendix 1 and Appendix 2 list, those are lists that were developed by EPA specifically to monitor groundwater in and around MSW facilities. Is that correct? 28 A A And other things, but they are an EPA list of the most common modern chemicals. 29 Q Now, would it be fair to say, in several portions of your prefiled testimony, that you do concede that the groundwater monitoring system as proposed for the vertical expansion may meet the minimum technical regulatory requirements for TCEQ? 15 A It may. 20 Q I Li just doesn't meet the Bob Kier standard, apparently. Right? 21 A Total's what we have done. It may change. 22 Constituents. Is that correct? 3 A Yes. 4 Q And the Appendix 1 and Appendix 2 list, those are lists that were developed by EPA specifically to monitor groundwater in and around MSW facilities. Is that correct? 3 A A Yes. 4 Q Now, would it be fair to say, in several 4 portions of your prefiled testimony, that you do concede that the groundwater monitoring system as proposed for the vertical expansion may meet the minimum technical regulatory requirements for TCEQ? 15 A It may. 16 Q It just doesn't meet the Bob Kier standard, apparently. Right? 17 A That's what we have done. It may change. 18 A I didn't know I was elevated to that status, but no. It's a case that, because of its situation, there is more going on. It sits next to a landfill that has taken all kinds of industrial waste and mixed them all together, and the resulting soup of which we have no idea what it is. And it is mig	13	A Well, sir, they will progress, so six isn't	13	MR. CARLSON: Objection to the second
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16 Right? 17 A That is correct. 18 Q All right. Now, BFI is proposing to conduct detection sampling twice annually. Is that right? 20 A Yes. 21 Q Okay. It's proposing to sample for 22 Appendix 1 constituents as long as any individual well is in on an assessment monitoring. Is that correct? 22 A I believe that's correct, yes. 23 I then it is proposing to monitor for Appendix 2 constituents. Is that correct? 24 A I believe that's correct? 25 Q And if a well is an assessment monitoring, 25 objection sustained. Strike the last part of the 26 objection sustained. Strike the last part of the 27 objection sustained. Strike the last part of the 28 objection sustained. Strike the last part of the 29 objection sustained. Strike the last part of the 29 objection sustained. Strike the last part of the 29 objection sustained. Strike the last part of the 29 objection sustained. Strike the last part of the 29 objection sustained. Strike the last part of the 29 objection sustained. Strike the last part of the 29 objection sustained. Strike the last part of the 20 objection sustained. Strike the last part of the 20 objection sustained. Strike the last part of the 20 objection sustained. Strike the last part of the 29 objection sustained. Strike the last part of the 20 objection sustained. Strike the last part of the 20 objection sustained. Strike the last part of the 20 objection sustained. Strike the last part of the 20 objection sustained. Strike the last part of the 21 objection sustained. Strike the last part of the 21 objection sustained. Strike the last part of the 22 onswer. 22 constituents. Is that correct? 23 a Yes. 24 Q And the Appendix 1 and Appendix 2 list, those are lists that were developed by EPA specifically to monitor groundwater in and around MSW facilities. Is that correct? 22 A A And other things, but they are an EPA list of the most common modern chemicals. 23 proposed for the vertical expansion may meet the minimum technical regulatory requirements for TCEQ? 24 A I timay. 25 Q I that's what you did or you	15	Q Ultimately TDS is permitted to install 10.	15	question.
18	16		16	JUDGE NEWCHURCH: Do you have a response
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15 A It may. 16 Q It just doesn't meet the Bob Kier standard, 17 apparently. Right? 18 A I didn't know I was elevated to that status, 19 but no. It's a case that, because of its situation, 20 there is more going on. It sits next to a landfill 21 that has taken all kinds of industrial waste and mixed 22 them all together, and the resulting soup of which we 23 have no idea what it is. And it is migrating, if 24 everything I've seen is correct, away from its 15 water at the weathered/unweathered interface. Is that 26 correct? A What we've identified, yes. Q All right. (Exhibit BFI No. 18 marked) MR. HEAD: Pardon me, Your Honor. Can I send Mr. Stecher home? I doubt that we're going to get to him, and he's got a traffic situation. JUDGE NEWCHURCH: We are not going to get to him, so Mr. Stecher is excused for today.	13	proposed for the vertical expansion may meet the	13	A That's what we have done. It may change.
16 Q It just doesn't meet the Bob Kier standard, 17 apparently. Right? 18 A I didn't know I was elevated to that status, 19 but no. It's a case that, because of its situation, 20 there is more going on. It sits next to a landfill 21 that has taken all kinds of industrial waste and mixed 22 them all together, and the resulting soup of which we 23 have no idea what it is. And it is migrating, if 24 everything I've seen is correct, away from its 16 correct? A What we've identified, yes. Q All right. (Exhibit BFI No. 18 marked) MR. HEAD: Pardon me, Your Honor. Can I send Mr. Stecher home? I doubt that we're going to get to him, and he's got a traffic situation. JUDGE NEWCHURCH: We are not going to get to him, so Mr. Stecher is excused for today.	14	minimum technical regulatory requirements for TCEQ?	14	Q As we sit here today, TDSL is monitoring
17 apparently. Right? 18 A I didn't know I was elevated to that status, 19 but no. It's a case that, because of its situation, 20 there is more going on. It sits next to a landfill 21 that has taken all kinds of industrial waste and mixed 22 them all together, and the resulting soup of which we 23 have no idea what it is. And it is migrating, if 24 everything I've seen is correct, away from its 17 A What we've identified, yes. Q All right. (Exhibit BFI No. 18 marked) MR. HEAD: Pardon me, Your Honor. Can I send Mr. Stecher home? I doubt that we're going to get to him, and he's got a traffic situation. JUDGE NEWCHURCH: We are not going to get to him, so Mr. Stecher is excused for today.	15	A It may.	15	water at the weathered/unweathered interface. Is that
A I didn't know I was elevated to that status, 19 but no. It's a case that, because of its situation, 20 there is more going on. It sits next to a landfill 21 that has taken all kinds of industrial waste and mixed 22 them all together, and the resulting soup of which we 23 have no idea what it is. And it is migrating, if 24 everything I've seen is correct, away from its 18 Q All right. 20 MR. HEAD: Pardon me, Your Honor. Can I 21 send Mr. Stecher home? I doubt that we're going to 22 get to him, and he's got a traffic situation. 33 JUDGE NEWCHURCH: We are not going to 24 get to him, so Mr. Stecher is excused for today.	16	Q It just doesn't meet the Bob Kier standard,	16	correct?
but no. It's a case that, because of its situation, there is more going on. It sits next to a landfill that has taken all kinds of industrial waste and mixed them all together, and the resulting soup of which we have no idea what it is. And it is migrating, if everything I've seen is correct, away from its 19	17	apparently. Right?	17	A What we've identified, yes.
there is more going on. It sits next to a landfill that has taken all kinds of industrial waste and mixed them all together, and the resulting soup of which we have no idea what it is. And it is migrating, if everything I've seen is correct, away from its MR. HEAD: Pardon me, Your Honor. Can I send Mr. Stecher home? I doubt that we're going to get to him, and he's got a traffic situation. JUDGE NEWCHURCH: We are not going to get to him, so Mr. Stecher is excused for today.	18		18	
that has taken all kinds of industrial waste and mixed them all together, and the resulting soup of which we have no idea what it is. And it is migrating, if everything I've seen is correct, away from its send Mr. Stecher home? I doubt that we're going to get to him, and he's got a traffic situation. JUDGE NEWCHURCH: We are not going to get to him, so Mr. Stecher is excused for today.	19	but no. It's a case that, because of its situation,	19	(Exhibit BFI No. 18 marked)
them all together, and the resulting soup of which we have no idea what it is. And it is migrating, if have no idea what it is. And it is migrating, if have no idea what it is. And it is migrating, if have no idea what it is. And it is migrating, if have no idea what it is. And it is migrating, if have no idea what it is. And it is migrating, if have no idea what it is. And it is migrating, if have no idea what it is. And it is migrating, if have no idea what it is. And it is migrating, if have no idea what it is. And it is migrating, if have no idea what it is. And it is migrating, if have no idea what it is. And it is migrating, if have no idea what it is. And it is migrating, if have no idea what it is. And it is migrating, if have no idea what it is. And it is migrating, if have no idea what it is. And it is migrating, if have no idea what it is. And it is migrating, if have no idea what it is. And it is migrating, if have no idea what it is.	20		20	MR. HEAD: Pardon me, Your Honor. Can I
have no idea what it is. And it is migrating, if 24 everything I've seen is correct, away from its 23 JUDGE NEWCHURCH: We are not going to 24 get to him, so Mr. Stecher is excused for today.	21	that has taken all kinds of industrial waste and mixed	21	send Mr. Stecher home? I doubt that we're going to
24 everything I've seen is correct, away from its 24 get to him, so Mr. Stecher is excused for today.		them all together, and the resulting soup of which we	22	get to him, and he's got a traffic situation.
	23	have no idea what it is. And it is migrating, if	23	JUDGE NEWCHURCH: We are not going to
DE containment error		everything I've seen is correct, away from its	24	-
25 Containment area. [25] MR. HEAD: Thank you.	25	containment area.	25	MR. HEAD: Thank you.

63 (Pages 1759 to 1762)

		1	~
	Page 1763		Page 1765
1	Q (BY MR. CARLSON) Dr. Kier, you've been	1	Q Okay. Why are those on here if they're not
2	handed a document that's been marked as BFI-18. Is	2	reflective of groundwater levels inside the landfill?
3	that correct?	3	A Well, that wasn't the purpose.
4	A Yes.	4	Q All right. Okay. Now, there's a low spot
5	Q Okay. And this is a document from a the	5	there in the area around OB-8. Right?
6	Texas Disposal Systems landfill permit. Is that	6	A You mean topographically or
7	correct?	7	Q Yes, sir.
8	A Yes.	8	A Why is OB-8 where it is? Is that what you
9	Q Are you familiar with this document?	9	want to know?
10	A Yes.	10	Q Yes, sir.
11	Q All right. On the upper right-hand side, it	11	A OB-8 is there because that's the low place in
12	shows the location of the monitor wells. Right?	12	the weathered/unweathered zone interface as we defined
13	A Yes, amongst other things.	13	it at the time this was permitted.
14 15	Q This shows where ultimately ten monitor wells	14 15	Q Were you positive, at the time you did this, that there wasn't a lower weathered/unweathered
16	will be located? A Yes.	16	
17		17	interface, let's say 100 feet to either I guess it would be to the southwest or to the northeast of OB-8?
18	Q All right. It's hard to read, but if you look at the monitor well I can't even tell what	18	A Yes.
19	number it is. You might be able to help me out. Do	19	Q How did you know that, sir?
20	you see the at the bottom of the landfill it says,	20	A Because we drilled a series of borings as was
21	"Carl Road, 680"?	21	put into the original plan along the side there so we
22	A I see 680, yes.	22	could find where it could be.
23	Q Right. There's a monitoring well there on	23	Q Okay. And OB-8 monitors along the
24	the south?	24	weathered/unweathered interface. Is that correct,
25	A Right.	25	sir?
	Page 1764		Page 1766
1	Q Would that be the southeast corner of this	1	A Correct, as we defined it then.
2	site?	2	Q All right.
3	A Well, not the corner.	3	MR. CARLSON: Bear with me, Judge.
4	Q Kind of along the southern border there at	4	JUDGE NEWCHURCH: Off the record.
5	least. Right?	5	(Brief recess)
6	A Well, it's actually kind of eastern, if you	6	JUDGE NEWCHURCH: Back on the record.
7	look at the north arrow.	7	Q (BY MR. CARLSON) Dr. Kier, I have a blowup
8	Q Right. Do you see which one I'm talking	8	of a document that is from the TDSL permit
9	about?	9	application. Do you see that?
10	A Yes. That's OB-8.	10	A Yes. It's actually from the Subtitle D
11	Q That's OB-8?	11	modification.
12	A Yes.	12	Q Okay. That's the modification that you
13	Q Okay. Is that a downgradient well?	13	worked on. Is that correct?
14	A Yes, sir.	14	A That is correct.
15	Q That sits in a low area. Right?	15	Q Okay. And it's labeled as Figure 7-1 from
16	A Yes.	16	that application. Right?
17	Q Those arrows inside the landfill show the	17	A Yes.
18 19	general direction of groundwater flow at the site?	18 19	Q Okay. And that was in Attachment 7? A At that time, I believe it was.
	A Yes, before the landfill is built.	20	
20 21	Q All right. Do you see those contour lines there?	21	Q Okay. And the sheet is called a typical fill cross-section. Do you see that?
21 22	A Yes.	22	A Yes.
23	Q Are those reflective of groundwater levels	23	Q And it was Bates labeled when it was produced
24	inside the cells?	24	to us the other day. TDSL 000171. Do you see that?
25 25	A No, sir.	25	A Yes.
	110,011		

64 (Pages 1763 to 1766)

	Page 1767		Page 1769
1	Q Okay. And this represents a cross-section	1	inside the landfill, would it?
2	through the TDS facility. Is that correct?	2	A No, sir.
3	A Yes.	3	Q There may even be a little rise right here.
4	Q Okay. And this is the B-B cross-section. Is	4	Do you see that?
5	that right?	5	A Yes, sir.
6	A Correct.	6	Q Would you call that maybe a mound?
7	Q Okay. Do you see these little upward or	7	A No, sir. That's simply reflecting the
8	downward pointing black arrows or carrots?	8	weathered/unweathered zone interface and the original
9	A Yes.	9	topography.
10	Q Okay. What are those supposed to represent?	10	Q However this line went right here, that
11	A They were the static groundwater levels in	11	wouldn't be reflective of leachate levels within this
12	the borings. They were almost well, all borings but	12	landfill. Is that correct?
13	one at that site were made into piezometers, temporary	13	A That is correct.
14	piezometers.	14	Q And it would be unfair for me to surmise that
15	Q All right. So those reflected at least some	15	the TDSL landfill is leaking if I had that line drawn
16	sort of historic groundwater level. Is that fair to	16	across this particular diagram. Right?
17	say?	17	A If you just drew that line and didn't label
18	A Yes.	18	it properly, somebody might infer what you just said,
19 20	Q Okay. That doesn't represent that number	19 20	that it was leaking.
	right there doesn't represent the amount of water or leachate inside the landfill, does it?		Q Okay. Just because somebody inferred it
21 22	A No.	21 22	doesn't mean it's actually leaking, though, does it? A Well, it depends on what you put on the
23		23	drawing.
24	Q Nor does that carrot? A No.	24	
25	Q Or any of these carrots that are shown	25	Q You don't believe the TDSL landfill is leaking, do you?
2.5	Page 1768	23	
			Page 1770
1	through there. Right?	1	A No, sir.
2	A That's correct.	2	Q All right. Just a few more topics. If
3	Q Now, I could actually go through and connect	3	you'll turn to Page 11 of your testimony, Dr. Kier.
4	these if I were actually qualified as a hydrogeologist	4	A Okay.
5	and create with this, and maybe a little other	5	Q Do you see the part of your testimony where
6	information, a potentiometric surface, couldn't I?	6	you refer to some potentiometric contours that are
7	A Well, I suppose you could.	7	shown on Figure 4F.1 in Part 3, Attachment 4,
8	Q A person could do that. Right?	8	Appendix 4-F of the application? A Yes.
10	A But you better label it properly. Q A person could do that. Right?	10	
11	A You could connect those, but you would have	11	Q All right. Would you turn to Page APP 000737 of the application?
12	to label it properly so it was clear what you were	12	A I've got the wrong volume. Excuse me. Okay.
13	showing.	13	Q That's Figure 4F.1 4F.1 from the
14	Q And I could do a little dot and dashed line	14	application. Right?
15	that would roughly follow here, and maybe I'd call it	15	A Yes.
16	"water level static elevation" and then put a date	16	Q And that's the figure you're referring to in
17	there. Right?	17	your prefiled testimony on Page 11?
18	A I wouldn't do that. I would put it in there	18	A Yes.
19	as a static I would make sure it was the static	19	Q All right. Do you rely on any
20	water level at the time the borings were drilled.	20	representations in 4F.1 as being a projected
21	Q Okay. Now, if this hypothetical line goes	21	potentiometric surface regarding any opinion that
22	right across here, that wouldn't be reflective of	22	you're offering in this case?
23	groundwater levels inside the TDS landfill, would it?	23	A It did not go into what has been labeled as
	A No, sir.	24	BK-3. However, as drawn, it illustrates a
24	A NO, SII.		

65 (Pages 1767 to 1770)

	Page 1771		Page 1773
1	Q Okay. But my question was a little	1	different dates, that's not a really good practice for
2	different. In connection with any opinion that you're	2	groundwater contouring. Right?
3	offering in this case, did you rely on those contour	3	A I wouldn't.
4	maps on Figure 4F.1?	4	Q All right. Now
5	A Yes.	5	A Well, you could use it for solely the purpose
6	Q What opinion is that, sir?	6	of trying to interpret between data points to get
7	A I was hoping you'd direct me to it so I	7	ballasting requirements, but you had to be very clear.
8	wouldn't have to go hunting.	8	Q Mr. Adams was doing waste as ballast
9	Q Well, I thought you might know your own	9	calculations. Correct?
10	opinion, so	10	A Well
11	A It's on the bottom of Page 11.	11	Q That's what this was for. Look what section
12	Q All right. What opinion is based in part on	12	it's in.
13	your reading of those lines as a potentiometric	13	A It's in the geology section.
14	surface?	14	Q All right.
15	A Well, it suggests that the landfill is the	15	A I don't think the waste as ballast
16	principal source of groundwater moving eastward	16	calculations are in the geology section.
17	towards the drainage, and it goes originating on the	17	Q Look at the page immediately before.
18	BFI site and proceeding across Applied Materials and	18	A I take that back. He did put them in here.
19	ultimately to Lake Walter E. Long.	19	O Excuse me?
20	Q Would you read Footnote 2 from Figure 4F.1?	20	A He did put them in here, but I think they're
21	A "Maximum recorded groundwater elevations are	21	also repeated elsewhere.
22	from different dates and do not represent a	22	Q All right. Well, Appendix 4F, the first
23	potentiometric surface."	23	page, says "Construction below the groundwater table."
24	Q All right. That's stamped by Mr. Adams?	24	Do you see that?
25	A That's correct.	25	A Yes.
	Page 1772		Page 1774
1	Q And signed by him?	1	Q That's APP 000736?
2	A Yes.	2	A Correct.
3	Q All right. So, in that footnote, if I read	3	Q Then we've looked at 4F.1. Right?
4	it correctly, Mr. Adams is telling you and others who	4	A Yes.
5	are looking at this that that's not intended to	5	Q Okay. And then if we turn to the next page,
6	represent a potentiometric surface. It's pretty	6	what's the description of that particular drawing say?
7	clear, isn't it?	7	I'm looking at APP 000738.
8	A Now, you picked that area out. If I were to	8	A Yes. That's labeled "4F.2, Factor safety
9	look at Note 2, I would say that he's telling me not	9	against uplift."
10	to use all the other elevations out there to draw a	10	Q All right. It's starting to look like it's
11	potentiometric surface, but he clearly drew a	11	part of waste as ballast calculations, isn't it?
12	potentiometric surface in that area. Whether he	12	A Well, it may well be.
13	intended to or not, he did it, and he signed and	13	Q Let's turn to the next page, sir, APP 000739.
14	sealed it.	14	MR. RENBARGER: Counsel, in the interest
15	Q And he clearly told reviewers of this	15	of time, we will stipulate that section represents
16	document that that was not intended to reflect any	16	ballast.
17	sort of potentiometric surface. Is that correct?	17	MR. CARLSON: Let's just read it into
18	A He said it's not do not represent, but then	18	the record, and I'll move on.
19	he drew one.	19	Q (BY MR. CARLSON) What's the title of APP
20	Q All right. And he also told readers and	20	000739?
21	reviewers that the groundwater elevations are from	21	A Liner ballast calculations.
22	different dates. Right?	22	Q All right. Could you turn to Exhibit BK-5?
23	A Correct.	23	I believe that's a map that Kevin Terrill has
24 25	Q Okay. I believe in your deposition you	24 25	testified about.
	agreed that as a general rule using elevations from	∠ ⊃	A Yes.

66 (Pages 1771 to 1774)

	Page 1775		Page 1777
1	Q Are you there?	1	top caps that range from between 2 to 5 or 6 percent?
2	A Yes. There's actually two maps, I think.	2	A Yes, sir.
3	Q Were you here for Mr. Terrill's testimony?	3	Q And in terms of slope stability calculations,
4	A Yes.	4	at least the projects that you've worked on or are
5	Q Do you recall Mr. Terrill saying that he took	5	familiar with, is it standard for the permit design
6	groundwater elevation data for the three different	6	engineers to determine whether or not the slopes of
7	sites from three different time periods?	7	the landfills will be sufficiently stable if you use a
8	A Well, three different dates, yes.	8	long-term factor of safety of 1.5?
9	Q Yeah. The Sunset Farms was a couple of	9	A Well, that's my memory of a typical factor of
10	months data was a couple of months different from	10	safety. Quite honestly, I rely on Mr. Chandler when
11	the ACL data and a couple months from the Applied	11	it gets to slope stability.
12	Materials data. Is that correct?	12	MR. CARLSON: I think I'm done. Let me
13	A Yes.	13	just ask
14	Q All right.	14	Q (BY MR. CARLSON) Dr. Kier, in your
15	A At least as he stated it. I don't know that	15	deposition, I believe you testified that you had
16	as a fact.	16	worked on several permitting projects with Mike
17	Q Now, you and I have agreed that it can	17	Snyder. Is that correct?
18	sometimes be dangerous to infer too much from using	18	A At least two that I remember.
19 20	charts groundwater contouring charts from which the	19 20	Q And your testimony was that you respect him
21	elevations have been selected from different points in time. Is that correct?	21	professionally. Isn't that correct? A I do.
21 22	A It can be.	22	MR. CARLSON: I'll pass the witness,
23	Q All right. Do you recall if I asked you the	23	Judge.
24	question, "Is that a good practice," and your answer	24	JUDGE NEWCHURCH: Is there redirect?
25	was, "Well, it could be misleading at times"? Right?	25	MR. RENBARGER: I think there will be.
	Page 1776		Page 1778
,		,	
1	A It could.	1	And with the Judge's permission, if I could take a
2	Q You testified that you served as a project	2	couple of minutes to get organized, we may be able to
3 4	manager on a couple of major MSW projects. Is that correct?	3 4	finish this witness without a great deal more testimony this evening. But I need to double-check
5	A I guess you could look at it that way.	5	that and make sure I'm not
6	Q Okay. So you have some experience with	6	JUDGE NEWCHURCH: Well, that's
7	respect to just the overall landfill design, even	7	surprising. I would have thought this would be a good
8	though you're not a design engineer. Right?	8	time to break. But if you only need a few minutes,
9	A Correct.	9	that's fine. We can press on.
10	Q And you've been around the MSW industry in	10	MR. RENBARGER: We'll take a break,
11	Texas for 20 or 25 years or more. Is that correct?	11	certainly. Or are you talking about breaking for the
12	A Yes, sir.	12	evening?
13	Q All right. Based on your own personal	13	JUDGE NEWCHURCH: Yes.
14	experience in the industry and your experience as a	14	MR. RENBARGER: Let's we'll go
15		15	ahead and we'll start first thing in the morning,
16	Texas that plan to install Subtitle D liner systems,	16	then. That's fine.
17	composite liners, to have three-to-one excavation	17	JUDGE NEWCHURCH: Let's do that, then.
18	slopes?	18	Let's go off the record while we talk about
19	A It's typical, yes, because you can put them	19	scheduling.
20	in parallel to the side slope.	20	(Recess from 5:12 p.m. to 5:17 p.m.)
21	Q Based on the same premises, your general	21	JUDGE NEWCHURCH: Back on the record.
22	experience, is it standard for modern MSW landfills in	22	So we're going to recess for the day. While we were
23	Texas to have four-to-one side slopes?	23	off the record, we had a discussion, and Mr. Carlson,
24	A Yes, sir.	24	you indicated that you had a bit more that you wanted
25	Q Is it typical for modern landfills to have	25	to offer on cross-examination, so you'll get the

67 (Pages 1775 to 1778)

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	Page 1779	
1	opportunity to do that, to complete your	
2		
	cross-examination of Dr. Kier in the morning. Then	
3	we'll proceed with the redirect examination of	
4	Dr. Kier. Then the parties should be prepared for	
5	witnesses Stecher, the remaining NNC witnesses, and	
6	then the city of Austin witnesses, Kelly, Word, and	
7	Lesniak. Is there anything else before we adjourn	
8	today?	
9	(No response)	
10	JUDGE NEWCHURCH: We'll reconvene at	
11	9:00 a.m. Thank you.	
12	(Proceedings recessed at 5:18 p.m.)	
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