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including 30-TAC 330.561.

And M, referred Issue S, whether the

application includes adequate provisions for fire

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Page 803 Page 805 TRANSCRIPT OF PROCEEDINGS BEFORE THE protection in accordance with agency rules, including STATE OFFICE OF ADMINISTRATIVE HEARINGS 30-TAC 330.1 -- I think that's 115. It's not one. It's 2 TEXAS COMMISSION ON ENVIRONMENTAL QUALITY 3 AUSTIN, TEXAS 4 And Issue Z, whether the storage treatment 5 and disposal of contaminated water is adequately) SOAH DOCKET NO. IN THE MATTER OF THE 6 addressed in the application and granted permit. APPLICATION OF BFI WASTE) 582-08-2178 7 So those issues will be removed from the SYSTEMS OF NORTH AMERICA, LLC) PROPOSED SOLID WASTE PERMIT) TCEQ DOCKET NO. 8 case by agreement of the parties. 2007-1774-MSW AMENDMENT NO. 1447A 9 JUDGE NEWCHURCH: So are you saying that 10 the parties now agree that there's no dispute concerning 11 those issues? Is that what I'm understanding? HEARING ON THE MERITS 12 MR. HEAD: Let me try to elaborate. For FRIDAY, JANUARY 23, 2009 13 the record, attorney for TJFA. 14 I met with counsel for BFI and Giles. The BE IT REMEMBERED THAT AT approximately 15 testimony of Mr. Neyens, with regard to closure issues, 9:10 a.m., on Friday, the 23rd day of January 2009, the 16 the testimony solely involved closure-cost estimates. above-entitled matter came on for hearing at the State 17 He also had two other issues, which was fire protection Office of Administrative Hearings, 300 West 15th Street, 18 and contaminated water. We are not going to present Hearing Room 402, Austin, Texas, before WILLIAM NEWCHURCH, Administrative Law Judge; and the 19 Mr. Neyens' testimony. And, thus, the issues with following proceedings were reported by 20 regard to fire protection and contaminated water are Virginia L. Bunting, a Certified Shorthand Reporter of: 21 stipulated to. Volume 4 Pages 803 - 1007 22 JUDGE NEWCHURCH: Meaning that you've got 23 stipulated facts or meaning that you're stipulating that 24 they're no longer in dispute? 25 MR. HEAD: No longer in dispute. Page 804 Page 806 1 JUDGE NEWCHURCH: Okay. And are all 1 PROCEEDINGS 2 FRIDAY, JANUARY 23, 2009 2 parties in agreement with that? 3 (9:00 a.m.) 3 MR. BLACKBURN: I am, Your Honor. 4 JUDGE NEWCHURCH: This is a continuation of 4 MR. SHEPHERD: Yes, Your Honor. 5 the hearing of 582-02-178. 5 JUDGE NEWCHURCH: Okay. 6 Are there any preliminary matters? 6 MS. NOELKE: Yes, Your Honor. 7 MR. GOSSELINK: Yes, Your Honor. I'm happy 7 MR. HEAD: I hope we don't have to go off 8 to report a preliminary matter. 8 the record. I thought it was our clear understanding 9 Can you hear me? 9 that inasmuch as Mr. Nevens only discussed closure-cost 10 JUDGE NEWCHURCH: Yes, sir. 10 estimates, that was the issue that was off the table as 11 MR. GOSSELINK: The parties have, I 11 well. 12 believe, reached a stipulation agreement as to certain 12 MR. GOSSELINK: Is what? 13 issues, and I can identify them for you. 13 MR. HEAD: We stipulate, too, that TJFA JUDGE NEWCHURCH: Okay. 14 14 does not dispute the closure-cost estimates of BFI. 15 MR. GOSSELINK: And they relate to Witness 15 MR. GOSSELINK: Yes. And we don't expect 16 Nevens for Protestant TJFA. And Witness Nevens will not 16 to provide any testimony about anybody else's 17 take the stand is my understanding. And as a result, 17 closure-cost estimates. And to that extent, I have 18 three issues will be no longer -- evidence will not be 18 agreed with Mr. Head that we will not put on testimony 19 taken on those issues. 19 that I elicited from Witness Chandler on that issue. 20 And those issues would be Issue J, whether 20 JUDGE NEWCHURCH: So you either will not 21 21 the application includes adequate provisions for closure offer -- you will strike portions of that testimony? Is 22 22 and postclosure in compliance with agency rules, that what you're saying?

1 (Pages 803 to 806)

MR. GOSSELINK: I just had the opportunity

to cross-examine him on it, because I raised it during

his deposition, and I will not cross-examine him on that

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Page 807
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 1
      issue.
                                                                               JUDGE NEWCHURCH: So --
                                                                 1
 2
              JUDGE NEWCHURCH: Okay. All right. I just
                                                                 2
                                                                               MR. HEAD: I'm sorry.
 3
                                                                 3
      wanted to make sure I have this clear. So JS -- see,
                                                                               JUDGE NEWCHURCH: Go ahead.
 4
      from my point of view, the critical point is those
                                                                 4
                                                                               MR. HEAD: Or there are some provisions in
 5
                                                                 5
      issues are no longer in dispute, that the parties are
                                                                      the Rule 11, we were just looking at, on closure that we
 6
      conceding that BFI's application complied with the
                                                                 6
                                                                      haven't stipulated to. But Neyens -- Mr. Neyens'
 7
      requirements in Issues J, S, and Z.
                                                                 7
                                                                      testimony was solely about cost of closure cost.
                                                                               JUDGE NEWCHURCH: So would it be a fair
 8
              MR. BLACKBURN: Would you reread Z, please?
                                                                 8
 9
              JUDGE NEWCHURCH: Paul, you will need to do
                                                                 9
                                                                      summary to say that you're agreeing there's no dispute
10
                                                                10
                                                                      concerning costs of closure and postclosure? There
      that.
11
              MR. GOSSELINK: Whether the storage,
                                                               111
                                                                      might be disputes about the proposed activities that
12
                                                               12
      treatment, and disposal of contaminated water is
                                                                      would occur upon closure?
13
      adequately addressed in the application and draft
                                                               13
                                                                               MR. HEAD: That's accurate.
14
      permit.
                                                               14
                                                                               JUDGE NEWCHURCH: Okay. I think I
15
                                                               15
              And, Jim, there's a separate issue about
                                                                      understand.
16
      surface waters, if that's what your question is.
                                                               16
                                                                               And, Mr. Gosselink, going back to you just
17
              MR. BLACKBURN: Groundwater protection is
                                                               17
                                                                      to make sure that's your understanding as well?
18
      what I wanted to make sure was still on the table. We
                                                               18
                                                                               MR. GOSSELINK: That was not. I thought we
19
      clearly have concerns about MW-30, but not about the way
                                                               19
                                                                      were removing the entire issue. There is no other place
20
      that water that is taken out of the landfill is handled.
                                                               20
                                                                      that I see that, for example, a soil balance dispute,
21
              JUDGE NEWCHURCH: Okay. So Z is partially
                                                               21
                                                                      assuming it was relevant, could come up. And so when I
22
                                                               22
      stipulated to be not in controversy?
                                                                      approached and said, "Are we removing Issue Z," I
23
                                                               23
              MR. BLACKBURN: It depends on how Z is
                                                                      thought the answer was yes. And so we probably
24
                                                                24
      interpreted.
                                                                      should --
25
                                                                25
              MR. TERRILL: Groundwater is Issue C, at
                                                                               JUDGE NEWCHURCH: Why don't you confer
                                                 Page 808
                                                                                                                 Page 810
      least that's my reading of it.
 1
                                                                 1
                                                                      again.
 2
               MR. HEAD: I think Z is stipulated to.
                                                                 2
                                                                              MR. GOSSELINK: -- confer again.
 3
               Groundwater contamination is a separate
                                                                 3
                                                                              MR. HEAD: I think we can knock this out
 4
                                                                 4
      issue that no one is stipulating to.
                                                                      really quick.
 5
                                                                 5
                                                                              JUDGE NEWCHURCH: I know this is on the run
               MR. BLACKBURN: As long as C is still
 6
                                                                 6
                                                                      and everybody is busy, but this kind of thing would be
      alive, then I'm happy with Z being taken off of the
 7
                                                                 7
                                                                      best if it would be laid out in writing so that it's
      table.
 8
               JUDGE NEWCHURCH: Okay. That's good. It
                                                                 8
                                                                      very clear. Because after the hearing is over and
 9
      makes it simple.
                                                                 9
                                                                      everybody goes away and starts shipping briefs to one
10
               MR. HEAD: But to be clear, I don't have
                                                                10
                                                                      another, things often get muddy on this type of thing.
11
                                                                11
      the number in front of me. But with regard to the
                                                                              MR. GOSSELINK: I've got a suggestion as to
12
      stipulation on closure and postclosure, the stipulation
                                                               12
                                                                      timing to do that. I think Mr. Blackburn has an
13
      is solely with regard to the closure-cost estimates of
                                                               13
                                                                      appointment. I presumed he would ask that the hearing
                                                                      be recessed during his obligation.
14
      the Applicant. That was the sole testimony of Neyens.
                                                               14
15
                                                               15
                                                                              MR. BLACKBURN: Actually, I wasn't going to
      He didn't like the closure-cost estimates, and we're
16
      stipulating closure-cost estimates and postclosure-cost
                                                                16
                                                                      ask for that just because I didn't want to burden
17
      estimates are not in dispute.
                                                                17
                                                                      everybody, but it might be a good time to talk about
18
               JUDGE NEWCHURCH: That suggests that
                                                               18
                                                                      that. If y'all could spend a little time, it would be
19
      there's still something that is in dispute concerning
                                                                19
                                                                      appreciated.
20
      closure and postclosure. Can you be a little more
                                                                20
                                                                              MR. GOSSELINK: I don't know that it will
21
      clear?
                                                                21
                                                                      take long, but I thought we would have a slot, and that
22
                                                                22
               MR. HEAD: Well, for instance, with regard
                                                                      was the slot I was going to suggest. If we're going to
23
                                                                23
                                                                      proceed anyway, then I don't want to -- I don't want to
      to closure, you may have -- there may be an issue as to
24
                                                                24
                                                                      slow this down, but it's -- it's got its own pace, and I
      whether you have enough available soil to accomplish
25
                                                                25
                                                                      would like to pick it up.
      that or --
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2 (Pages 807 to 810)

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JUDGE NEWCHURCH: Yeah, I would like to keep the train moving. If we need to break for a half an hour or so, we can certainly do that, but I prefer to move on as much as possible.

MR. GOSSELINK: There's more to the stipulation.

JUDGE NEWCHURCH: All right.

MR. GOSSELINK: And the other stipulation is that the Protestant parties have agreed that additional revised pages to the application pursuant to the TCEQ's interpretation of the requirements of the Rule 11 Agreement will be allowed into the record by stipulation.

And those pages have to do with the stabilization basin. Specifically, Rule 11 Agreement calls for the closure and removal of the stabilization basin, and there's a special condition in the permit that says that's a requirement. Because the special condition and the Rule 11 Agreement occurred after we had drafted the application and had it technically complete, is the term, there's a lot of references in the document to the existence or the planned stabilization basin.

So the TCEQ's staff would like all of that language removed, and that language, you know, occurs in 25 Page 813

that specific provision. And I think it would occur in a figure and in a narrative, and we would do that.

And finally, the TCEQ staff has asked that a special provision be added reflecting the continued obligation of the applicant to place vegetation immediately after the placement of final cover. And that is what our application already says, but to whatever extent the Rule 11 Agreement cast that obligation in doubt, TCEQ staff asked that that be made clear in a special provision to the permit.

Steve, do I have that right?

MR. SHEPHERD: That is correct. And I guess the only condition that the Executive Director would add is that, of course, all these things in the application are incorporated by reference in the draft permit. I believe the draft permit has one or two corresponding provisions that would need to be reconciled, I think, at this point. It still provides for a liquid waste stabilization basin, and we would be striking that provision.

We had anticipated potentially adding a sentence to clarify that these special provisions do supercede any inconsistent provisions within the rest of the permit, the application. We've made an effort to make sure there aren't any inconsistent provisions, but

20 to 30 pages. It's sort of spread out. So there's an agreement that that language can be removed by stipulation. And we will provide -- assuming the stipulation is effectuated, we will provide that language to you and to the court reporter and to all the parties. We have it in redline strikeout. But, really, we would like a red pen under it right now. That's one part of that.

Do you have a question, sir? JUDGE NEWCHURCH: Yes.

Did you say the application or the draft permit or both?

MR. GOSSELINK: The application. JUDGE NEWCHURCH: Okay.

MR. GOSSELINK: On that one. There's more to come.

JUDGE NEWCHURCH: Okay.

MR. GOSSELINK: There are two other aspects of the application that would need to be revised. There's one other that needs to be revised. One of the provisions in the Rule 11 Agreement is that we provide a 100-foot buffer strip of Buffalo sod, and that was nowhere referenced in the revised pages that Mr. Mehevec or Mr. Shull included. And that omission was pointed out by the TCEQ staff, and they asked that we include

Page 814

to the extent there could be, we may be adding that provision.

I believe it was BFI's motion to supplement the application to incorporate the settlement provisions, had attached a document from the Executive Director that was drafted in a way that it could be cut and pasted into the draft permit as special provisions. So we anticipate, along with our direct case, we would be supporting this new revised draft permit that would be incorporating the provisions from the settlement.

JUDGE NEWCHURCH: Okay.

MR. GOSSELINK: The point of all of these stipulations on the part of all of the parties is obviously, and I should say this, to all mutual benefit is to eliminate issues that aren't really in dispute and not argue that process. By that, I mean they still have reserved the right to talk to Mr. Shull, as I understand it, to be brought back to go over the -- well, whatever they want to talk about on the Rule 11 Agreement with him including whether the stabilization basin should be there or should not be there.

We haven't eliminated the right for cross-examination. We've just stopped arguing about whether we can put in the revised pages.

JUDGE NEWCHURCH: Okay. Shaking heads all

3 (Pages 811 to 814)

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JUDGE NEWCHURCH: Sure.

MR. GOSSELINK: I wasn't suggesting that.

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Page 815
                                                                                                                    Page 817
       around. So those are the agreements.
                                                                        I was just suggesting they might limit what they want to
 2
                                                                   2
                                                                        talk about if they exhausted the subject.
               MR. GOSSELINK: Finally, I just want to
 3
                                                                                JUDGE NEWCHURCH: Okay. As we get a little
       make sure I understand for the benefit of Mr. Shull of
                                                                   3
 4
       when you expect to have Mr. Shull brought back to the
                                                                   4
                                                                        further down the road, maybe things will be clearer, and
 5
                                                                   5
                                                                        you can be more specific with him about the schedule.
       stand. There was a discussion, if you recall, that he
 6
       was going to come back. They were going to give him an
                                                                   6
                                                                                MR. GOSSELINK: One last schedule item.
 7
      hour to talk to Mr. Shull because of the request by
                                                                   7
                                                                        I've learned this morning that Witness McInturff is
 8
      Mr. Head. And it's fair, and that's an established
                                                                   8
                                                                        unavailable on Tuesday morning from 10:00 to 12:00. I
 9
      event. I just don't know when it's going to happen.
                                                                   9
                                                                        don't have any idea how that's going to, in fact, impact
10
               Is that up to me, or up to you, or up to
                                                                 10
                                                                        the schedule. We told him we thought he would be on on
11
                                                                 11
                                                                        Monday, but I don't -- it may be that he has to be on on
      them?
12
                                                                 12
               JUDGE NEWCHURCH: It's hard to pinpoint
                                                                        Tuesday afternoon.
13
      because it's dependent upon when TJFA begins to put on
                                                                 13
                                                                                JUDGE NEWCHURCH: It sounds like something
14
      its direct case.
                                                                 14
                                                                        we could work around.
15
                                                                 15
               Now, I suppose that we could -- as I said
                                                                                MR. GOSSELINK: I just noticed everyone
16
      repeatedly, I like to accommodate people's schedules and
                                                                 16
                                                                        sort of what I was trying to accomplish.
17
                                                                 17
                                                                                JUDGE NEWCHURCH: Okay. Anything else?
      other obligations, so if the parties want to agree on a
18
       specific time -- I mean, like we could say first thing
                                                                 18
                                                                                MR. BLACKBURN: Yes. I have a matter. I
19
      Monday morning, just would that work for everybody. But 19
                                                                        think that the Applicant has agreed to allow the
20
      I'm not saying -- I'm not throwing that out there. I'm
                                                                 20
                                                                        testimony of -- I believe it's Marcy in without her
21
      just saying that kind of thing could be done.
                                                                 21
                                                                        testifying.
22
                                                                 22
               MR. GOSSELINK: One reason I bring it up is
                                                                                . And I have just been informed that
23
                                                                 23
      because Mr. Mehevec is going to be testifying today, and
                                                                        Jeremiah Bentley, who is one of our witnesses, is going
24
                                                                 24
      I haven't talked to these guys about that, because I
                                                                        to have to leave town on Wednesday. And I would wonder,
25
      actually just thought of it this morning. It's unclear
                                                                 25
                                                                        one, if you would be willing to allow his testimony in
                                                                                                                    Page 818
 1
       to me as to whether or not it makes sense to delve
                                                                   1
                                                                        without cross; or if you want cross, could we take
 2
       deeper into the Rule 11 Agreement with Mr. Mehevec or
                                                                   2
                                                                        Mr. Bentley out of order? I know this is the first
 3
       not. If they do, they may not want to talk to Mr. Shull
                                                                   3
                                                                        you've heard of it, so I'm not necessarily asking for a
 4
       or they may want to specifically not talk to Mr. Mehevec
                                                                   4
                                                                        response right now, but I would like to at least put
 5
       so that they can talk to Mr. Shull. Either way works
                                                                   5
                                                                        that on the table.
 6
                                                                   6
                                                                                MR. GOSSELINK: Okay. And we did agree to
       for us. I just wanted to point out we're at
 7
                                                                   7
                                                                        Marcelina Cook being handled that way, and I will look
       mini-crossroads here on that issue. It's not my call.
 8
      I'm just trying to figure it out.
                                                                   8
                                                                        in -- we're going fast enough that I need to go read
 9
               JUDGE NEWCHURCH: Mr. Head, it's really
                                                                   9
                                                                        Mr. Bentley again to see what it was he said.
10
       your option. I mean, you can call him during your
                                                                 10
                                                                                MR. TERRILL: What was the name of the
11
                                                                 11
       direct case. You can choose not to call him. That's
                                                                        other one, Mr. Blackburn?
12
                                                                 12
       really up to you.
                                                                                MR. BLACKBURN: It's Marcy Cook. And at
13
               And really, Mr. Gosselink, all you're
                                                                 13
                                                                        least so far the Applicant has, at least, agreed that it
14
      really asking is some sort of certainty so you can
                                                                 14
                                                                        can come in without the necessity of cross-examination.
15
       advise your witness on when he needs to be here.
                                                                 15
                                                                                MR. GOSSELINK: We have the option to put
16
               MR. GOSSELINK: That's right. He has other
                                                                 16
                                                                        on the deposition in response just by submitting the
17
       things to do. And he said, "I can schedule around it if
                                                                 17
                                                                        written deposition or the portions thereof and handle
18
       I've got just some idea about what I need to do."
                                                                 18
                                                                        everything by writings.
19
               MR. HEAD: And I would respond that it's
                                                                 19
                                                                                MR. BLACKBURN: And perhaps the same could
20
       entirely likely that I may address some of the
                                                                 20
                                                                        be worked out with Mr. Bentley, or perhaps we could
21
       components of the Rule 11 with Mr. Mehevec today, but I 21
                                                                        bring him out of order. We're willing to do either. I
22
                                                                 22
       don't want to waive the right to discuss it with
                                                                        just raise it as a problem and would appreciate
23
       Mr. Shull, who sealed it. He's instrumental in --
                                                                 23
                                                                        everybody taking a look at it and figuring out a way to
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4 (Pages 815 to 818)

JUDGE NEWCHURCH: Okay. Those things

24

25

deal with it.

	Page 819		Page 821
1	usually work out.	1	3 is the Attachment 14 in the expansion
2	Anything else?	2	amendment.
3	MR. GOSSELINK: No, sir.	3	MS-4 is the current and proposed probe
4	JUDGE NEWCHURCH: Okay. BFI may call its	4	monitoring system.
5	next witness.	5	5 describes the different phases of the gas
6	MR. MOORE: John Moore for the Applicant.	6	system and coverage by acres of the gas system.
7	The Applicant calls Mr. Matt Stutz to the stand.	7	MS-6 shows the different phases of the gas
8	JUDGE NEWCHURCH: Mr. Stutz, if you will	8	system, just shows what was installed and when.
9	take the oath, please.	9	MS-7 is the approval letter for the
10	(Witness sworn)	10	standard air permit for the landfill. It includes the
11	JUDGE NEWCHURCH: Please have a seat.	11	expansion.
12	PRESENTATION ON BEHALF OF	12	And MS-8 is the approval authorization to
13	BFI WASTE SYSTEMS OF NORTH AMERICA, INC.		operate under the general operating permit.
14	MATT STUTZ,	14	Q Do you adopt your prefiled testimony here today
15	having been first duly sworn, testified as follows:	15	as if you had given it all live before the Court?
16	DIRECT EXAMINATION	16	A Yes.
17	BY MR. MOORE:	17	Q Thank you, Mr. Stutz.
18	Q Will you state and a spell your name for the	18	MR. MOORE: At this point, Your Honor, the
19	record, please.	19	Applicant submits Mr. Stutz' prefiled testimony and all
20	A Matt Stutz, M-a-t-t S-t-u-t-z.	20	of the exhibits he has just identified into the
21 22	Q What is your current occupation?A I'm a principal within the firm of Weaver Boos	21 22	evidentiary record.
23	Consulting.	23	JUDGE NEWCHURCH: I don't remember specifically if there were rulings or agreements
24	Q And what is your connection with the Sunset	24	following the objections on prefile, but if there were,
25	Farms Landfill project?	25	they're incorporated in the versions provided in the
	Page 820	23	Page 822
1			
1 2	A I have worked with Sunset Farms on landfill gas	1	official record, right?
3	collection and control system design, perimeter monitoring system, and the air quality.	2	MR. MOORE: Yes. JUDGE NEWCHURCH: Are there further
4	Q Which perimeter monitoring system is that?	4	objections to Mr. Stutz' testimony and exhibits?
5	A That would be the perimeter probe landfill gas	5	Then MS-1 through MS-8 are all admitted.
6	monitoring system.	6	(Exhibit BFI Nos. MS-1 through MS-8
7	Q Did you write any portion of the application	7	admitted)
8	for the expansion of the Sunset Farms Landfill?	8	MR. GOSSELINK: The Applicant passes the
9	A Yes. The Attachment 14 Landfill Gas Management	9	witness.
10	Plan.	10	JUDGE NEWCHURCH: Cross-examination,
11	Q Have you visited the landfill?	11	Mr. Terrill?
12	A Several times.	12	MR. TERRILL: No, Your Honor.
13	Q Did you prepare prefiled testimony for this	13	JUDGE NEWCHURCH: Ms. Noelke?
14	proceeding?	14	MS. NOELKE: No, Your Honor.
15	A Yes, I did.	15	JUDGE NEWCHURCH: Mr. Morse?
16	Q I would like for you to look at what's been	16	MR. MORSE: No, Your Honor.
17	marked as Exhibit MS-1 and identify that for the record,	17	JUDGE NEWCHURCH: Ms. Mann?
18	please.	18	CROSS-EXAMINATION
19	A This is my prefiled testimony.	19	BY MS. MANN:
20	Q Do you have any changes or corrections to that	20	Q My name is Christina Mann. I'm with the Public
21	testimony at this time?	21	Interest Counsel at TCEQ. And I just have a few
22	A No.	22	questions. Let me clarify some of your testimony.
23	Q Could you also look at Exhibits MS-2 through	23	First, I'd like to start off by talking
24	MS-8 and briefly describe each of those documents?	24	about the different kinds of monitors that you had to
25	A MS-2 is my resume.	25	monitor the potential leaks in landfill gas. By my

5 (Pages 819 to 822)

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landfill gas, we're mostly concerned about it moving

A Certainly. I mean, that's -- the perimeter

is not leaving the permitted boundary.

system is there to monitor that, to make sure that gas

Q You testified about certain percentages -- I

subsurface; is that correct?

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Page 823 Page 825 count, there's, more or less, three: perimeter think it's 1.25 percent methane -- in the buildings and 2 5 percent in the perimeter monitors; is that correct? monitors, building monitors, and then maybe the surface 2 3 admission handheld monitors; is that correct? 3 A That's correct. 4 A Yes, those are three monitoring systems that 4 Q How does that compare to, for those of us who 5 5 are at the facility. don't know or understand, say, 500 parts-per-million 6 Q And can you tell me how frequently each one of 6 detect level for the surface emission monitors? 7 those undergoes testing? Is it a consistent -- or 7 A Okay. Let's see how to do that conversion. 8 constant monitoring, or is it quarterly? 8 Q And it can be approximate. I'm just trying to 9 A Yes. The building monitors have continuous 9 get a ballpark idea of what kind of concentration detect 10 monitors in them and they get checked quarterly, that levels we're talking about here comparably. 10 11 they're in operation. The perimeter probe monitoring 11 A I guess just to clarify, the perimeter probes 12 system gets checked on a quarterly basis. All of the 12 are monitored to make sure that there's less than 13 probes get checked. The surface emissions monitoring 13 5 percent methane. That's 5 percent by volume in air. 14 are also checked quarterly. 14 The building monitors have continuous 15 15 Q The perimeter monitoring gets checked monitors in them that can read down to 1.25 percent 16 quarterly, but is it still a constant emissions 16 methane by volume in air. 17 monitoring? 17 The surface emissions monitoring uses a 18 18 A No. The probes -- at the time of monitoring, handheld scanner that goes across the surface of the 19 they take the instrument to each probe and pull in a 19 landfill, and it's detecting 500 parts-per-million above 20 sample and then check the methane readings at that time. 20 background concentration. 21 Q It's sort of analogous of checking a water --21 I guess the conversion from 5 percent 22 22 A Exactly. methane into a parts-per-million, I could do it, but I 23 23 Q Okay. Now, is the perimeter monitoring system would rather take some time to calculate that out. 24 intended to monitor whether landfill gases are sort of 24 Q Is the 500 parts-per-million a much stronger 25 25 coming from the landfill, moving over and redepositing concentration than the 5 percent detect level? In other 1 1 words, is it allowed to be much stronger methane levels into the soil, or is it intended to monitor, or maybe 2 both, whether or not it's moving laterally away from the 2 or higher methane levels at the surface of the landfill 3 sides, underground? 3 than you would be comfortable with in a perimeter 4 A Yes. It's there to monitor subsurface 4 monitoring well by comparison? 5 migration, the gas, as it migrates through the soils 5 A I couldn't say. That's a great question, but I 6 6 could -- give me a minute and I could answer it, but -underground. 7 7 Q Were you here for any testimony yesterday? Q Do you find -- I mean, I've had -- I've been in 8 A I was here for a portion of Carel's testimony. 8 hearings --9 Q I can't remember -- I can't recall which 9 A Okay. 10 portion, but there was discussion that perhaps some 10 Q -- where we've gone off the record for half an 11 monitoring wells had been -- that exceedances in certain 11 hour. I don't really want to do that. I mean, if it 12 amount of constituents were from landfill gas deposition only takes you a couple of minutes, I'm just curious to 13 into the well. Did you understand that to be a lateral 13 know that. But if it's a long --14 14 A Yeah. Just give me a couple of minutes. movement through the soil or an aboveground sort of 15 15 movement and redeposit? Q Okay. 16 16 MS. MANN: Can we go off the record? A I'm not -- I can't really answer to that 17 particular case. You know, I'm not familiar with that 17 JUDGE NEWCHURCH: Off the record. 18 monitoring well and those particulars in that case. 18 (Off the record) 19 Q But, generally, when we're concerned about 19 JUDGE NEWCHURCH: Back on the record.

6 (Pages 823 to 826)

Q (BY MS. MANN) Mr. Stutz, do you have a

estimate that 5 percent methane is equivalent to about

Q Okay. Do you have an understanding of the

A I do. From doing the calculation here, I would

20

21

22

23

24

25

response?

5,000 parts-per-million.

	Page 827		Page 829
1		,	
1 2	sensitivity level of SEMs, the surface emission monitoring, handheld devices?	1 2	A No. That is what's currently installed at the facility now.
3	A I'm not sure I understand.	3	Q Is there a map of what the final configuration
4	Q How low of a concentration of methane can SEMs	4	will be?
5	detect accurately?	5	A Yes. That's in the Attachment 14.
6	A I'm not sure of the low end. I know that they	6	Q And excuse me a second while I get that.
7	calibrate those machines to read, I believe, between	7	Do you have a page number on that? Excuse
8	zero to 500 or a little bit above	8	me. Do you have a page number on that?
9	500 parts-per-million.	9	A It's Figure 14E-1.
10	Q And are the are the measurements the	10	Q How about the page number at the bottom? APP?
11	quarterly measurements that are taken, are they logged?	11	A 001557.
12	A Yes.	12	Q Now, I must admit the way we read our copies,
13	Q Okay.	13	mine has ended up in black and white.
14	A Yes. The quarterly measurements, if they do	14	MR. BLACKBURN: May I approach, Your Honor?
15	get an exceedance when they're monitoring, those	15	JUDGE NEWCHURCH: Yes, sir.
16	exceedances are noted and reported back to the TCEQ.	16	Q (BY MR. BLACKBURN) Now, what is shown on this
17	Q But, otherwise, it has to be over the	17	diagram is a series of green lines, which I presume are
18	500 parts-per-million?	18	the final profiles; is that correct?
19	A Right. Anything over 500 gets reported.	19	A Yes. That's the proposed final cover.
20	Q Okay.	20	Q And there are, within that, a number of blue
21	MS. MANN: I pass the witness.	21	circles; is that right?
22	JUDGE NEWCHURCH: The Executive Director?	22	A Yes.
23	MR. SHEPHERD: Pass.	23	Q And what are those blue circles?
24	JUDGE NEWCHURCH: Or TJFA?	24	A Those are the proposed future wells that will
25	MR. HEAD: If we could, since Mr. Blackburn	25	be installed as a part of the expansion.
	Page 828		Page 830
1	has to catch a limo, can he go out of order?	1	Q So those would be added to the wells that or
2	JUDGE NEWCHURCH: Sure. Mr. Blackburn?	2	the system that you've shown in the exhibit which is, I
3	CROSS-EXAMINATION	3	think, No. 7; is that correct? I'm sorry, MS-6.
4	BY MR. BLACKBURN:	4	A Yes, they will be added in addition to what's
5	Q I have just a few questions. It's really more	5	shown on MS-6.
6	to explain things than perhaps anything.	6	Q And how exactly will that be done? How will
7	Did you in your prefiled testimony come to	7	they be added over time?
8	a conclusion as to the source of odors in the 2002 time	8	A There's actually a couple of methods.
9	frame?	9	Generally what they do is as a landfill progresses,
10		10	those wells the existing wells will be extended. And
11		11	once there's enough waste in place to drill a new well,
12	point, the gas system that was installed was installed	12	a new well will be drilled through the additional waste
13	primarily for gas for energy development, not	13	that's placed over it.
14	necessarily installed for odor control. And so I do	14	Q And if there were a crack that were to appear
15	feel that at that point the gas system needed to be	15	in, say, the cover on the side of the landfill, would
16	upgraded and expanded to control odors.	16	that interfere with the gas collection system?
17		17	A Certainly if there was a significant crack on
18	odors from the landfill during that time period, at	18	the side slopes that was allowing air to enter the
19	- · · · · · · · · · · · · · · · · · · ·	19	landfill, that would be a major concern. These wells
20	A Yes.	20	are pulling vacuum. And if they pull air into the
21	Q Now, on your Exhibit 6 what is it? Yeah, I	21	landfill, it does disrupt the gas generation process.
22	believe it is MS-6. Do you have that in front of you?	22	Q Basically your system wouldn't work if that
23	A I do.	23	were the case; is that correct?
24	Q Okay. Is that the plan that will be in place	24	A No, not necessarily. The system would work.
25	through the life of the facility through 2015?	25	It would continue to pull and collect gas, but it would

7 (Pages 827 to 830)

24

25

5,000 parts-per-million.

Q That's your testimony, 5,000?

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Page 831 Page 833 also be pulling ambient air. 1 A That was quick calculation, but that's --1 2 Q So you're telling me, though, that the movement 2 Q If on a break you feel uncomfortable with that 3 would be from the outside in as opposed from the 3 calculation, you can recalculate it and we can --4 4 landfill out: is that correct? A I appreciate that. 5 5 In other words, if there was a crack, would Q Fair enough. 6 the air be coming into the landfill because of the 6 Now, Mr. Blackburn asked you a question if 7 vacuum being pulled, or would gas escape out of the 7 you had a crack or a void in the side of the landfill, 8 8 you could pull -- because of the vacuum, you would pull 9 A No. With the gas -- air would be pulled in. 9 air into the landfill? 10 Q So it might disrupt the efficiency of the 10 A Right. That is a potential. 11 system and the gas -- for example, gas energy plant, but 111 Q Yes. Would pulling air into the landfill cause 12 should not be a problem from the standpoint of odor; is 12 a potential for any spontaneous combustion in that 13 landfill, causing a fire? that your testimony? 13 14 A Yes. My testimony would be that the crack 14 A It is possible. 15 15 would interfere with gas generation because of the Q Now, you sealed Attachment 14, which basically 16 additional oxygen. It is possible that the -- some of 16 entails what I'll call your -- the probes component and 17 those fissures that do develop will be picked up during 17 also the landfill gas collection system component, 18 18 the surface emissions monitoring and would have to be correct? 19 19 A Right. 20 Q And how does the surface emissions monitoring 20 Q Did anyone assist you in the preparation of 21 21 work? Attachment 14? 22 22 A They walk the entire landfill on approximately A Yes. I had assistance from Bob Furbend in our 23 23 a hundred-foot pattern -- space pattern across the office who is a geologist. I had assistance with some 24 landfill. And then they have a handheld instrument that 124 other staff engineers, Heath Parker, and David Vonaske. 25 25 they keep above the surface, about two to four inches Q In the preparation of Attachment 14, was there Page 834 Page 832 above the surface, checking for emissions of gas, seeing any assistance by Mr. Snyder or Mr. Adams, any 1 1 2 if there is any gas escaping from the surface of the 2 geologists, any geotechnical folks? 3 3 A Yes. Mr. Snyder provided me with some 4 4 groundwater information. And I think Mr. Mehevec If that gas is encountered, they have a 5 prescribed number of days that they have to get that 5 provided me with excavation for the bottom of the 6 fixed or they have to expand the gas system to make sure 6 landfill. 7 7 that that gas no longer escapes the landfill. Q Okay. And with regard -- we're going to skip 8 MR. BLACKBURN: Thank you. Pass the 8 around a little bit today. 9 witness. 9 But with regard to the excavation for the 10 JUDGE NEWCHURCH: Mr. Head? 10 bottom of the landfill, that is pertinent towards the 11 11 **CROSS-EXAMINATION** extraction wells as opposed to the probes; is that 12 BY MR. HEAD: 12 correct? 13 Q Good morning, Mr. Stutz. 13 A It's important for both. 14 14 Q How is the depth of the landfill and the depth A Good morning. 15 15 Q In response to an inquiry from the Public of the liner significant towards the placement of the 16 Interest Counsel, you did a quick computation with 16 extraction wells? 17 regard to conversion of 5 percent methane gas. I think 17 A The depth of the waste is what we use to 18 your response was that would compute to 18 determine the spacing of the wells on the landfill. 19 5,000 parts-per-million. Did you mean 50,000 19 Wells that are in deeper waste, we can pull harder on 20 20 and can get a better radius of influence. Wells that parts-per-million? 21 A No. I think it's 5,000. 50 percent methane is 21 are in shallow waste, we have to -- we can't pull as 22 22 about 50 parts-per-million. 5 percent methane is -hard on. And so the depth of the waste is important. 23 23 would be 500 parts per million -- or Q And I may have not stated my question properly.

8 (Pages 831 to 834)

With regard to depth of the waste, how is

that significant with the perimeter probes?

24

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24

25

prior to that on the probe project?

A No, not on the probe project, just on some air

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Page 835 Page 837 quality. 1 A Oh. The perimeter probes, we look at the depth 1 of waste within a thousand foot of the proposed probe 2 2 Q Okay. Do you have personal knowledge of when 3 location. And we use that as one of the criterias to 3 the first probes were installed at Sunset Farms? A I don't. I do -- I recall they were several 4 determine how deep the probes should be in that area. 4 5 5 Q And just to be clear, the probes are not years ago, but I don't recall the exact time they were 6 installed in any waste, correct? 6 installed. 7 A Correct. 7 O Are you aware of -- strike that. 8 Q Now, on Page 13 of your prefiled testimony. 8 Is there a federal or state law that 9 9 I'm going to make you jump around a little bit. mandates the installation of these methane probes? 10 A That's all right. Okay. 10 A Subtitle D requires installation, as well as 11 11 Q Page 16 -- I'm sorry. Page 13, Line 19, you TCEQ requirements. 12 state: Currently there's 16 probes around the perimeter 12 Q So Subtitle D came into effect roughly 1994? 13 of the site. Each probe was installed to a depth equal 13 A Correct. 14 to the depth either of groundwater or the depth of the 14 Q So is it safe to assume that since 1994, we've 15 15 deepest waste within 1,000 feet of the probe. had probes out there? 16 16 A I don't know for sure, but it is an assumption. A Right. 17 17 Q Okay. Who installed the initial probes? Q Now, isn't it the case that you look at the 18 shallower of the groundwater or the waste, and that's 18 A I don't know. 19 the extent of your probe? 19 Q Now, according to your testimony, the probes 20 A We look at both the shallowest groundwater and 20 were all replaced per a 2005 MOD; isn't that correct? 21 21 the depth of the waste within a thousand foot of that A Yes. 22 22 probe location. Q What was the purpose of replacing all of the 23 23 Q And you determine how deep to put the probe probes? 24 24 with the shallower of the two; isn't that accurate? A The purpose for replacing the probes goes back 25 25 A Yes. Yes. to your original questions of not knowing. We were Page 836 1 Q Okay. And I don't know, this may have been a 1 uncomfortable with how the probes were installed, who 2 question from the Public Interest Counsel. She asked 2 installed them, and felt like we wanted to make sure 3 how often the perimeter probes were checked. 3 they were installed properly, and decided to redo them 4 And, first, let me ask you: How does one 4 5 5 check a perimeter probe? They use a handheld instrument Q Do you have personal knowledge of any of the 6 probes prior to -- prior to the 2005 MOD being that they -- when they go to each probe, each probe is 7 7 equipped with a sample port. They connect the equipment submitted, any of those probes having what I'll call 8 to the sample port and draw a sample, and they take a 8 hits? 9 methane reading. 9 A I was not aware of any -- any exceedances in 10 Q And, hypothetically, if there was a 5 percent 10 any of the previous gas-monitoring probes until 11 or more in a perimeter monitor in between a quarterly 11 reviewing some information in some of the discovery. 12 sampling, how would you know that? 12 Q And from your review of the information in 13 A You wouldn't. 13 discovery, what did you glean from any potential -- any 14 Q Is there any federal or state law that mandates 14 15 15 the sampling frequency of the perimeter probes? A I recall, from what I remember, maybe one probe 16 A The current -- or the current TCEQ rules 16 that had some exceedances in it. 17 require, at a minimum, quarterly. 17 Q Was that a perimeter probe or was that a probe 18 Q At a minimum, quarterly. 18 inside a structure? 19 I think you've worked, according to your 19 A It was a perimeter probe. 20 testimony, on the landfill gas project for approximately 20 Q And would that perimeter probe had been at the 21 21 boundary shared by Waste Management and Sunset Farms seven years? 22 22 A Yes. Landfill? 23 23 A I'm not sure where the location was for that Q Have you worked at the Sunset Farms Landfill

9 (Pages 835 to 838)

Q Okay. Are you aware that there was a probe on

24

25

probe.

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Page 839 Page 841 the BFI site on its southern boundary with the Waste 1 new wells for a month, the monitoring probes were tested 1 2 2 again on January 31, 2000. At this time GMP-12 was Management facility? 3 A I am not aware. I don't know where the probe 3 found to have 24-percent methane in the 20-foot level." Let me stop and ask, is 24-percent methane, 4 was that had an exceedance in the past. 4 5 5 would that be a hit, an exceedance? Q Well, let me rephrase that. 6 6 Are you aware -- as we sit here today, is A Yes. 7 it not a fact that there are no probes on the southern 7 Q It goes on to say, "As has happened in the 8 boundary of the Sunset Farms facility? 8 past, I expected that the gas was being pulled across 9 9 the property boundary from Waste Management. This probe A That's correct. 10 10 had never been hot until the new gas extraction wells Q Okay. Are you aware that at one time in the 11 11 were installed. past there was a probe on the southern boundary? 12 12 "In order to correct the problem, I went 13 Q And are you aware that there was a request by 13 over and opened up on the Waste Management extraction BFI, through a MOD, to have that probe taken away? well closest to this probe. This was done on 14 14 15 15 February 1, 2000. The probe was checked the next two 16 16 Q And are you aware that that was granted? weeks and the readings went down to 18 percent and then 17 17 to 13-percent methane. I checked the probe again today, A Yes. 18 18 2/29/00, the probe read 4-percent methane." Q Does that refresh your recollection that that 19 was the probe that had the hit? 19 Are you aware of the location of GMP-12? 20 A No. I was unaware of why those probes were 20 A No. I could look at some old drawings. 21 21 Q If you have them handy, would you, please? requested to be removed. 22 22 A I believe -- I'm not sure if GMP-12 -- GMP-12 MR. HEAD: Off the record just one second. 23 23 JUDGE NEWCHURCH: Off the record. is not an existing probe at the site. 24 24 Q Correct. (Off the record) 25 25 A So I --(Exhibit TJFA No. 17 marked) Page 840 Page 842 Q (BY MR. HEAD) Mr. Stutz, I've handed you an 1 Q Do you recall whether GMP-12 was the subject of 1 2 exhibit marked TJFA-17. Have you ever seen this 2 the permit modification to remove that probe? 3 document? 3 A I believe it may have been one of several 4 4 probes along that boundary. It appears to be so. A I don't recall ever seeing this. 5 5 Q How, if you know, would a gas extraction well Q Okay. This document is a transmittal to Adam 6 Mehevec, dated 2/29/2000, from a Jamie Meaux? 6 impact a methane probe? 7 A Meaux. 7 A The gas extraction system, one of the purposes 8 Q Do you know Jamie Meaux? 8 of the system is to control subsurface migration. And so by inducing vacuum within the waste, you create a 9 A Yes. 9 10 Q Who is Jamie Meaux? 10 pressure gradient that draws the gas into the extraction 11 A I'm not sure what his capacity was at the time. 11 wells into the landfill and away from the probes. So 12 I just know of him in the landfill gas industry. He 12 any gas -- it would -- gas wouldn't want to naturally 13 is -- I just know of him. I'm not sure what his 13 migrate away from the landfill because the landfill 14 capacity was at this point. He's changed jobs a few 14 would be under vacuum with the gas system. 15 times. 15 Q So if you have -- hypothetically, if you have 16 16 two landfills side-by-side, and they both had the gas Q Is he an engineer? 17 A I don't know. 17 extraction well system, how would that impact the probes 18 Q But he's a landfill gas person? 18 between the two landfills? 19 19 A Sure. We see this quite often. If you've got A Yes. 20 Q Okay. And this e-mail indicates that "In 20 two -- a perimeter -- a probe in between two waste 21 December '99, Sunset Farms Landfill installed additional 21 masses or two landfills, you do create an instance where 22 22 gas extraction wells. The gas monitoring probes were if one gas system in that area is pulling harder than 23 23 checked at the end of December and there were no hot the other gas system, then you can draw gas back and 24 24 probes." forth across that probe. It becomes a time where you 25 25 It goes on to state, "After pulling on the have to balance how you're pulling and how hard you're

10 (Pages 839 to 842)

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Page 843
                                                                                                                 Page 845
      pulling on your gas system, but it's quite common.
                                                                      an unusual objection to the responsiveness, because I
                                                                      think the question was -- while he was being referred to
 2
              MR. HEAD: Move to admit TJFA-17.
                                                                 2
 3
              MR. MOORE: Objection; hearsay.
                                                                 3
                                                                      the detail of the monitoring probe, the question was
 4
              JUDGE NEWCHURCH: Mr. Head?
                                                                      about an extraction well. And I want to -- if you could
                                                                 4
 5
                                                                 5
              MR. HEAD: Well, one, it's authenticated.
                                                                      clear it up.
 6
      It was produced by BFI. It's a document that was sent
                                                                 6
                                                                              MR. HEAD: And I misspoke. We were talking
 7
      to Adam Mehevec. It appears to be reliable. It appears
                                                                 7
                                                                      about monitoring probes.
      to be germane to the proceeding.
 8
                                                                 8
                                                                              JUDGE NEWCHURCH: And was that the witness'
 9
                                                                 9
                                                                      understanding as well?
               MR. MOORE: I don't think he's identified
10
                                                                10
                                                                              THE WITNESS: That was my understanding,
      any exception to the hearsay rule in that argument. The
11
      fact that it's produced doesn't authenticate anything.
                                                                11
                                                                      and I described a probe.
12
               You're required to produce all kinds of
                                                                12
                                                                              JUDGE NEWCHURCH: Okay. So I think that's
13
      documents. That doesn't make them admissible. He needs
                                                               13
                                                                      clear now.
14
      to show some independent basis or exception to hearsay
                                                                         Q (BY MR. HEAD) Now, on these probes, is the
                                                                14
15
                                                                15
      rule. I don't think I heard any.
                                                                      probe screen to the bottom of the probe?
16
              JUDGE NEWCHURCH: So this is an e-mail --
                                                                16
                                                                         A Yes. The screen extends to the bottom of the
17
                                                                17
      or, rather, a fax from Jamie Meaux. It was never clear
                                                                      probe.
18
      to me if Jamie Meaux is a male or female --
                                                                18
                                                                         Q And typically -- so the length of the screen is
19
                                                                19
                                                                      dependent upon the length of the probe?
20
                                                                20
               THE WITNESS: Male.
                                                                         A Yes. The length of the -- yes. I guess the
21
                                                                21
              JUDGE NEWCHURCH: Okay.
                                                                      perforation level varies with the depth of the probe.
22
                                                                22
                                                                         Q But the entire probe is perforated?
               -- who exists, because Mr. Stutz says he
23
                                                                23
      exists. And this is his statement. I don't -- there's
                                                                         A No.
24
                                                                24
      not an obvious exception, Mr. Head. So I'm going to
                                                                         Q Okay. How much of the probe typically is
25
                                                                25
      sustain the hearsay objection and 17 is not admitted.
                                                                      perforated?
                                                 Page 844
                                                                                                                 Page 846
              MR. HEAD: We may come back to that with
                                                                         A Typically at the site, the top five feet of the
 1
                                                                 1
 2
      Mr. Mehevec.
                                                                 2
                                                                      probe is not perforated. The rest of it is.
 3
              JUDGE NEWCHURCH: Sure.
                                                                 3
                                                                         Q And why is the top five feet not perforated?
         Q (BY MR. HEAD) Let's go to 1529 of the
 4
                                                                 4
                                                                         A The top five feet is not perforated for a
 5
      application, if you would, please.
                                                                 5
                                                                      couple of reasons. First, within TCEQ guidance
 6
         A Okay.
                                                                 6
                                                                      documents, they have requested that we leave between a
 7
                                                                 7
         Q This was sealed by you, and this is the
                                                                      four-and-a-half to six-foot surface casing in place.
 8
      schematics, drawings. Proposed Landfill Gas Probe Event
                                                                 8
                                                                               The reason for the surface casing is to
 9
                                                                 9
                                                                      protect infiltration of groundwater, as well as when
10
              Could you -- and on the left-hand side of
                                                                10
                                                                      monitoring the probe, not to pull in air into the probe
11
                                                               11
      that page is "LFG monitoring probe."
                                                                      while you're sampling.
12
              JUDGE NEWCHURCH: What APP page is this? |12
                                                                         O So in your prefiled on Page 14, this would
13
              MR. HEAD: I'm sorry. It's 001529.
                                                               13
                                                                      coincide with what you stated. All of the probes have
14
              JUDGE NEWCHURCH: Thank you.
                                                               14
                                                                      perforations that are within five feet of the ground
15
         Q (BY MR. HEAD) Could you just briefly describe
                                                               15
                                                                      surface. So the probes would only become completely
16
      the construction -- the construction methodology of the
                                                               16
                                                                      submerged if the water level was within five feet of the
17
      extraction well?
                                                               17
                                                                      surface?
18
         A Sure. I guess you -- it's -- the probe is
                                                               18
                                                                         A Correct.
19
      drilled down and then backfilled. A pipe is then -- a
                                                               19
                                                                         Q How does groundwater impact the probes?
20
      slot of PVC pipe is inserted and backfilled with a
                                                               20
                                                                         A Groundwater -- you know, gas will certainly
21
      silica sand around the screen interval. On top of that,
                                                               21
                                                                      seek the path of least resistance. And so any time the
22
                                                               22
      you have bentonite granulars placed there to seal off
                                                                      gas encounters a saturated zone, groundwater, it's going
23
      the surface. That is then followed by a bentonite grout
                                                               23
                                                                      to quickly find a path around it and travel quickly to
24
                                                               24
      and then a concrete pad on the top.
                                                                      the surface and vent out as opposed to traveling through
25
                                                               25
              MR. MOORE: Your Honor, I'm going to make
                                                                      the groundwater or through the saturated zone.
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11 (Pages 843 to 846)

	Page 847		Page 849
1	Q If you have water high groundwater that is	1	probes, and we have certain columns. We have the ground
2	in your screen interval, would that impede the detection	2	surface elevation, the bottom of the waste depth within
3	of methane?	3	a thousand feet, lowest groundwater elevation, required
4	A No.	4	bottom of probe elevation, required depth of probe, and
5	Well, I mean, were you saying if you	5	then recorded depth of probe from the ground, recorded
6	have some groundwater in your probe, you can still	6	probe bottom elevation, recorded depth to water from the
7	detect methane.	7	ground, and recorded water elevations.
8	Q If you have groundwater let's say you've got	8	Do you see all of those notations?
9	an eight-foot-deep probe and you've got six feet of	9	A Yes.
10	groundwater in it, is that going to be an effective	10	Q And Note 2 indicates: "The bottom of the waste
11	probe for the purposes of monitoring methane?	11	depth obtained from the excavation plan provided by
12	A Yes.	12	ACE." And you're familiar with Ray Shull and Adam
13	Q So it's your testimony that water in the probe,	13	Mehevec and folks at ACE.
14	no matter how much water, is not going to impact the	14	And the asterisk note indicates: "Recorded
15	efficacy of the probe for monitoring methane?	15	Probe Depths obtained by Weaver Boos Consultants-LLC,
16	A No. That's not what I'm saying.	16	Southwest on 11/24/2004."
17	Q Okay.	17	And that's your company, correct?
18	A Do you want me to clarify?	18	A Correct.
19	Q Please do.	19	Q And in the column in the middle, you have a
20 21	A You mentioned water at any level	20 21	column, Required Depth of Probe. And, for instance, for GMP-1S, the first one, it says, Required depth of probe,
22	Q Right. A as opposed to water in the probe. Having	22	11 feet.
23	some water in your probe still allows some perforations	23	Now, is that required depth of probe based
24	to be available to sample.	24	on how you determine is that based on the
25	Q Okay. The more water in the perforated area,	25	determination that you put your probe to the shallower
	Page 848		Page 850
	_		
1	the less effectiveness of the probe; is that not	1	of the groundwater or the waste fill within a thousand
2	correct? A No. It's still effective here. You can still	2	feet? A There's a lot of information on here. It would
4	monitor gas because the gas is going to travel on top of	3	take me a minute to familiarize myself with it.
5	that groundwater.	5	Q Please take your time.
6	Q Okay.	6	MR. MOORE: J.D., while he's doing that,
7	(Discussion off the record)	7	did you have this marked?
8	(Exhibit TJFA No. 18 marked)	8	MR. HEAD: Yes. I had it marked 18.
9	Q (BY MR. HEAD) Mr. Stutz, I have handed you	9	MR. MOORE: Thank you.
10	what's been marked TJFA-18 that consists of two pages at	10	A (Reviews document.)
11	APP 020577 and APP 020578. And let me represent to you		Do you want to re-ask?
12	the chart here is exactly the same, but someone has put	12	Q (BY MR. HEAD) Yes.
13	notations on 020577. It also indicates at the bottom of	13	But before I ask that question, I'm going
14	the left-hand corner that this was Sunset Farms' Permit	14	to go back to your "Proposed Replacement: A New Probe
15	MOD 705. Are you familiar with this document? Have you	15	Data" page, which is in the application, Table 14-1.
16	ever seen this document?	16	And it's at 001515. And I apologize in advance for
17	A Yes. I mean, it's been a while, but this does	17	having you skip around.
18	look familiar.	18	A What was that again?
19	Q Did you generate this document?	19	Q It's Application 1515, and it's Table 14-1.
20	A I would have to I believe we did. I believe	20	A Okay.
21	I did.	21	Q And as I understand this, this table reflects
22	Q Is that your writing on the right-hand side?	22	proposed replacements and new probe data subsequent to
23	A It does look like my handwriting.	23	the 2005 MOD.
24	Q Okay. Now, I would like to go through this	24	A Actually, this is taken from the 2005 MOD.
25	with you briefly. This appears to be a list of the	25	Q Right. Now, in the 2005 MOD from this Table 1,

12 (Pages 847 to 850)

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SOAH DOCKET NO. 582-08-2178 Page 851 you indicate in Note 2: "The bottom of probe elevation 1 2 is based on the higher elevation between the lowest 2 3 elevation of waste within 1,000 feet of the probe and 3 4 the lowest groundwater elevation at the probe," correct? 4 5 5 A Correct. depth is 13. 6 Q And the total depth of the probe is a minimum 6 7 of 10 feet. Is the minimum depth of the probe being 7 8 10 feet, is that an industry standard? 8 9 9 A Yes. 10 10 Q And looking at this chart, it appears to me 11 that what you've done is you've looked at the ground 11 field. 12 surface elevation, and you've looked -- and you prepared 12 13 the lowest elevation of waste and the lowest 13 14 elevation -- lowest groundwater elevation, and you go 14 15 15 with the higher of the two. 16 16 A Yes. 17 17 Q And we talked about that at the beginning of 18 18 your testimony. 19 19 20 Q So going back to TJFA-18, I just want to draw 20 21 your attention to the first probe GMP-1S. If I go to 21 A I don't know. 22 22 that column, although it states under required depth of 23 A Okay. probe, 11 feet, the next entry and recorded depth of the 23 24 24 probe from ground is 4.9 feet; isn't that correct? 25 25 A That's what it shows on here. Page 852

Page 853

Q And the depth of the groundwater, 1.5. And I'm grappling with how you have a required depth of the probe and the probe is, according

to this chart, less than five-feet deep and the required

A The required depth is not any regulatory standard. That was just our -- again, these were the previously existing probes that we didn't have any information or data on. And we were trying to look at what was out there just based on observations in the

The required depth is simply -- I guess, as an internal use, we were using that to evaluate how deep the probes were in relation to how we measure groundwater in that area. But this certainly wasn't used to design the existing probes that are out there

Q Well, these -- I think you indicated those are your notations and on the right you say eight good -and is that six or seven not good? I can't tell.

- O It looks like a six to me.
- Q And "1 New probe."

Can you tell from looking at this which was

- Q And the recorded depth to water from the ground is 2.3 feet?
 - A Correct.

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- Q So is it my understanding that at least as of 2004, one of the probes was only -- less than five-feet deep?
 - A Those are a series of probes. 1S, 1I, and 1D, they're nested. And so you have three probes in one casing there. You have a shallow, intermediate, and a deep. And the shallow, according to this, is at 4.9. As I mentioned earlier, I don't have any of the logs of the existing probes.
 - Q And nesting means within a pipe you would have multiple probes?
 - A Within a boring, within one of the drillings for the probe.
 - Q Okay.
 - A They also could have been adjacent. I guess I should clarify. You could also have adjacent probes with different intervals at that one location.
 - Q Okay. And if we could go down to GMP-2S. Once again, it states required depth of probe, 13 feet. And I see the recorded depth of the probe from the ground, 4.9 feet.
 - A Correct.

Page 854

- the new probe? 1
 - A I don't recall.
 - Q Okay. So are all of these probes gone?
- 4 A Yes.

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- Q So you submitted a MOD in 2005 to replace all of the probes, correct?
 - A Yes.
- Q And, once again, the purpose of that MOD was what?
- A As I originally testified. Do you want me to restate?
 - Q Please. I'm not trying to trick you.
 - A That's okay.
 - Q We've had some long days here.
- A The original -- the reason -- the purpose for replacing the probes at the site were exactly what we were looking at here. We were unaware of how the probes were constructed and installed. They're subsurface. They're below the ground. We're not sure what they look like.

And I was uncomfortable preparing a gas management plan not knowing the details of the installation or having boring logs or having any information on how they were installed. We went to the field and did some field verification and checked the

13 (Pages 851 to 854)

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Page 855
                                                                                                                   Page 857
       best we could, looked at several things, hoping to be
                                                                       action would then be developed. And that we don't want
 1
 2
      able to use the existing probes. We probably could
                                                                  2
                                                                       are required to provide many details of the action plan
 3
                                                                  3
      have, you know, incorporated some of those existing
                                                                       at this time."
 4
                                                                  4
                                                                                MR. MOORE: Objection, Your Honor. I'm
       probes into the current system.
 5
                                                                  5
               However, again, we still didn't have the
                                                                       going to object to the form of the question. I
 6
       boring logs to back it up, and just wanted to make sure
                                                                  6
                                                                       anticipate that Mr. Head will want to offer this, and I
 7
       all of the probes were installed and that they were
                                                                  7
                                                                       will peremptorily make an objection to the hearsay
 8
       consistent. That makes for ease of monitoring and
                                                                  8
                                                                       nature of this document. And I think that it's
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                                                                  9
       compliance if all of the probes are the same, have the
                                                                       basically skirting a hearsay objection to try to read
10
       same monitoring ports, design, and are installed the
                                                                 10
                                                                       this document into the record.
11
                                                                 11
       same. So that was the intent.
                                                                                If he's going to be using this as a prior
12
                                                                 12
          Q Can you tell from this Exhibit TJFA-18 whether
                                                                       inconsistent statement or a statement against interest,
13
       certain of those probes were not functioning properly?
                                                                 13
                                                                       then he can use that after he has -- after he finds that
          A No. I couldn't say that.
14
                                                                 14
                                                                       Mr. Stutz has made a statement inconsistent with this.
15
                                                                 15
          Q Would you deem a five-foot probe with a
                                                                                We need to have testimony about the subject
16
      recorded depth of water of one-and-a-half feet to be an
                                                                 16
                                                                       before we can make a determination of whether this would
17
                                                                 17
      effective probe for detecting migration of methane gas?
                                                                       be admissible as a prior inconsistent statement. So
18
                                                                 18
          A It's hard to say. I don't know anything about
                                                                       just reading this into the record is skirting the
19
                                                                 19
      how these were constructed.
                                                                       hearsay objection, and I therefore object.
20
                                                                 20
          Q So you looked at these probes that were
                                                                                JUDGE NEWCHURCH: Do you have a response?
21
                                                                21
       existing that day and said, "We have to have a whole new
                                                                                MR. HEAD: I have a hard time responding to
22
                                                                 22
       set of probes," and that was your 2005 MOD, right?
                                                                       that. Let me just try to go a different route on this.
23
                                                                 23
                                                                                JUDGE NEWCHURCH: Okay. So you're
          A That's not a good characterization. My
24
                                                                 24
                                                                       withdrawing the question and asking a new question?
       approach was I looked at the existing probes and hoped
25
                                                                 25
      that I could use them, and, you know, was trying to
                                                                                MR. HEAD: Yes.
                                                  Page 856
                                                                                                                   Page 858
 1
       gather the data so that we could use the existing
                                                                  1
                                                                          Q (BY MR. HEAD) Mr. Stutz, this e-mail -- this
 2
      probes. But when it came time to needing to provide
                                                                  2
                                                                       is an e-mail from Ray Shull, correct?
 3
      boring logs in our application, they couldn't be found.
                                                                  3
                                                                          A It appears to be.
 4
      And at that point, we decided to continue with
                                                                  4
                                                                          Q And it was addressed to you, correct?
                                                                  5
 5
      replacement of the probes.
                                                                          A Correct.
 6
               MR. HEAD: Off the record for a second.
                                                                  6
                                                                          Q Okay. And what does Mr. Shull discuss in the
 7
               JUDGE NEWCHURCH: Off the record.
                                                                  7
                                                                       e-mail?
 8
                                                                               MR. MOORE: Objection; hearsay.
               (Off the record)
                                                                  8
 9
               JUDGE NEWCHURCH: Back on.
                                                                  9
                                                                               MR. HEAD: He's indicated that he's
10
               MR. HEAD: Move to admit TJFA-18.
                                                                 10
                                                                       received this document.
11
               MR. MOORE: No objection.
                                                                 11
                                                                               JUDGE NEWCHURCH: Okay. Okay. So that
12
               JUDGE NEWCHURCH: 18 is admitted.
                                                                 12
                                                                       would indicate that there was a statement by Mr. Shull.
13
               (Exhibit TJFA No. 18 admitted)
                                                                 13
                                                                               Are you offering it for a limited purpose
14
               (Exhibit TJFA No. 19 marked)
                                                                 14
                                                                       or for the truth of the matters asserted by Mr. Shull?
15
          Q (BY MR. HEAD) Mr. Stutz, I've handed you
                                                                 15
                                                                               MR. HEAD: For the truth of the matters
16
      what's been marked TJFA-19. This is APP 021693 and 694. 16
                                                                       asserted.
17
      I'll represent to you this was produced to my law firm
                                                                 17
                                                                               JUDGE NEWCHURCH: Okay. So you are
18
      by BFI, and it's an e-mail exchange between yourself and
                                                                 18
                                                                       offering the exhibit at this time?
19
      Ray Shull; is it not?
                                                                 19
                                                                               MR. HEAD: Yes.
20
          A Yes. It appears to be from Ray to myself and
                                                                 20
                                                                               JUDGE NEWCHURCH: Is there an objection?
21
                                                                 21
                                                                               MR. MOORE: Yes. Objection on the basis of
      others.
22
                                                                 22
          Q Right. And Mr. Shull states to you: "My
                                                                       hearsay.
23
      understanding is that we pretty much decided to install
                                                                 23
                                                                               JUDGE NEWCHURCH: And is it somehow exempt
24
      the probes along the south boundary, but would want to
                                                                 24
                                                                       from the normal prohibition on hearsay?
25
                                                                 25
      describe it such that if 'hits' are recorded, then an
                                                                               MR. HEAD: To tell you the truth, I can't
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14 (Pages 855 to 858)

		1	
	Page 859		Page 861
1	think of one.	1	Q But the bottom line was that TCEQ required this
2	JUDGE NEWCHURCH: Okay. Well, the	2	over the objections of the Applicant?
3	objection is sustained.	3	A The TCEQ originally told us we could take the
4	MR. HEAD: Does that mean we can't discuss	4	probes out, and then they came back and said we would
5	this document?	5	like to have the probes put back in.
6	JUDGE NEWCHURCH: Well	6	Q And as we sit here today, you, BFI has
7	MR. HEAD: Let me just go another route.	7	installed all of the probes in the 2005 MOD, but has not
8	JUDGE NEWCHURCH: you might be able to	8	installed the probes on the southern boundary; is that
9	discuss it in part. It sounded like Mr. Moore was	9	correct?
10	objecting to quoting statements as if they had been	10	A That's correct. Those are proposed with the
11	stated by Mr. Shull. Those are hearsay statements. You	11	approval of the expansion.
12	might be able to ask Mr. Stutz questions about the	12	Q Now, if you have an exceedance in your
13	subject matter without quoting any hearsay statement.	13	application in the application in your portion
14	MR. HEAD: That's where I'm going.	14	starting with Page 1516 you have the exceedance
15	, 11	15	action plan, correct?
16	application was filed initially in 2006, was there	16	A 1516?
17	<i>y</i> 1	17	Q I think 1516 is where the exceedance action
18		18	plan begins.
19	A I'm not certain on the date, but I do know when	19	A Correct.
20	originally submitted we did not have probes on the	20	Q Could you briefly explain to the Court what an
21	southern boundary.	21	exceedance action plan is?
22	Q And isn't it a fact that TCEQ issued a note of	22	A This is the actions that are to be taken should
23	deficiency requiring that those probes be installed?	23	there be an exceedance in a perimeter gas probe or in
24	A Again, I remember them issuing a letter	24	one of the building monitors.
25	requesting that probes be installed on the southern	25	Q Is there any plan for BFI to have a separate
	Page 860		Page 862
1	boundary.	1	exceedance action plan for the methane probes at the
2	Q In your advising BFI on the landfill gas	2	boundary of the Waste Management Landfill?
3	component, was it your advice not to have probes on the	3	A No, not that I'm aware of.
4	southern boundary?	4	MR. HEAD: I'm going to go to gas
5	A Absolutely.	5	collection next. It might be a good time for a break if
6	Q Absolutely?	6	that works for you.
7	A Absolutely.	7	JUDGE NEWCHURCH: Yes, it does. Let's take
8	Q And why is that?	8	a 10-minute break.
9	A Having probes in between two waste masses, a	9	(Recess: 10:31 a.m. to 10:46 a.m.)
10	lot of time, it just doesn't make sense. It you're	10	JUDGE NEWCHURCH: Back on the record.
11	monitoring gas traveling between two landfills, and it's	11	MR. MOORE: Your Honor, I believe the
12	not going off into the public property. It's both	12	witness would like to offer a correction to some prior
13	sites have collection systems. If those probes do get	13	testimony, if he may.
14	exceedances, if there's the remediation of that	14	JUDGE NEWCHURCH: What's your correction,
15	probe would be, basically, continue with the gas systems	15	please?
16 17	that are already in place. They're not monitoring gas	16	THE WITNESS: The conversion. Five-percent
17	leaving the outgoing into the general public.	17	methane would be equivalent to 50,000 parts-per-million.
18 10	Q Are you familiar with any other landfill facilities in Texas where two landfills are coterminous?	18 19	Thank you.
19 20	A Yes.	20	JUDGE NEWCHURCH: Got it. Thanks. MP. HEAD: You don't really believe I
20 21	A Yes. Q And are you aware of whether there are methane	21	MR. HEAD: You don't really believe I calculated that, do you, Your Honor?
22	probes between the two landfills?	22	Q (BY MR. HEAD) A few more questions on these
23	A Where there are probes between two landfills?	23	probes. We had a discussion about groundwater and the
24	Q Yes. Yes.	24	perforations. I think your testimony was that that
25	A I can't recall any in Texas.	25	didn't impact the efficacy of the probe. Is that your
			r r y me proce. to that your

15 (Pages 859 to 862)

	TI DOCKET NO. 302 00 2170		CEQ DOCKET NO. 2007 1774 MOV
	Page 863		Page 865
1	testimony?	1	that gas will go into solution, and you're left with
2	A Groundwater when gas hits that groundwater,	2	methane. And so your gas probe will still monitor gas.
3	it's not going to migrate. So if there's groundwater in	3	Q Just so we're clear, you've got your water
4	a gas probe, that means that there's a natural barrier	4	table to the very top of that probe above the
5	there to gas migration. So having water in a gas probe	5	perforation, and you're telling the Court that that's
6	is that gas will just hit the groundwater and rise to	6	not going to impact when you do a quarterly reading to
7	the surface and vent off.	7	determine whether we have a methane situation at the
8	Q So the gas will rise above the water?	8	perimeter? Is that your testimony?
9	A Yes.	9	A My testimony is that that probe will continue
10	Q Now, what about if the water is above the	10	to give an accurate representation of what's happening
11	perforation? Will that impact the efficiency of the	11	at the subsurface in the gas migration.
12	methane probes?	12	Q Fair enough.
13	A Those perforations are within five feet of the	13	And are you familiar with the federal and
14	surface. So you're talking about gas traveling to the	14	state regulations with regard to requirements or
15	top five feet of the surface. And that gas is going to	15 16	installation of gas probes around a landfill? A Yes.
16 17	find its path of least resistance, which is not through the soil. It's going to get to the surface.	17	Q And isn't it a fact that those regulations
18	Q If you have heavy rains and you've got	18	require that the entire perimeter of a landfill have
19	groundwater at the very top of that probe above the	19	extraction wells?
20	perforations	20	A I'm sorry. Did you change from wells to probes
21	A Okay.	21	again?
22	Q will that condition impact the efficacy of	22	Q I did. Probes. Probes.
23	the methane probe?	23	A Okay. Ask it again.
24	A I guess I struggle with the word "efficacy" of	24	Q Isn't it a fact that the federal and state
25	the probe. The probe is still effectively monitoring	25	regulations require gas probes to extend along the
	Page 864		Page 866
1	what's happening in the subsurface, which is there's	1	entire perimeter of the landfill?
2	water and the gas isn't migrating. It's effectively	2	A No.
3	doing its job.	3	Q No?
4	Q Well, let me try to state it another way.	4	A No.
5	Hypothetically, you come out to do your monthly	5	Q Is there an exception to those rules for
6	monitoring. Is it monthly or quarterly?	6	landfills located adjacent to other landfills?
7	A Quarterly.	7	A There is certainly some engineering judgment,
8	Q And you come after a high rain condition and	8	some determinations on geology, looking at natural
9	you've got water to the very top of that probe. So	9	barriers, looking at off-site structures. All of those
10	you're not as I understand it, you're not picking up	10	things do go into determining the location of a
11	any gas.	11	monitoring system.
12	A Right. No.	12	Q So as you sit here today, your testimony is, as
13	You could still be picking up gas. Gas can	13	we pull out the state and federal regulations, it's not
14 15	bubble up through a probe, but it can still read	14 15	going to say that we have to have probes around the perimeter of a landfill? That's your testimony?
16	methane. Q Isn't it correct it wouldn't be reading methane	16	A My testimony would be, from my understanding of
17	to the extent the probe would, without the existence of	17	the rules, is that the perimeter monitoring system has
18	water above the perforation?	18	to take into consideration other factors in designing
19	A No. Actually, your methane readings could be	19	the spacing and location of probes. The spacing of
20	higher.	20	those probes could be such that you have probes that
21	Q I'm going to have to give up on that one.	21	aren't between two landfills. It's not that you're not
22	A Could I explain?	22	having a monitoring system around the perimeter. It's
23	Q Explain, please.	23	just that you're having a larger spacing of probes
24	A As methane migrates, it travels through that	24	around the perimeter.
25	water. As we talked about a little yesterday, the CO2 in	25	Q Explain briefly how extraction wells operate at
		_	-

16 (Pages 863 to 866)

	Page 867		Page 869
1	a landfill.	1	The Subtitle D wells are wells that I'm
2	A The extraction wells are drilled into the waste	2	familiar with having been involved in the design
3	and have a perforated pipe and a gravel pack around them	3	installation. And those wells generally go to within 10
4	and they're used to extract the gas in the landfill.	4	to 15 feet of the landfill, of the bottom.
5	Q And if I could refer you in the application to	5	Q And is it your professional opinion that wells
6	Figure 14-E2, which is Application No. 0001558.	6	should be located within 10 to 15 feet of the liner?
7	Do you have that in front of you?	7	A It's my opinion that the the purpose of the
8	A Yes.	8	10-foot separation is a safety factor to not penetrate
9	Q You have a typical extraction well on the left	9	the liner. So you can drill deeper, but I don't
10	side there, correct?	10	encourage it because you're just getting too close.
11	A Yes.	11	Q You don't want to puncture the liner?
12	Q And you have your perforated pipe, correct?	12	A Absolutely.
13	A Yes.	13	Q Now, going back to my schematic, your
14	Q And, typically, how much of the pipe is	14	schematic, I see you have your perforated pipe, and then
15	perforated? What percentage of the length is	15	you have an area that says clay backfill or well-graded
16	perforated?	16	soil backfill. And my question is in that area, if
17	A That varies, depending on the depth of the well	17	there's landfill gas, could it not enter the extraction
18	and the depth of the waste at the well. Generally, it	18	well where you have the clay backfill?
19	can be anywhere from a half to three-fourths.	19	A Could you re-ask?
20	Q Okay. And looking at is it safe to call	20	Q Yes.
21	this schematic?	21	The gas enters the extraction well in the
22	A Sure.	22	perforated pipe, correct?
23	Q Looking at this what I will call is a	23	A Yes. That's where it enters into the well, is
24	schematic, it appears that the bottom of your extraction	24	through the perforations.
25	well should be located within 10 feet of the top of the	25	Q Okay. And my question is: If you have a
	Page 868		Page 870
1	protective cover or the bottom of the waste.	1	portion of your extraction well where the well is
2	A Yes. The proposed wells are designed to go no	2	backfilled with clay or well-graded soil, in that
3	closer than 10 feet from the bottom.	3	section of your well, can gas landfill gas enter the
4	Q And you said "proposed wells." Are the	4	extraction well?
5	existing wells situated within 10 feet of the liner at	5	A Yes.
6	the landfill?	6	Q And does it does the gas go through the clay
7	A Some are within 10 feet; some are closer.	7	backfill?
8	Q Is there any do you know the difference	8	A No.
9	between	9	Q Then where does the gas enter?
10	A And some are much higher.	10	A Through the perforations.
11	Q And you are aware there's a portion of this	11	Q I guess my question is: If I've got gas,
12	landfill which has pre-Subtitled D wells, correct?	12	hypothetically, look at our
13	A Correct.	13	A Let me help you.
14	Q And are you generally aware of where that area	14	Q Please. Help me.
15	is?	15	A This gas is under vacuum. And so you're
16	A Yes.	16	creating a zone of low pressure. So any gas is going to
17	Q Is there any distinction between the depths of	17	go from high pressure to low pressure. So the gas above
18	the wells between the pre-Subtitle D and the	18	the perforation is still going to migrate to the low
19	post-Subtitle D areas?	19	pressure and enter the perforation.
20	A The pre-Subtitle D wells were certainly	20	Q So you're pulling it below that clay backfill into the perfection?
21 22	installed prior to my involvement at the site. What	21	into the perforation?
23	I've been able to gather is that the pre-Subtitle D	22 23	A Yes.
23 24	wells are generally within about 15 feet some are a lot higher of the bottom of the landfill. But,	24	Q Is that your testimony? A That is possible.
2 4 25	generally, they're around 10 to 15 feet from the bottom.	25	Q Okay. In your schematic, you have your
	Scherary, they is around to to 15 feet from the bottom.	1-5	Z Skuy. In Jour senemane, you have your

17 (Pages 867 to 870)

	Daga 971		Daga 972
	Page 871		Page 873
1	monitoring ports, and those are above-grade, correct?	1	system. Come take a look." But as we moved into the
2	A Correct.	2	design phase, it was brought to my attention that there
3	Q And then you have laterals as well? It appears	3	were odor complaints and needed to control some odors.
4	these laterals are located in the erosion layer. Is	4	Q And who at BFI contacted you to get involved
5	this schematic premised upon final cover?	5	with their landfill gas situation?
6	A Yes. This is showing the wells at completion,	6	A I would oh, vaguely, I remember working with
7	final cover.	7	Randy Bodnar and Lee Kuhn at the time.
8	Q We've got maybe hundreds how many wells do	8	Q And according to this chart in 2007, there was
9	we have out there today?	9	an entry under Phases, GCCS repair. Was that pursuant
10		10	to a TCEQ MOD?
11	•	11	A No. That was actually we had one of the
12		12	pipes that had settled and needed to be replaced. It
13		13	was just a routine operation and maintenance activity.
14 15	, ,	14	Q And did that repair, according to this chart,
16	, ,	15 16	resulted in 3-percent less coverage of a GCCS of landfills acreage, correct?
17	Q Where are those laterals on the surface or	17	A No, I wouldn't say the repair resulted in less.
18		18	It was as a landfill continues to take waste, there's
19	A They're buried.	19	more area without coverage. It was simply they were
20	Q And how deep are they buried?	20	taking waste at the same time they were doing repairs.
21	A Generally, at this site, they're buried a foot	21	Q I see. What impact does leachate have in the
22	to 18 inches.	22	screened area of an extraction well on the effectiveness
23	Q Would they be buried in waste?	23	of gas collections?
24	A Typically, they're in the intermediate, their	24	A As we have talked about, the gas will find the
25	daily cover, but sometimes they do they are in waste.	25	path of least resistance. Traveling through leachate is
	Page 872		Page 874
1	Q Are there any areas, as we sit here today,	1	not something it would prefer to do. So it will either
2	where you have your laterals that are just sitting on	2	quickly bubble up through the leachate and be collected
3	top of the landfill not covered?	3	or it will travel along the leachate and be collected.
4	A I don't think there are, but there could	4	Q Have you ever heard the term of a well being
5	possibly be a new line put in that's aboveground for a	5	watered-in?
6	temporary installation. I'm not sure.	6	A Yes, sir.
7	Q So is it your testimony that an extraction well	7	Q Explain what happens when a well is watered-in.
8	can collect landfill gas from the entire column of the	8	A "Watered-in" is used to refer to a well where
9	boring?	9	the perforations are completely submerged, completely
10	A Yes.	10	full with water.
11	Q In MS-5, which is one of your Exhibit 5,	11	Q Okay. Now, if you have the perforations
12	this appears to be a chart from 2000 to 2008. You would	12	completely submerged in water, that does, in fact,
13	agree with me that it shows the coverage of the GCCS	13	impact the efficiency of your extraction well, correct?
14	system and the amount of fill areas by acreage	14	A Correct.
15		15	Q All right. And if you have, hypothetically,
16		16	30 feet of perforation and 20 feet of water, that is
17	·	17	also going to affect the effectiveness of your
18	of BFI with respect to the GCCS system?	18	extraction well, correct?
19		19	A One more time.
20		20	Q Say you've got 30 feet of perforation
21	you called in to address the odor problems that other	21	A Okay.
22	witnesses have testified were related to the poorly	22	Q and 20 feet of water in there
23	functioning GCCS system?	23	A Okay.
24 25	A That was not the initial request I got. The	24 25	Q that is going to impact the effectiveness of your extraction well, correct?
د ک	initial request I got was, "We need to expand our gas	²	your extraction wen, correct?

18 (Pages 871 to 874)

	MI DOCKET NO. 302 00 2170		CEQ DOCKET NO. 2007 1774 MSW
	Page 875		Page 877
1 2	A It still can collect gas, but at a reduced rate.	1 2	and it's styled Sunset Farms Landfill Gas Collection and Control System Leachate Level Data for 8/23/05. Have
3	Q Okay. The court reporter is going to hand you	3	you ever seen this document?
4	TJFA-1, which has already been admitted into evidence.	4	A Not until a couple of days ago, probably
5	Have you been provided TJFA-1 yet?	5	Tuesday when I received it.
6	A Yes, I have.	6	Q And I would like to draw your attention to
7	Q Before we go to that document, have you ever	7	you see you have the well numbers and you see you have
8	heard of a business called Gas Recovery Systems, Inc.?	8	the depths Well No. 121. That well appears to be
9	A Yes, sir.	9	38.57 feet from the ground surface and has close to
10	Q And what is Gas Recovery Systems, Inc.'s	10	seven feet of water in it as of 8/23/05?
11	association with the BFI Landfill?	11	A That's what it shows here, right.
12	A I can give you my understanding.	12	Q Right above there, Well 63 is a 23.21-foot
13	Q Please.	13	well, and it has 11-1/2 feet of water in it, right?
14	A Gas Recovery Systems owns and operates a	14	A Correct.
15	gas-to-energy facility at the landfill. They collect	15	Q First, let me back up and ask you: Is it usual
16	the gas, send it to their facility to generate power	16	to have an extraction well of only 23 feet?
17	from the waste.	17	A It's not common, no.
18	Q Does a fellow Paul Hesson, does that ring a	18	Q You've got an extraction well, 58, with a depth
19	bell?	19	less than 20 feet. Do you see that one?
20	A Yes, sir.	20	A I do.
21 22	Q And he's with Gas Recovery Systems, Inc.?	21 22	Q Is that uncommon? A Yes.
23	A Not currently. Q Not currently.	23	Q An uncommon depth?
24	Does I'm going to call them GRS. Does	24	A Yes. But I'm not sure if those are actual
25	GRS generate reports for BFI and for Weaver Boos with		depths of the probe of the extraction well. Those
	Page 876		Page 878
1	regard to the extraction wells?	1	are the depths that were measured at the time. It's
2	A Yes, sir.	2	possible that those wells were originally drilled
3	Q And what's the purpose of those reports?	3	deeper, but I'm not sure.
4	A They serve a couple of purposes. One is to	4	Q If the wells are drilled deeper, how does it
5	assist in balancing and tuning the well field, making	5	get shorter?
6	the proper adjustments to the wells, to collect as much	6	A When they put their tape down the extraction
7	gas as they can. The other is regulatory driven.	7	well, you know, it could the tape could get hung up
8	They're required to keep records of the extraction	8	on one of the welding beads that are inside the well.
9	wells.	9	The wells kind of move a little bit as they're filling
10	Q And do you rely on those reports let me back	10	and the landfill is shifting. So it could be that the
11	up.	11	tape hit on one of those bends in the pipe.
12	Who is responsible for the maintenance of	12	Q You're talking about a dipstick?
13	the extraction wells?	13	A That's how they measure the bottom, yes.
14 15	A That's probably a contract question that I'm not aware of, but I do know that BFI has been the one	14 15	Q What I would like for you to do is to go to MS-6. Actually, Mr. Stutz, I'm going to give you a
16		16	choice; it's either MS-4 or MS-6. What I'm going to ask
17	pushing forward with gas system improvements and construction.	17	you to do is circle some extraction wells. And I'll
18	Q And were you called in to assist in the	18	leave it to you to see which are the most legible for
19	improvements?	19	those purposes.
20	A Yes.	20	A MS-4 is probably easier to read.
21	Q Okay. And so do you rely on reports, in your	21	Q Okay. MS-4, could you circle Well 121, please,
22	capacity in assisting BFI, from GRS?	22	with a red pen, marker?
23	A Yes.	23	MR. HEAD: Judge, do you have any
24	Q Okay. I would like to refer you to TJFA-1.	24	preference to the marking of exhibits with regard to
25	This is a widely circulated exhibit in this proceeding,	25	JUDGE NEWCHURCH: A red pen is fine, if
_	. 1 67		1 17

19 (Pages 875 to 878)

	Page 879		Page 881
1	that's what you've got up there.	1	54, please?
2	Do you have a pen?	2	A 54, again, just to the right of 58.
3	THE WITNESS: I do. Do you want me to mark	3	Q So that would be the basically the southern
4	it in this?	4	portion of the pre-Subtitle D area, correct?
5	JUDGE NEWCHURCH: Why don't you go ahead	5	A Yes.
6	and mark it on the official exhibit. And if you would,	6	Q And that has, according to the chart, a little
7	just so the rest of us can follow along, give us a rough	7	over a foot of water.
8	description on the page where it is.	8	The next one we'll go to is 53.
9	THE WITNESS: Okay.	9	A Just to the right and up the page from 54.
10	JUDGE NEWCHURCH: What is the first one,	10	Q Let's skip to 50.
11	please?	11	A 50. If you go straight up the page from 53, at
12	MR. HEAD: I'm sorry. It was Well 121.	12	the end of that line is 50.
13	JUDGE NEWCHURCH: Well 121.	13	Q I'm having problems finding that one.
14	A You want me to circle on this map where 121 is?	14	A To the right of 60.
15	-	15	Q Okay. To the right of 60 is 55?
16		16	A One more. One more to the right.
17	we can find it as well.	17	Q And that, according to the chart, 8/23/05, had
18	A Sure. 121 is, I would have to say, right in	18	close to six feet of water correct?
19	the middle. If you let's see, I'll give you some	19	A Correct.
20	other wells. Wells 120, 160, 162. We're right in the	20	Q So 44?
21	center of the site.	21	A All right. 44 is on the very bottom southern
22	Q I got it. And 121, at least as of 8/23/05, had	22	edge. If you go
23	about seven feet of water covering the well, correct?	23	Q I found it.
24	A At this time, that's correct.	24	Go ahead and tell everybody else.
25	Q All of these questions are going to be as of	25	A Okay.
	Page 880		Page 882
1	8/23/05.	1	MR. GOSSELINK: What's that number, again?
2	A Okay.	2	THE WITNESS: 44.
3	Q Could you find and circle Well 63, please?	3	A Again, to the right of 45 along the southern
4	A Sure. 63, if you go straight down the page to	4	edge.
5	the bottom, from 121, it will be the well on the very	5	Q (By Mr. Head) And 44, has, as of this daily
6	bottom there, almost in a straight line.	6	chart, 6.86 feet of water, right?
7	Q Below 62?	7	A Right.
8	A Below 62.	8	Q Have we circled 45 yet? Did I miss one? A No.
9 10	Q And as of 8/23/05, there was 11.55 water		Q Let's circle 45.
11	covering that well, according to this chart, correct?	10 11	A All right. (Witness complies.)
12	A Correct. Q And could you find Well 60 for us, please?	12	Q And 45, according to the chart, has
13	A 60?	13	approximately five feet of water as of 8/23/05.
$\frac{1}{14}$	Q 60, yes.	14	A Correct.
15	Can you hear me?	15	(Discussion off the record)
16	A Yes.	16	MR. HEAD: Bear with me.
17	60. Again, go straight back towards 121,	17	Q (BY MR. HEAD) Well, 40, please?
18	along that same line of 63. And 60 is at the end.	18	A 40 is to the right of 44 along the bottom.
19	Q And according to our chart, that well, as of	19	Q Well 30, please?
20	8/23/05, had four feet of water covering the well,	20	A 30 is, again, along that southern edge on the
21	right?	21	bottom. Let's see, if you move over from 40 about an
22	A Right.	22	inch, inch-and-a-half, 30 is on that bottom.
	Q Okay. 58, please?	23	Q And according to this chart, as of '05, they
23			
23 24	A 58 is just to the right of 63.	24	had 1.28 feet of leachate, right?

20 (Pages 879 to 882)

		1	
	Page 883		Page 885
1	Q I made you skip a bit.	1	Okay.
2	Well No. 13?	2	Q And 20 is a two-page document APP 004252 and
3	A 13 is in the southeast corner, the very	3	004253, which was produced by BFI. The first page is a
4	Q Right. The very southeast?	4	memo from Hesson. It's my recollection that you
5	A southeast.	5	indicated that Mr. Hesson used to be with GRSI.
6	Q Right by where it says "Existing site	6	A That's correct.
7	entrance"?	7	Q And it's my recollection that you indicated you
8	A Correct.	8	relied on reports from Mr. Hesson in your functioning on
9	Q And that's, once again, the southern boundary	9 10	behalf of BFI to review their extraction wells?
10 11	of the pre-Subtitle D?	11	A That's correct. Q And you were cc'd on this document?
11 12	A Right.	12	A That's what it shows, yes.
13	Q And, also, could you find and circle Well 11, please?	13	Q Turning to the second page, if you look at
$\frac{13}{14}$	A Well 11 is north of 13 along that edge.	14	wells you see the well number on the left-hand side?
15	Q And according to this chart, we've got, as of	15	I would like for you to refer to Well 39.
16	8/23/05 5.08 feet of water in that well, correct?	16	A On the second page?
17	A No.	17	Q Yes, sir.
18	Q No?	18	A Please
19	A No.	19	Q The water level analysis.
20	Q I've got I may have gotten off. Well 11,	20	A I just want to clarify. These are together?
21	according to my chart, is 5.08 feet of water.	21	Q It's one exhibit. Yes, sir. They're together.
22	Did I misstate myself on the well I wanted	22	The e-mail says: See the attached spreadsheet. And now
23	you to locate?	23	I'm going to the spreadsheet.
24	A Yes. I show Well 11 as only having .08.	24	A Got it. Okay.
25	Q Let's look at the chart for a moment. I think	25	Q This chart does deal with extraction wells,
	Page 884		Page 886
1	I have the same chart.	1	does it not?
2	A Well	2	A Yes.
3	Q The beginning well, top of the chart, is	3	Q And according to this chart, Well No. 39 had a
4	Well 1, correct?	4	bore depth of 28 and a perforation length of 16?
5	A Correct.	5	MR. MOORE: Your Honor, I'm going to make
6	Q Far right corner, nondetect?	6	another objection. Now we're reading from a document
7	A Nondetect.	7	that is hearsay and skirting the hearsay objection,
8	Q Well 6, .29?	8	which I will have against this document, by reading it
9	A Correct.	9	into the record and questions
10	Q Well 11, 5.08?	10	MR. HEAD: I think this goes to a business
11	A Yes. I'm sorry. You are correct. 11. Sorry.	11	record. The gentleman has admitted that he relies upon
12	Q Is that right above 12 there, close to the	12	these documents prepared by this company in his capacity
13	"Existing site entrance"?	13	as the landfill gas go-to guy for BFI.
14	A Yes.	14	JUDGE NEWCHURCH: Okay. I'm looking at the
15	Once again, you got me. That's twice.	15	rule. You're talking about the record of a
16	Q Mr. Stutz, in the past, have you been provided	16	regularly-conducted activity. Is that what you're
17	information from GRS with regard to high leachate levels	17	saying, that is exception to the hearsay rule?
18	in Wells 39, 40, and 44?	18	MR. HEAD: Yes. This is a document that's
19	A I don't recall anything in the past, no one	19	kept in the regular course of business. This is a
20	indicating that to me.	20	communication between two entities involved with the
21	(Discussion off the record)	21	landfill gas out at BFI. It's probative, provided by
22	(Exhibit TJFA No. 20 marked)	22 23	BFI.
23	Q (BY MR. HEAD) Have you had a chance to review	24	Your Honor, if every time I'm going to have
24 25	BFI 20 (sic)? Take your time. A (Witness reviews document.)	25	a document that has clearly pertinent and relevant data that people have relied upon, to have to call up Paul
	A (WILLESS TEVIEWS GOCUITIEIL.)	_∠ O	that people have reflect upon, to have to call up radi

21 (Pages 883 to 886)

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Hesson or 15 other people, this is going to be problematic. I think this is probative information. It's clear from the company who operates the landfill and gas, that Well 39, 40, and 44 are not functioning because of the water level.

MR. MOORE: Well, Your Honor, that addresses the subject matter of the documentation, but it doesn't address the business records exception. And I don't think we have testimony sufficient to show that this is a business record, that this gentleman doesn't have sufficient knowledge of whether or not this is a regularly-conducted business activity, and if it was the regular practice of that business activity to make a memorandum, etcetera, etcetera.

And to the extent that Mr. Head is concerned that he would have to get an affidavit and/or have proper person testify about the business record, he had that opportunity. There is a specific provision in the authentication portion of the Rules of Civil Procedure that allows him to get an affidavit and serve it on the other parties 14 days ahead of time. The fact that he failed to get that affidavit and serve that on everyone is not a failing of Mr. Stutz. And I would reurge my objection.

MR. HEAD: Well, let me respond. And

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high leachate levels in 39, 40, and 44.

And I think that at a minimum he can look at this document and say whether or not he can change his answer about that, or if his answer is the same, or somehow reflect on this document. We haven't gotten to that opportunity yet because of the understandable preemptive hearsay objection.

So my response would be that we wait until it's offered and see what it's offered for, because I think there's information in here that's definitely pertinent to the previous question.

MR. MOORE: Your Honor, I'm not objecting to the document being used to refresh the recollection of the witness. What I'm objecting to is that the document itself being read into the record to skirt the hearsay rule, and I would further say 803(6) exception for regularly conducted business activity requires the testimony of the custodian or other qualified witness, or by affidavit. So we don't have an affidavit that satisfies the Rule 902(10), and we do not have testimony of the custodian of this document.

MR. HEAD: But we do have testimony of a qualified witness who is sitting on the witness stand right now.

MR. MOORE: And I don't think the testimony

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nobody claimed that there was any failing of Mr. Stutz here, Counsel.

MR. MOORE: Thank you.

MR. HEAD: Okay. I will state that Mr. Stutz did state, in my previous questioning, that he and BFI were provided on a routine basis reports from GRS on the condition of the system, and that he was called upon by BFI at times to address those conditions.

JUDGE NEWCHURCH: All right. Let me think about this for a second. So we've got a statement by Mr. Hesson. And I think it's clear that there was testimony of who Mr. Hesson was, right? And that you were working with Mr. Hesson out at GRSI?

THE WITNESS: Correct.

JUDGE NEWCHURCH: All right. And there's no challenge to the authenticity of the document, just that it's hearsay and that Mr. Hesson is not here.

MS. MANN: Your Honor?

JUDGE NEWCHURCH: Yes, ma'am.

MS. MANN: At a minimum, I think you should be able to ask questions about it, because even if it goes to the -- introducing some of the actual data, because just before this document was intended to be

introduced or discussed, Mr. Stutz said he hadn't received reports regarding whether or not there were

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he provided satisfied all of the other requirements
 about it being a memorandum, record, report kept in the
 regular course of business, and it was the regular

regular course of business, and it was the regular
 practice in a business activity, making the memorandum
 report, blah, blah, blah. So I reurge my objection.

report, blah, blah, blah. So I reurge my objection.

JUDGE NEWCHURCH: Okay. Off the record. I

want to think this through.

(Off the record)
JUDGE NEWCHURCH: Back on the record.

Mr. Stutz, I have a few questions for you.

And maybe you said this earlier, and I wasn't listening closely enough.

Mr. Hesson was in communication with you, and he was another contractor for BFI; is that right?

THE WITNESS: My understanding is Paul Hesson, working for GRS, has a contract with BFI to operate the gas system.

JUDGE NEWCHURCH: Okay. And to your knowledge, was he -- as a part of those responsibilities under that contract with GRSI and BFI, was he measuring water levels in these wells?

THE WITNESS: It was -- it appears that it was under his responsibility that they did measure these wells. Taking water levels in wells is something that they do occasionally. It's not something that we

22 (Pages 887 to 890)

1 i	Page 891			Page 893
1 ı	,			
4 -	routinely see.	1		Well 40 also be watered-in?
2	JUDGE NEWCHURCH: That they do	2		0 right below 39?
	occasionally? You mean this and other locations where	3	Q Yes.	
	you worked together in the past, is that what you mean?	4		ompletely watered-in.
5	THE WITNESS: Yes. Yes.	5		gnificantly covered with leachate?
6	JUDGE NEWCHURCH: I'm going to overrule the	6	A Yes.	
	objection.	7		which is the next one down?
8	I think Mr. Stutz is another qualified	8		ere is high levels of liquid in that
	witness, and his testimony is sufficient to show that	9	well.	********
		10		Well 35, what's the perforation length
		11	there?	1 1 25 1 1 21 6
	1 7 1	12		on length on 35 shows to be 21 feet.
13 (14		13		depth to water?
15	• .	14	A 21.1.	
	±	15		much of that perforation was submerged?
		16 17	A This show	
18	č		34 percent, corre	efficiency or percent open is
	JUDGE NEWCHURCH: Well, we kind of wabbled	19	•	
19 a	1	20	A That's wh	
21		21		go back to MS-4 and circle Wells 35,
	, 2	22	_	please, if they haven't been circled
	·	23	yet. A 39?	
24		24	Q Start with	25
25	· · · · · · · · · · · · · · · · · · ·	25	A 35. Okay	
	Page 892	23	71 33. Okay	Page 894
	objections are hard to figure out.	1		ld agree according to this document, 14
2	Go ahead.	2		g to this document, it's 14 feet of
3	Q (BY MR. HEAD) Let's go to the first page of	3	water in that we	ell, correct?
	the memorandum. Mr. Stutz, does not that memorandum		A Yes.	
	from Paul Hesson indicate that he measured leachate	5		s located on the southern boundary?
	levels in the extraction wells, and the only seriously	6	A Yes.	
	impacted ones of those were 39, 40, and 44?	7	Q Well 39,	
8	A Yes. That's what it says. Q And for the record, this is the 2003 memo. And	8	Q I think it	9 was previously circled.
		10	40?	was too.
		11		reviously circled.
•		12	•	. And 44, please?
13	· · · · · · · · · · · · · · · · · · ·	13	A Already	-
14		14	•	oit TJFA No. 21 marked)
15		15		HEAD) Mr. Stutz, I've handed you
16		16		rked as TJFA-21. Could you identify this
	-	17	document for the	
		18		es to be a letter to Lee Kuhn from GRS.
		19		o signed the letter?
20	-	20	A Paul Hes	
		21		re you cc'd on this?
22		22	A It shows	•
	-	23		is a monthly report regarding the
23	property.			
23 ₁ 24		24		tenance of the well field, correct?

23 (Pages 891 to 894)

	Page 895		Page 897
1	Q Right. And is it not true that the third	1	detail not operating efficiently, the site has 121
2	paragraph indicates that GRS noted leachate outbreaks	2	days to remediate and fix that.
3	between Wells 80 and 81 near LCV-3?	3	Q Does EPA or the State set the standard for what
4	A That's what it states.	4	is not operating efficiently?
5	Q Okay. Do you know what LCV-3 is, what that	5	A Yes.
6	refers to?	6	Q Is that removal sufficiency?
7	A No.	7	A No.
8	Q What is a leachate outbreak?	8	Q Can you briefly describe what sets that off?
9	A I'm not much of a leachate expert. It's	9	A A well needs to be able to maintain vacuum. It
10	usually whenever there's near a side slope there is	10	needs to be able to have less than 5-percent oxygen.
11	sometimes a moist area.	11	And it needs to have a temperature of less than
12	Q So it would be leachate outside the leachate	12	131-degrees Farenheit.
13	collection system surfacing on the side of the landfill?	13	Q Okay. If you go to the next-to-the-last entry
14	A Yes.	14	on the far left column, that's the Sunset Farms facility
15	Q Could you go to your Exhibit MS-4 and circle	15	in Texas, correct?
16	Wells 80 and 81? Actually, to be fair, could you put a	16	A I would assume it is.
17	red mark between 80 and 81?	17	Q Well, these are all lists of landfills, are
18	A A red mark?	18	they not?
19	Q Well, I just want to be fair for the record, it	19	A I'm not familiar with those. If I look at the
20	indicated when you say between 80 and 81, so a red	20	column, yes.
21	line as opposed to a circle.	21	Q If you look at the column, it says Landfills or
22	MR. HEAD: Move to admit 21.	22	Recycling Facility. If you go to the next-to-the- last
23	JUDGE NEWCHURCH: Any objection?	23	entry on the left column, it says Texas and Sunset
24	MR. MOORE: No objection.	24	Farms.
25	JUDGE NEWCHURCH: 21 is admitted.	25	Are you familiar with any other landfills
	Page 896		Page 898
1	(Exhibit TJFA No. 21 admitted)	1	in Texas called Sunset Farms?
2	(Exhibit TJFA No. 22 marked)	2	A No.
3	Q (BY MR. HEAD) Mr. Stutz, have you had the	3	Q All right. And going to the fourth column
4	opportunity to review what has been marked as TJFA-22?	4	over, it says "Wells on 120-day list." This is for
5	A Yes.	5	Sunset Farms 2, correct?
6	Q Can you identify this document?	6	A Correct.
7	A I have no idea what this is.	7	Q Far left column, it has "Comments/Areas of
8	Q Okay. At the top does it not indicate "GRS	8	Concern." It says "high leachate levels - South slope,"
9	Landfill Monitoring-Excursion Report"?	9	right?
10	A It does.	10	A Yes.
11	Q And have we established that GRS is the entity	11	Q And we've seen, have we not, previously in
12	that, one, operates the landfill gas plant the plant	12	our markings on MS-4, we've marked many wells on the
13	at Sunset Farms?	13	south slope, correct?
14 15	A They are one entity that takes care of the well	14	A We have marked many wells on the south slope.
16	field out there; that's correct. Q And I refer you to the this appears to be a	15 16	MR. HEAD: Move to admit.
17	list of landfills on the left-hand column, correct?	17	JUDGE NEWCHURCH: Any objections? MR. MOORE: No objections.
18	A Yes. That's what it states.	18	JUDGE NEWCHURCH: 22 is admitted.
19	Q All right. And it discusses the who the	19	(Exhibit TJFA No. 22 admitted)
20	report was sent to, landfill status, the NSPS, number of	20	Q (BY MR. HEAD) Okay. I'm going to refer your
21	wells on the 120-day list. Let me stop.	21	attention to Application 001520.
22	What is the 120-day list as it relates to	22	A One more time?
	extraction wells?	23	U 1m sorry, 001520. That's the application
23 24	extraction wells? A Should an extraction well have not being	23 24	Q I'm sorry. 001520. That's the application where you start talking about the LFG System.

24 (Pages 895 to 898)

DOF	AH DOCKET NO. 362-06-21/6	Τ.	CEQ DOCKET NO. 2007-1774-MSW
	Page 899		Page 901
1	Q And, in particular, looking at 6.2	1	A Hypothetically.
2	A Okay.	2	Q And you've got 30 or 40 percent of that
3	Q this describes how you intend to make	3	extraction well has perforations, maybe more?
4	improvements, and as I understand it, add additional	4	A Most likely more.
5	extraction wells as the landfill expands.	5	Q So that extraction well is pulling gas from the
6	A Correct.	6	bottom of the landfill, lower portions of the landfill?
7	Q All right. And isn't it true that if you have	7	A And some from the upper portion of the
8	an existing extraction well that's located at an area of	8	landfill. Again, you've got a pressure gradient that
9	a new vertical fill, that you will have to deactivate	9	you're working with.
10	that well when they put the new fill on top of it?	10	Q My question is: If I put a 30 feet of new
11		11	waste on top of that existing extraction well, is that
12	•	12	30 feet of waste going to is the extraction well
13		13	system going to extract gas from that new waste fill
14		14	within 18 months to two years?
15 16		15	A Within that time frame a new well will be
16	1	16	installed in that up to 30 feet that you're referencing.
17 18		17 18	They'll sink a new extraction well in that upper waste.
19	3	19	Q Right. But before they sink the new extraction well in the upper waste, that upper waste is not going
20		20	to be serviced by an extraction well?
21		21	A Not significantly.
22	well.	22	Q Okay. So your only odor control is going to be
23		23	daily cover?
24	it's out of the way of the filling activity and it will	24	A Yes, but that new waste won't be generating
25	continue to operate as they fill around it.	25	gas. If it's new waste, it takes a year to two years
	Page 900		Page 902
1	Q Okay. That's what I'm trying to understand.	1	before it's actually generating methane gas.
2	So I've got an area that's been filled and it's got	2	Q And is another reason that you don't install
3	intermediate cover. You understand what intermediate	3	the vacuum for is GRS GRS, who runs your gas plan,
4	cover is?	4	do they have any say-so of when you install at Sunset
5	A Yes.	5	Farm Landfill when you install the gas collection system
6	Q And I've got my risers that eco term	6	and when you put it under vacuum?
7	A Right.	7	A No.
8	Q coming out.	8	Q They don't?
9	Are you saying that what you would do for	9	A No.
10	new waste areas, you would extend your well 30, 40 feet		Q Okay. Let's go back to my hypothetical
11	in the air and dump garbage around it?	11	extraction well where I'm going to have new waste put on
12	A Yes. They extend it up; typically not 30 or	12	it. What happens to the laterals when you're going to
13	40 feet at a time, but it is extended up enough so they	13	put the new waste on top?
14	can fill around it.	14	A The below portion of that lateral stays
15	Q When they fill around it, they put the fill	15	belowground.
16	, ,	16	Q Okay. Were you here for Dr. Libicki's
17	of the new fill? Do they put the vacuum on it?	17	testimony a few days ago?
18 10	A Well, the well continues to be under vacuum the	18 19	A I was not.
19 20	whole time. When they extend the well up, only for that moment that they're out there extending the well is it	20	Q She testified that a gas control system should typically not be installed in new waste for two years.
21	not under vacuum.	21	Do you agree with that testimony?
22	Q Let me try it this way. You've got this well	22	A I agree that that's common and typical. I
23	sunk within 5 to 10 feet of the liner, right?	23	don't know if I would say that's always the case.
24	A Yes.	24	Q When you place new waste vertically over old
25	Q I mean hypothetically.	25	waste, can't this increase the pressure and cause more
			r

25 (Pages 899 to 902)

	Page 903		Page 905
1	gas production in the previously filled area?	1	AFTERNOON SESSION
2	A The question is that as you're adding more	2	JANUARY 23, 2009
3	waste on top will it increase?	3	(1:33 p.m.)
4	Q Is it going to increase gas production below by	4	JUDGE NEWCHURCH: Coming back on the
5	virtue of the fact that you've got more weight and maybe	5	record, it's 1:35. Are there any preliminary matters
6	that's pushing out the gas from the pores in the waste	6	this afternoon?
7	bins, if that's your area?	7	(No response)
8	A Well, I mean, you're referencing a sudden dump	8	JUDGE NEWCHURCH: Then we will go back to
9	of waste all of a sudden instantaneously on top of the	9	the testimony of Mr. Stutz. And, Mr. Moore, do you have
10	landfill. It just doesn't happen. It's placed	10	redirect?
11	gradually over time. So, no, I guess there isn't you	11	MR. MOORE: Yes, I do, Your Honor.
12	wouldn't notice a significant increase.	12	PRESENTATION ON BEHALF OF
13	Q Is there any scenario whereby in the expansion	13	BFI WASTE SYSTEMS OF NORTH AMERICA, INC.
14	proposed by BFI you would have to deactivate some	14	(CONTINUED)
15	operational gas control wells?	15	REDIRECT EXAMINATION
16	A I mean, I can't think of an instance where we	16	BY MR. MOORE:
17	are planning or would need to deactivate extraction	17	Q Good afternoon, Mr. Stutz.
18	wells for any significant period of time, no.	18	Mr. Stutz, do you have the Exhibit TJFA
19	Q How do you define significant? Because	19	No. 1 up there still, which was the table showing
20	Dr. Libicki, she said a little bit of time is two years.	20	certain gas levels or water levels and gas extraction
21	How do you define significant?	21	wells?
22	A To have a well not active.	22	A Yes.
23	Q Based on expansion activities?	23	Q And I think your testimony was that you had
24	A I guess, unfortunately, we don't have that	24	just seen this within the last couple of days; is that
25	luxury. Under the rules we have to monitor every	25	correct?
	Page 904		Page 906
1	extraction well every month. If a well is taken offline	1	A That's correct.
2	and is not monitored, we just don't allow it. It would	2	Q Let me ask you a general question: Is it
3	have to be monitored.	3	common, when you put a gas extraction system into a
4	Now, you could petition the State to allow	4	landfill, to survey for water levels?
5	you to abandon a well or decommission a well	5	A It is common. It's done, I wouldn't say on a
6	temporarily, but you would have to prove-up that the	6	routine or regular basis. It is done occasionally. If
7	surrounding wells around would be able to compensate for	7	you try to increase production of certain wells and you
8	the well you're decommissioning. So this is a system	8	have some wells that you want to investigate, it's a
9	a collection system, so one well down just means you	9	common practice.
10		10	Q And I think it was your testimony if you get
11		11	enough water in a gas extraction well that it can
12		12	interfere with production of gas; is that correct?
13	second. I know we're getting close to lunch.	13	A It can I would say it would interfere more
14		14	with maybe some collection gas collection and
15		15	control. I don't production of gas, really, the more
16	JUDGE NEWCHURCH: Mr. Blackburn, you went		moisture you have, the more gas you produce.
17		17	Q Well, is there a solution if the water gets so
18	-	18	high in an extraction well that it becomes watered-in, I
19	, ,	19	believe is the phrase?
20	MR. MOORE: Yes. And I think this would	20	A Oh, certainly. Having water in extraction
21	probably be an appropriate time to break for lunch if	21	wells is pretty common. It's not unusual to have that
22		22	occur. The solution is to install pumps into the
23	•	23	extraction wells and pump out the water.
24		24	Q And once the water is pumped out, it will go
25	(Recess: 12:01 p.m. to 1:33 p.m.)	25	back to producing gas?

26 (Pages 903 to 906)

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Page 907
                                                                                                                 Page 909
         A Yes.
                                                                       level in feet. I think the ones you just mentioned were
 1
 2
                                                                      less than a foot.
         Q Do you still have Exhibit MS-4 in front of you
                                                                 2
 3
      that Mr. Head was asking you to circle certain wells on?
                                                                 3
                                                                          A Yes. Let me go back. Extraction Well 18 has
 4
         A Yes, I do.
                                                                 4
                                                                       .46 feet.
 5
                                                                 5
         Q If you could, referring back to the table on
                                                                               Extraction Well 22 has .08 feet.
 6
      TJFA-1, I think he had you circle some wells that didn't
                                                                 6
                                                                               Extraction Well 27, .05.
 7
       seem to have very much water in them. If you can go
                                                                 7
                                                                          O Got it.
 8
       through that table and any of them that you think is an
                                                                 8
                                                                          A I got to get it.
 9
      insignificant amount of water, if you could rehighlight
                                                                 9
                                                                          Q I think it's near the road going up onto the
10
       those. And in this case, since we've used blue and red,
                                                                10
                                                                       landfill?
11
                                                                111
      I'll ask you to use the green pen and, again, circle
                                                                          A Thank you.
12
       those same wells where you don't think there was a
                                                                12
                                                                               Extraction Well 28, .24 feet of water.
13
       significant amount of water, and tell us how much was
                                                                13
                                                                               Extraction Well 29, .05 feet of water.
14
       there
                                                                14
                                                                               Extraction Well 30 has only 1.28 feet of
15
                                                                15
         A Going for the wells that were previously
                                                                       water. That was previously marked.
16
                                                                16
                                                                               31 has .34 feet of water.
       circled?
17
                                                                17
                                                                               Well 40, 2.5 feet of water. That was
         Q Or others. If there is other wells in there
18
                                                                18
       that didn't have any water in them and was functioning
                                                                       previously marked.
19
       completely, you can go ahead and identify those.
                                                                19
                                                                               Well 44, I'll leave that off of the list.
20
         A Okay. Extraction Well 1 has no detectable
                                                                20
                                                                               Well 45, almost five feet of water, but
21
                                                                21
                                                                       still would have screen above it. So I would circle
       water.
22
                                                                22
         Q And you're marking that with a green circle?
                                                                       that one.
23
                                                                23
         A Yes, I will.
                                                                               46 is nondetect.
24
                                                                24
                                                                               Extraction Well 50 with a little over
               Extraction Well 1 is on the -- I would say
25
                                                                25
       the east side, kind of in that southwest corner area.
                                                                       five feet of water, but it's a 64-foot well, so I would
                                                                                                                 Page 910
 1
               I would say Extraction Well 6 only has 2.9.
                                                                 1
                                                                       say that would be insignificant. That's Well 50,
 2
       Extraction Well 6 is near the label that says Existing
                                                                 2
                                                                       previously marked.
 3
       Scalehouse, just below that.
                                                                 3
                                                                               Wells 51 and 52 have no detectable water.
 4
         Q Let me interrupt you there. You've skipped
                                                                 4
                                                                               Well 53 and 54, just over one foot of
 5
       over 2, 3, 4, and 5. Were those wells in existence
                                                                 5
                                                                       water.
 6
                                                                 6
       during that time?
                                                                               53 and 54 are previously marked.
 7
                                                                 7
                                                                               Well 55 and 56 are nondetect.
         A Yes, they were.
 8
         Q And as far as you know, there's no reason,
                                                                 8
                                                                               57 is also no detectable water.
 9
       then, to think that there was any water in them? They
                                                                 9
                                                                               58, just over three feet of water. It
10
       were not surveyed?
                                                                10
                                                                       would be insignificant. And that was previously marked.
11
         A They were not.
                                                                11
                                                                               Well 60, four feet of water. It's a
12
                                                                12
         O Go ahead, please.
                                                                       71-plus well, so it would still be an insignificant
13
               The water levels indicated in 11, 12, and
                                                                13
                                                                       amount of water. That was previously marked.
14
       13 show about six feet of water. I wouldn't consider
                                                                14
                                                                               Well 61, 62, no detectable water.
15
                                                                15
       that significant. I would have to compare with
                                                                               I would say Well 121 has about six, almost
16
                                                                16
                                                                       seven feet of water, but would not be a significant
       perforation levels of those wells at the time and the --
17
       well, let me look real quick and see if I can do that.
                                                                17
                                                                       amount compared to a 38-foot well.
18
               Yeah. Again, I wouldn't consider those to
                                                                18
                                                                          Q Mr. Stutz, does it appear to you that whether a
19
       be a significant amount of water. There still would be
                                                                19
                                                                       well might have significant amounts of water in it as
20
       a good portion of screen -- from what I can infer from
                                                                20
                                                                       regards to gas production purposes, and might not seems
21
                                                                21
                                                                       to be fairly randomly distributed across this map that
      here, a good portion of screen above those wells that
22
                                                               22
       would allow them to continue to collect gas. You know,
                                                                      you just marked up?
23
                                                                23
                                                                         A I'm sorry. I was still marking. I got a
      really, Well 18, Well 22.
24
                                                                24
               Do you want me to keep circling?
                                                                      little behind.
25
                                                                25
                                                                               I would say that, you know, certainly it
         Q Sure. And if you could note the amount -- the
```

27 (Pages 907 to 910)

	Page 911		Page 913
1	looks pretty random. I mean, there are some wells that	1	this is the basis on which his opinion is based.
2	do have water, which is common, but there are several	2	JUDGE NEWCHURCH: So you're offering it for
3	wells in the same area that don't have water.	3	the sole purpose of showing his basis for the expert
4	Q And in several circumstances, that's the case,	4	opinion?
5	you have water in one and the next closest one has	5	MR. MOORE: Yes. And I believe an expert
6	no-detect?	6	can be required to disclose the basis of the
7	A Correct.	7	information, and that's all that I'm doing.
8	Q All right. Since you've received a copy of	8	JUDGE NEWCHURCH: For the limited purpose,
9	TJFA-1, have you had an opportunity to talk to the	9	the objection is overruled.
10	people that operate the gas wells out at the Sunset	10	Q (BY MR. MOORE) What did you learn about the
11	Farms Landfill?	11	current conditions of the wells that might be
12	A Yes, I have.	12	experiencing the collection of water out there today?
13	Q And did you ask them about what's currently	13	A I learned that there are six wells that I know
14	going on in terms of whether some of the gas wells might		of that currently have water in them that they are
15	be experiencing some collection of water in them?	15	concerned about maybe possibly removing that water to
16	A Yes. In talking with	16	increase gas production.
17	MR. HEAD: I'm going to object if he's	17	Q And are you able to identify those wells on
18	getting ready to get into hearsay. The question was	18	this same exhibit, MS-4?
19	have you spoken with someone.	19	A Sure.
20	MR. MOORE: I'll withdraw that, and I'll	20	Q Would you please do so again with your green
21	lay a little bit more predicate.	21	pen and tell us where on the map you're finding them.
22	JUDGE NEWCHURCH: Okay.	22	A Extraction Well 75. 75 is located kind of
23	Q (BY MR. MOORE) Mr. Stutz, in formulating	23	south central area.
24	opinions about gas collection systems, their efficiency,	24	Wells 70, 89A, 74A are in the general
25	and particularly about the current efficiency of the gas	25	vicinity. Maybe just up from the previously marked
23			
	Page 912		Page 914
1	collection system wells, is it common for professionals	1	well, 80.
2	such as yourself to rely on communications with the	2	Q Okay.
3	operators of those systems?	3	A Just below that 75 is Well 76. And across from
4	A Yes.	4	those two, Well 78. In addition, there was some water
5	Q And can you identify the individual that you	5	in Well 100. 100 is in the center of the system on the
6	spoke to about this particular system?	6	west side, maybe, if you go straight up from Well 78
7	A I spoke with Billy Johnson.	7	that we marked, past Well 89. The well just down from
8	Q And how is he employed?	8	100 to the west, 101, and going further north to
9	A He is hired by GRS to monitor the well field.	9	Well 110.
10	•	10	Q And what is the nature of the if you could,
11		11	just a little more general information. What is the
12	e-mails and memoranda that were recently offered to you	12	nature of the water collection in those wells that
13	by Mr. Head?	13	you've been informed about?
14	A It is the same company, but they have changed	14	A I was informed that they had water in them. I
15		15	was informed that Well 110 was the one they were most
16		16	significantly concerned about. It had it was, I
17	such as yourself in landfill gas collection systems and	17	would say watered-in, as we've talked about, where the
18	their efficiencies to rely on information provided to	18	water was above the perforations. That Well 110 was
19	you by persons such as him?	19	they pumped it out. They put a pump in there, extracted
20	A Yes. It's critical.	20	the water out of it, and possibly will be doing the same
21	Q And what did he tell you about gas wells that	21	for other wells.
22	might be experiencing the collection of water currently	22	MR. MOORE: May I approach?
23	at the Sunset Farms Landfill?	23	JUDGE NEWCHURCH: Yes, sir.
24		24	MR. MOORE: I believe we're at Exhibit
25		25	BFI-8.

28 (Pages 911 to 914)

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Page 915 Page 917 1 (Discussion off the record) 1 Q When you find a well that is collecting water, 2 2 does it tell you anything about what the water level or (Exhibit BFI No. 8 marked) 3 Q (BY MR. MOORE) Mr. Stutz, will you look at 3 leachate level might be below that well? 4 what's been marked as Exhibit BFI-8? 4 A No. 5 5 A Okay. Q What does it tell you? 6 Q And identify that for us. 6 A All it tells us is that in that particular area 7 A This is the well boring log and the completion 7 that liquids have accumulated into that well. It tells 8 log for Extraction Well 110. 8 us that as water percolates through the waste up above 9 Q These have the name of Weder Services. Who is 9 that well, that it has somehow come in contact with the 10 Weder, and how are they related to this project? well and that gravel pack has accumulated in that area. 10 11 A They were the driller contractor at the time 111 Q From the perspective of a raindrop or other 12 these wells were installed. 12 liquid that finds its way into the near surface of a 13 Q Can you explain to us what's shown on the 13 landfill or above it, can you tell us about the journey 14 14 second page of that in terms of the well construction of that raindrop as it passes through a landfill? 15 15 A Sure. 16 A Sure. This is a detail showing how the well 16 O Or not. 17 A Sure. 17 was installed, showing the gravel pack, the bentonite 18 18 plugs, the perforation distances. You know, overall, it Q Tell me which do and which don't. 19 shows that the well had a boring depth of 64 feet. 19 A Yeah. You know, as moisture enters the 20 Q And were you able in the last couple of days to 20 landfill from a rainfall event, you know, a majority of 21 determine how high above the liner the bottom of this 21 that water runs off as runoff. Some of that water is 22 22 well is? used in evapotranspiration in the top cover for 23 23 A This particular well is about 15 feet above the vegetation growth. Should the water be sufficient that 24 24 bottom of the liner in this area. it passes through the upper layers and into the waste, 25 25 Q And how much of the well is perforated? most of that water is then consumed by the waste and Page 918 A This shows the slotted pipe length of 31 feet. 1 held in the waste itself until it gradually -- if it 1 2 Q And it's your understanding that this well was 2 does reach fill capacity, at that point the water will 3 collecting water recently? 3 continue to migrate down. A lot of times what we will 4 A It's my understanding that there's been water 4 see as this water migrates through, if it's moving 5 in this well and that they've pumped water out of this 5 through the waste, it will hit different layers within 6 well. 6 the landfill, an intermediate cover, a final cover layer 7 7 Q Is that common? that's been buried. As that water hits that layer, it 8 A Oh, yes. 8 will sometimes perch on that layer. 9 Q Is it a regular part of the maintenance of gas 9 When we drill an extraction well in that 10 extraction wells to pump water out of them? 10 wet zone, we're drilling right through those 11 A Yes. It's done routinely. 11 intermediate and daily covers and putting in a 12 O To your knowledge, is the location of this 12 perforated pipe and a gravel pack. And naturally all of 13 well, as you have shown on Exhibit MS-4, in an area of 13 that water will then come into that well through those 14 the landfill that is underlined by a Subtitle D liner 14 layers up above. And that's a pretty common journey of 15 15 and leachate collection system? the rainfall. 16 A Yes. Well 110 is in the Subtitle D lined area. 16 Q Is there a way to perform a water balance 17 Q Is the same true for Wells 101, 100, 78, 75, 17 calculation and determine or estimate the amount of 18 and 76? 18 water that collects or stays in a landfill? 19 A Yes. Those are all in Subtitle D areas. 19 A Yes. You can calculate, based on the rainfall 20 Q And based on that and your experience, then, 20 and cover materials, how much water will actually enter 21 21 does the collection of water in a well have anything to into the landfill, how much water will be consumed and 22 22 do with whether or not it's an area underlaid by a held as part of the waste itself until it reaches its 23 23 Subtitle D liner leachate collection system or not? fill capacity. You can determine how much water will 24 24

29 (Pages 915 to 918)

In addition, really, you can also calculate

25

then accumulate.

A We see water collecting in wells in Subtitle D,

pre-Subtitle D regardless of the underlying liner.

25

24

25

(Discussion off the record)

Q (BY MR. MOORE) I'd like for you to look at the

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Page 919 Page 921 how much water is removed from the landfill. You know, gas management plan, which is Attachment 14 to the 1 1 2 application. And, particularly, if you can find these -- as gas is being produced, it takes an enormous 2 3 amount of water to produce the gas itself. And so 3 Figure 14-E2, which is also Bates No. 1558. 4 4 gas is -- water is consumed in the gas-generation A Okay. 5 5 process. Water is also extracted through the gas. Gas Q When you design a schematic like this to 6 is -- it's saturated. And so when you're removing all 6 specify how a well can or should be built, do you take 7 of this gas from a landfill in a saturated form, as it 7 into consideration the possibility that there might be 8 cools there's a condensate. And that condensate is 8 water collecting in the wells? 9 9 A Yes. It's -- part of the process is to collected and removed. You do have some water coming 10 in, but you also have a lot of water being consumed and 10 anticipate that water will be in the wells. And as 11 11 taken out in the process. noted on the detail here, we show a pump to be installed 12 12 Q So as the gas enters the well from the waste in the extraction wells to remove liquids as needed. 13 mass, is it relatively warm? 13 So it was certainly something that we contemplated. 14 A As the water enters the well? 14 Q And if you could, there's a Note 3. Is that 15 15 Q As the gas moves into the well, is it where it says they will be installed as needed? 16 relatively warm? 16 A Yes. The pump is shown in the schematic 17 17 A Oh, yes. It's very warm. itself. There's just kind of an outline of a pump in 18 Q And does that allow it to hold more water? 18 the bottom of the extraction well, a liquid removal 19 19 pump, and then it refers to Note 3: Pumps will be 20 Q So then as it moves through the header system 20 installed as needed. 21 21 toward the blowers, what happens? Q And if one is not installed with the initial 22 22 A As it moves -- as it reaches the surface and construction, is there still an opportunity to pump the 23 23 moves through the piping, it cools. And as it cools, well to remove collected water? 24 the condensate and the moisture in that gas stream comes 24 A Yes. These wells are specifically designed to 25 out and is collected as a condensation and is collected 25 accommodate a pump as needed in the future. They're Page 920 Page 922 and disposed of. 1 about a six-inch diameter pipe and can easily take a 2 Q Does that condensate also sometimes collect in 2 pump. 3 the well itself? 3 Q To your knowledge, if you discover water 4 A Yes, it does. You know, in some wells, and 4 collecting in a gas well, does that mean that leachate 5 particularly the ones maybe we've looked at where 5 is mounding up from the bottom of the fill upward -- I'm 6 there's, you know, a couple of feet, there's inches of 6 sorry -- from the bottom of the landfill upward? 7 7 water, it's most likely that that water is from A No. That's -- water in an extraction well does 8 condensate and not leachate collecting in a well. The 8 not in any way indicate that there's an amount of water 9 wells themselves are very moist and wet just from the 9 coming from the bottom up. It's more likely that the 10 condensation. 10 water in the well is coming from water down, so no. 11 11 Q So as it moves through, then, the header system Q Mr. Stutz, if you could refer now to what was 12 toward the blowers that are pulling it, it's sort of 12 previously marked as TJFA-22. 13 like a still; is that right? 13 Do you have that document before you? MR. HEAD: Be careful how you answer that. 14 14 A I do. Yes. 15 A I have never been to a still. You will have to 15 Q I believe it was your prior testimony that if a 16 16 ask it again. well is experiencing collected water to the extent that 17 MR. MOORE: Okay. I'll waive the question. 17 it's interfering with production or for other reasons 18 MR. HEAD: I was going to go with a 18 that a well might be having trouble in production, 19 speculation objection. 19 there's some sort of a 120-day list; is that correct? 20 MR. MOORE: I'm sure I've opened up a wide 20 A Yes. That's correct. 21 21 door with that. Q And what -- so does that mean it's -- that if 22 MR. BLACKBURN: Mr. Moore has much more 22 it goes on that list that it's in violation, or you need 23 23 experience than most of us. to make sure it's corrected within 120 days?

30 (Pages 919 to 922)

A It needs to be corrected within 120 days.

Q Adjacent to the column where there's a number

24

25

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Page 923
                                                                                                             Page 925
      of wells on the 120-day list, there's another column.
                                                               1
                                                                    wells in Subtitle D that have the water, including 110
 2
      Can you tell me what that is?
                                                               2
                                                                    that's watered-in, can you say with a hundred percent
 3
                                                               3
                                                                    degree of certainty that that water does not extend from
         A That is the number of wells that are beyond 120
 4
                                                               4
                                                                    the perforation down to the liner?
      days -- on the 120-day list.
 5
                                                               5
         Q And based on this document as regards to Sunset
                                                                       A Oh, with a hundred percent certainty, no.
 6
                                                               6
      Farms Landfill, back in February of 2003, were there any
                                                                            MR. HEAD: I pass the witness.
 7
      wells that were on the 120-day list more than 120 days?
                                                               7
                                                                            JUDGE NEWCHURCH: Any other cross?
 8
                                                               8
                                                                            Okay. Off the record.
 9
                                                               9
                                                                             (Off the record)
         O And that's a zero in that column; is that
10
                                                              10
                                                                             FURTHER REDIRECT EXAMINATION
      correct?
11
                                                              11
                                                                    BY MR. MOORE:
         A That's correct.
12
         Q Mr. Stutz, is it your opinion that the gas
                                                             12
                                                                       Q Very briefly. Do you have an opinion about
13
      collection and control system and the landfill gas
                                                              13
                                                                    whether there is leachate mounding up from the liner
14
                                                                    through the drainage layer of the leachate collection
      management plan, as they're currently being implemented
                                                             114
15
      at the Sunset Farms Landfill, are controlling odors?
                                                             15
                                                                    system and up to the elevations of the production zone
16
         A Yes.
                                                              16
                                                                    of Gas Well 110?
17
                                                              17
         Q Is it also your opinion that if the permit
                                                                       A My opinion is that it's not. My opinion is
18
                                                              18
      amendment is granted and the system is operated in
                                                                    that that well is in that area, that there's a leachate
19
      accordance with the Attachment 14, the landfill gas
                                                              19
                                                                    collection system in that area, that there's -- the
20
      management plan, and the GCCS is operated as described,
                                                             20
                                                                    water is not mounding up from the bottom, but simply the
21
      that it will continue to control odors at the Sunset
                                                              21
                                                                    water has entered from the top. That's my opinion.
22
                                                              22
      Farms Landfill?
                                                                             MR. MOORE: No further questions. Well,
23
                                                              23
         A Yes.
                                                                    wait.
24
                                                              24
                                                                       Q (BY MR. MOORE) And is that your opinion to a
              MR. MOORE: Pass the witness.
25
                                                             25
              JUDGE NEWCHURCH: Who wishes additional
                                                                    reasonable degree of engineering certainty?
                                                Page 924
                                                                                                              Page 926
                                                               1
                                                                       A Yes.
 1
      cross-examination?
 2
                                                               2
                                                                            MR. MOORE: Pass the witness.
               Anyone?
 3
               MR. HEAD: Yes.
                                                               3
                                                                            JUDGE NEWCHURCH: Any other cross?
 4
                                                               4
               JUDGE NEWCHURCH: Mr. Head?
                                                                            Thank you, Mr. Stutz. You're excused.
 5
                                                               5
                                                                            Off the record.
               MR. HEAD: We have Blackburn.
                                                                            (Off the record)
 6
                                                               6
               MR. BLACKBURN: I'm going to pass.
 7
                                                               7
                                                                            JUDGE NEWCHURCH: Back on the record.
               JUDGE NEWCHURCH: Okay.
 8
                                                               8
                  RECROSS-EXAMINATION
                                                                            MR. MOORE: We would like to offer Exhibit
 9
      BY MR. HEAD:
                                                               9
                                                                    BFI-8. It is the boring log on Well 110.
10
         Q You mentioned that there could be layers in
                                                              10
                                                                            JUDGE NEWCHURCH: Is there objection?
11
      the waste from past intermediate daily cover which was
                                                             11
                                                                            MR. HEAD: One second. I assumed he wasn't
12
      causing some perch zones, correct?
                                                              12
                                                                    going to offer it.
13
         A Correct.
                                                              13
                                                                            No objection.
14
         Q Are you aware that the practice of BFI in the
                                                             14
                                                                            JUDGE NEWCHURCH: 8 is admitted. And we're
15
                                                              15
      past has been to use alternative daily covers like
                                                                    off the record.
16
                                                              16
                                                                            (Exhibit BFI No. 8 admitted)
17
         A I am not aware that that's been their normal
                                                              17
                                                                            (Recess: 2:08 p.m. to 2:30 p.m.)
18
                                                              18
                                                                            JUDGE NEWCHURCH: Let's go back on the
      practice.
19
         Q One last question: With regard to these wells
                                                              19
                                                                    record.
20
      that you mentioned in the Subtitle D area, 100, 101, 78,
                                                             20
                                                                            MR. GOSSELINK: Would you like to hear
21
                                                              21
                                                                    about the final resolution of our stipulations?
      75, 76, as you sit here today, you cannot state
22
                                                              22
      definitively that there is not leachate from the liner
                                                                            JUDGE NEWCHURCH: I would love to.
23
                                                              23
                                                                            MR. GOSSELINK: We have agreed that all
      all the way to that perforation, can you?
24
                                                              24
                                                                    three of those issues that we previously identified are
         A Are you asking --
25
                                                              25
         Q I'm asking if you know for a certainty that the
                                                                    being stipulated to as no longer being in the case.
```

31 (Pages 923 to 926)

	Page 927		Page 929
1	They're being dropped as issues.	1	application?
2	JUDGE NEWCHURCH: Those would be J, S, and	2	A Yes, sir.
3	Z of the Commission's designations?	3	Q Does it, in fact, appear to be a true and
4	MR. GOSSELINK: Yes. However, with the	4	correct copy of Part III of the application?
5	understanding that BFI acknowledges that part of what	5	A It does.
6	might be talked about in a closure issue is also a final	6	Q Did you prepare any prefiled testimony?
7	cover issue, and to the extent that it's appropriate to	7	A Yes, I did.
8	bring up as part of cross-examination on final cover, we	8	Q And would you take a look at what's been marked
9	have agreed not to contend that that issue is being	9	as AM-1 and identify that for the record?
10	dropped. In other words, that's fair game.	10	A This appears to be a true and correct copy of
11	JUDGE NEWCHURCH: Whether or not the final	11	my prefiled testimony.
12	cover is an issue?	12	Q Do you have any changes or corrections to your
13	MR. GOSSELINK: Yes.	13	testimony, sir?
14	JUDGE NEWCHURCH: Okay.	14	A Yes, I do.
15	So your next witness, please?	15	Q Okay. And what are they?
16	MR. GOSSELINK: BFI calls Adam Mehevec.	16	A I've made some amendments to address the
17	JUDGE NEWCHURCH: Mr. Mehevec, will you	17	Rule 11 Agreement that was executed with the City of
18	take the oath, please.	18	Austin.
19	(Witness sworn)	19	MR. GOSSELINK: And, in particular, Your
20	JUDGE NEWCHURCH: Thank you.	20	Honor, those were Exhibits AM-29 and AM-30, which we had
21	Mr. Gosselink.	21	attached to our Motion to Supplement, which has
22	MR. GOSSELINK: Thank you.	22	previously been admitted by the Court. We also in one
23	ADAM WADE MEHEVEC,	23	of those attachments had Mr. Mehevec's amended prefiled
24	having been first duly sworn, testified as follows:	24	testimony, which I had not marked which I now understand
25	DIRECT EXAMINATION	25	you would like to be marked and put in the record to
	Page 928		Page 930
1	BY MR. GOSSELINK:	1	make the record clearer or at least you would like to
2	Q Good afternoon.	2	make the record clear. And I choose to do it by marking
3	A Good afternoon.	3	it.
4	Q Will you please state your full name and	4	JUDGE NEWCHURCH: Instead of offering AM-1,
5	address for the record.	5	you're going to offer the revised version and put it in?
6	A My name is Adam Wade Mehevec. I reside at	6	MR. GOSSELINK: I'm going to offer what I
7	2747 Grimes Ranch Road in Austin, Texas.	7	now will call AM-31 and at the end offer AM-1 through
8	Q And what is your current occupation?	8	31.
9	A I am currently employed as a professional	9	JUDGE NEWCHURCH: Okay. I think I'm with
10	engineer with the first respectated consuming Engineers	10	you.
11	here in Austin.	11	MR. GOSSELINK: All right.
12	Q And what's your connection to this project?	12	(Discussion off the record)
13	A I've been involved with this project, I	13	MR. GOSSELINK: I'm sorry. I know you
14	believe, since its inception around the 2000 time frame	14	asked us to get this all organized, but with all of that
15 16	and was deeply involved in the development of the	15	negotiating, I got lost.
16 17	application that we're talking about here today.	16	JUDGE NEWCHURCH: That's fair.
18	Q And would you take a look at what I think is	17 18	(Exhibit BFI Nos. AM-29 through AM-31 marked)
18 19	marked as Applicant's Exhibit AM-3 and identify it for the record.	19	
20	A AM-3 appears to be a copy of all of Part III of	20	Q (BY MR. GOSSELINK) Mr. Mehevec, have you had a chance to look at AM-29, AM-30, and 31?
21	the application except for the things that were	21	A Yes, I have.
		22	Q Are they, in fact, the changes that you would
		ے کے	o zne mey, m ract, me changes mat you would
22	previously sponsored by Mr. Snyder, Mr. Adams, and Mr. Stutz, which would be Attachments 4, 5, 10, 11, and		
	Mr. Stutz, which would be Attachments 4, 5, 10, 11, and 14, to Part III.	23 24	like to offer to your prefiled testimony? A Yes, they are.

32 (Pages 927 to 930)

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Page 931
                                                                                                               Page 933
         A AM-31 is a supplement to my prefiled testimony
                                                                1
                                                                     through APP 1128.
 2
      that brings in the Rule 11 Agreement we got with the
                                                                2
                                                                            Attachment 7 to Part III, which is APP 1131
 3
                                                                3
      City of Austin.
                                                                     through APP 1137.
 4
         Q Does it change Pages 46 through 49 of your
                                                                4
                                                                            Attachment 8 to Part III, which is APP 1138
 5
                                                                5
                                                                     through APP 1151.
      testimony?
 6
         A Yes, that appears to be correct.
                                                                6
                                                                            Attachment 9 to Part III, which is APP 1152
 7
              MR. GOSSELINK: And, Your Honor, it will
                                                                7
                                                                     through APP 1155.
      also change subsequent pages, which I have asked to be
 8
                                                                8
                                                                            Attachment 12 to Part III, which is
 9
      brought forward, but these are the same pages that were
                                                                9
                                                                     APP 1402 through APP 1487.
10
      attached to the Motion to Supplement. I just didn't get
                                                               10
                                                                            Attachment 13 to Part III, which is
11
      them in the record yet.
                                                              11
                                                                     APP 1488 through APP 1499.
12
              JUDGE NEWCHURCH: They don't seem to go
                                                              12
                                                                            Attachment 15 to Part III, which is
13
      smoothly. Like 46 starts -- oh, I see. There we go. I
                                                              13
                                                                     APP 1566 through APP 1699. That's all
14
                                                              14
      understand.
                                                                        Q Thank you.
15
                                                              15
                                                                            MR. GOSSELINK: Pass the witness.
              MR. GOSSELINK: Are you all right?
16
              JUDGE NEWCHURCH: Off the record.
                                                              16
                                                                            JUDGE NEWCHURCH: You wanted to offer the
17
                                                              17
              (Discussion off the record)
                                                                     exhibits, right?
18
              JUDGE NEWCHURCH: And I think we've all
                                                              18
                                                                            MR. GOSSELINK: I do. Thank you, Your
19
                                                              19
      agreed what had been marked as AM-31, the page numbers
                                                                     Honor. As I said in the beginning of this, I would like
20
      were changed slightly, because it's actually an insert
                                                              20
                                                                     to offer Mehevec Exhibits 1 through 31.
21
                                                                            JUDGE NEWCHURCH: Are there further
      on Page 46. So those pages of AM-31 are 46-A through D. 21
22
                                                              22
              MR. GOSSELINK: Yes, sir. Thank you.
                                                                     objections beyond that which has been ruled on?
23
              JUDGE NEWCHURCH: I think that's a cleaner
                                                              23
                                                                            (No response)
24
                                                              24
      record that way.
                                                                            JUDGE NEWCHURCH: Then AM-1 through 31 are
25
                                                              25
              MR. GOSSELINK: I'm almost done.
                                                                     all admitted.
                                                Page 932
                                                                                                              Page 934
 1
         Q (BY MR. GOSSELINK) Is AM-2 your resume, sir?
                                                               1
                                                                             (Exhibit Nos. AM-1 through AM-31 admitted)
 2
         A Yes, it is.
                                                                2
                                                                             JUDGE NEWCHURCH: And you passed the
 3
         Q Do you have any changes to your resume?
                                                                3
                                                                     witness for cross-examination.
 4
                                                                4
         A No, I do not.
                                                                             Mr. Terrill?
 5
         Q Do you adopt your prefiled testimony here today
                                                                5
                                                                             MR. TERRILL: No questions, Your Honor.
 6
      as if you were giving it all live before the Court?
                                                                6
                                                                             JUDGE NEWCHURCH: Ms. Noelke?
 7
                                                                7
                                                                             MS. NOELKE: Thank you.
         A Yes, sir.
 8
         Q Have you given everyone the understanding of
                                                                8
                                                                                 CROSS-EXAMINATION
 9
      what you are sponsoring in terms of an exclusion of all
                                                                9
                                                                     BY MS. NOELKE:
10
      of Part III, except what three other witnesses
                                                              10
                                                                        Q Mr. Mehevec, I'm Holly Noelke. I'm with the
11
      sponsored? For purposes of the record, I've asked you
                                                              11
                                                                     City of Austin.
12
      to identify exactly what you are sponsoring, and include
                                                              12
                                                                        A Hi, Holly. How are you?
13
      the Bates labels. Will you do that, please?
                                                              13
                                                                        O I'm fine.
14
         A Sure. I'm sponsoring Part III, Site
                                                              14
                                                                             You are familiar, are you not, with the
15
      Development Plan Narrative, which is Bates labels
                                                              15
                                                                     terms of the agreement between City of Austin and BFI,
16
      APP 356 through APP 378.
                                                              16
                                                                     the subject of the Rule 11 Agreement?
17
              I'm also sponsoring Appendix A to that --
                                                              17
                                                                        A Yes, ma'am, I am.
18
      actually Appendices A through D of that narrative, which
                                                              18
                                                                        Q Does this agreement apply to current permit
19
      is APP 379 through APP 394. I am sponsoring
                                                              19
                                                                     operations as well as any future operations of the
20
      Attachment 1 to Part III, which is APP 395 to APP 405.
                                                              20
                                                                     landfill?
21
              Attachment 2 to Part III, which is APP 406
                                                              21
                                                                        A Yes, ma'am, it will.
22
                                                              22
      through APP-412.
                                                                        Q Does the agreement include requirements for
23
              Attachment 3 to Part III, APP 413 through
                                                              23
                                                                     erosion and sedimentation controls?
24
      APP 418.
                                                              24
                                                                        A Yes, ma'am.
25
                                                              25
              Attachment 6 to Part III, which is APP 921
                                                                        Q As well as additional operational improvements,
```

33 (Pages 931 to 934)

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Page 935 Page 937 correct? 1 1 A Yes, ma'am. Sorry. 2 2 A Yes. Q Is it your opinion that the settlement terms 3 Q Does it also provide for prohibition on the 3 pertaining to the sequence and timing of revegetation, 4 acceptance of waste after November 2015? 4 the revegetation methods and additional erosion 5 A Yes, ma'am. 5 prevention and sediment control devices will increase 6 Q And prohibits the use of the property or 6 the effectiveness of the overall erosion/sedimentation facility for a transfer station, correct? 7 7 control plan? 8 A Yes, that's correct. 8 A I believe it will, yes. 9 Q Are you asking -- or is it your opinion that Q Does the agreement provide for specifications 9 10 special conditions that BFI has requested to be a part for soil composition, fertilizer, irrigation, and bed 10 11 of this permit, those conditions that were a part of the 11 preparation in a separate exhibit called Exhibit No. 1 12 12 agreement, that those apply in the event that there is a to the Agreement? 13 conflict between special conditions and the application 13 A Yes, it does. 14 14 or permit -- draft permit? Q Are these practices and improvements of past 15 A Yes, ma'am. I agree that I am requesting it be 15 practices at Sunset? 16 included, and I do agree that the special provisions 16 A I would say they are, yes. 17 17 would take precedent over anything that was in the Q Regarding the photo in Exhibit AM-28, which 18 18 application. is --19 Q Thank you. 19 A Okay. I have it. 20 Under the agreement, does BFI agree to 20 Q Are you aware that the grass establishment in 21 21 submit a site development application to the City of the area depicted in this picture has taken over two 22 22 Austin? vears to establish? 23 23 A Yes, we do. In fact, we've already done that. A I'm not aware of the timing of this. This is a 24 Q And under the agreement, does BFI agree to 24 picture of the waste management facility next door to 25 revise its Storm Water Pollution Prevention Plan? 25 Page 936 Page 938 1 A Yes, ma'am. 1 Q Oh, it is? 2 Q And has BFI complied with this requirement? 2 A And I'm not sure when they first seeded this 3 A We will comply with it by the date that's set 3 area. 4 4 in the requirement. I think we have about eight more Q I apologize. I thought it was BFI. 5 5 days, and it's getting wrapped up right now. It's Are you aware that the current areas in BFI 6 have taken two years or more and many re-seedings to somewhat slowed by the fact that I'm sitting here today, 6 7 7 establish vegetation? but we're working on it. 8 8 Q Is it your opinion that the effectiveness of A In some areas, that's correct, yes. 9 the proposed stormwater facility of the northeast 9 Q Regarding the type of soil currently being 10 portion of the landfill will be enhanced by making the 10 purchased for use at BFI, is it your intention to amend 11 improvements called out in the agreement? 11 the soil purchase from any source and the soil purchase 12 A I think it will, yes. 12 for use on the site as necessary to comply with the 13 Q Do you agree that the agreement includes the 13 Exhibit 1 requirements contained in the Agreement? 14 requirement to catch more drainage area to the pond 14 A Yes. Any soil that's used for topsoil would be 15 15 amended in that way. Daily cover that isn't the top since it is -- which it's sized to handle it and 16 16 part, if we -- when we go back and put an intermediate permanently vegetating the basin side slopes within 30 17 days of final grading? 17 cover, if there's another layer, then we would amend 18 A I agree the agreement requires us to construct 18 19 the pond as soon as that drainage area is available to 19 MS. WHITE: Your Honor, if Ms. Noelke could 20 drain water to it. I don't think the agreement provides 20 speak up just a little bit, the Executive Director would 21 21 more water to the pond than we had before. And I do appreciate it. 22 22 agree with the second part of your question that it MS. NOELKE: Oh, I'm sorry. 23 requires the stabilization of the side slopes of that 23 JUDGE NEWCHURCH: Ms. Noelke, if you could 24 24 pull your microphone a little closer. I think you basin. 25 25 Q Within 30 days of final grading? managed to get one of the bad microphones.

34 (Pages 935 to 938)

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Page 939
                                                                                                             Page 941
         Q (BY MS. NOELKE) Does the BFI agreement with
                                                                    cover and implement seeding events, on all side-sloped
                                                               1
 2
      the City specify the type of erosion control devices,
                                                               2
                                                                    disturbed areas on which activity is not recommenced
 3
      their location, and the timing for placement?
                                                               3
                                                                    within 60 days, etcetera, etcetera.
 4
                                                               4
                                                                       A Are you in Section D, Item 1?
         A Yes.
 5
         Q Do you believe that the agreement with the City
                                                               5
                                                                       Q Yes.
 6
      is likely to provide more effective erosion and
                                                               6
                                                                       A I'm with you.
 7
      sedimentation control at the BFI facility?
                                                               7
                                                                       Q And just for clarity, talk about on all
 8
         A It will definitely enhance the current program
                                                               8
                                                                    side-sloped disturbed areas.
 9
                                                               9
                                                                             What is your understanding of a disturbed
      that's out there.
10
              MS. NOELKE: No further questions.
                                                              10
                                                                    area?
11
              JUDGE NEWCHURCH: Mr. Morse?
                                                              11
                                                                       A Disturbed area would basically be a bare area,
12
                                                             12
              MR. MORSE: Not at this time, Your Honor.
                                                                    an area that's been worked and therefore has no
13
              JUDGE NEWCHURCH: Ms. Mann?
                                                             13
                                                                    vegetation on it. An area that's currently vegetated, I
14
              MS. MANN: I pass.
                                                             14
                                                                    would say, is an undisturbed area.
15
                                                             15
              MR. SHEPHERD: I do have a question.
                                                                       Q And under the wording of this, it appears that
16
                  CROSS-EXAMINATION
                                                              16
                                                                    activities could be recommenced within 50 days of when
17
                                                              17
                                                                    they stopped and there would be no obligation for BFI to
      BY MR. SHEPHERD:
18
         Q Mr. Mehevec, I'm Steve Shepherd with the
                                                             18
                                                                    seed such area.
19
      Executive Director. I have just one follow-up question
                                                             19
                                                                       A That's correct.
20
      related to what the City just asked you.
                                                              20
                                                                       Q And that could continue cyclically, could it
21
              I believe at one point they had asked about
                                                             21
                                                                    not, under the wording of this?
22
      whether or not additional stormwater would be routed to
                                                             22
                                                                       A If they were filling a slope and continually
23
      some of the detention ponds. In the exhibit that was
                                                              23
                                                                    placing on top of that slope every 50 days, every 45
24
      marked AM-31, your supplemental prefiled, at the bottom 24
                                                                    days, then it could until it got to final grade, at
25
      of that page, Page 46-A, Line 22, you're discussing
                                                              25
                                                                    which point then they would seed.
                                               Page 940
                                                                                                             Page 942
      routing additional stormwater to and through detention
                                                               1
                                                                       Q Now, then -- and I have a question -- and this
 1
 2
      and sedimentation ponds.
                                                               2
                                                                    goes back to the application, so we're going to jump a
 3
         A I believe that is an error. The agreement
                                                               3
                                                                    little bit.
 4
                                                               4
      specifies timing. There's no additional water that
                                                                       A Okay.
 5
      wasn't going to the pond before. It's a timing issue of
                                                               5
                                                                       Q It would be your Attachment 6.
 6
      when the pond would be constructed and when the water
                                                               6
                                                                       A Okay.
 7
                                                               7
                                                                       Q Page 000989. And that's at the bottom. And
      would be directed there.
 8
              MR. SHEPHERD: Thank you.
                                                               8
                                                                    this is an original application where it says:
 9
               No further questions.
                                                               9
                                                                    Abovegrade intermediate cover areas.
10
               JUDGE NEWCHURCH: Mr. Head?
                                                              10
                                                                             Do you see that?
11
                                                                       A Yes, sir, I do.
              MR. HEAD: Yes.
                                                              11
12
                  CROSS-EXAMINATION
                                                              12
                                                                             MR. GOSSELINK: I don't, J.D.
13
      BY MR. HEAD:
                                                              13
                                                                             Did you say Attachment 6?
14
                                                             14
                                                                             THE WITNESS: It's Appendix --
         Q Good afternoon, Mr. Mehevec.
15
                                                             15
         A How are you doing, Mr. Head?
                                                                             MR. HEAD: I meant Appendix 6. I
16
                                                             16
                                                                    apologize. It's 989 of the application, Paul.
         Q I've been pronouncing your name wrong for
17
      months. Please forgive me.
                                                             17
                                                                       Q (BY MR. HEAD) Mr. Mehevec, it states in this
18
         A It's all right. It's a common mistake.
                                                             18
                                                                    section that if significant erosion is occurring, then
19
         Q While we're on the Rule 11, I would like to go
                                                             19
                                                                    one or more of the following actions will be taken to
20
                                                             20
                                                                    mitigate the erosion, including the placement of rock
      to Item 1.
21
                                                             21
         A Okay.
                                                                    berms, silt fencing, vegetation, and contouring where
22
                                                             22
         Q Where at least -- do you have the Rule 11 in
                                                                    the surface of the cover may be roughened with a series
23
                                                              23
      front of you itself?
                                                                    of horizontal grooves running parallel.
24
         A I do.
                                                              24
                                                                             And my question is: On the 60-day limit,
25
                                                              25
         Q It says: BFI agrees to place intermediate
                                                                    if BFI was to go out there and determined there had been
```

35 (Pages 939 to 942)

22

23

24

25

is tied into their current irrigation system. They also

have temporary three-inch meters that they use on the

fire hydrants along Giles Lane. In addition, there's a

55-inch water main in Giles that there's a stub-out just

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	Page 943		Page 945
1	some erosion and they roughened it with a series of	1	south of the BFI property that could be accessed if we
2	horizontal grooves, would that in any way total the	2	needed additional water. There's also on-site water
3	60-day requirement?	3	storage in the pond, the trapezoidal pond, that we draw
4	A That's not my understanding of the intent of	4	from to try to give us a buffering for water use.
5	the requirement. My understanding was that activity was	5	Q I am assuming at this point in time there's not
6	defined as if they were going to come back and do waste	6	a whole heck of a lot of water.
7	placement activities within 60 days.	7	A I think it's actually quite full right now.
8	Q And to your knowledge, is activity, as you just	8	Q Really?
9	defined it, defined either in the Rule 11 or in your	9	A I'm sure our water bill would reflect that.
10	amendments to the application?	10	Q So BFI actually puts City water in the pond for
11	A I'm not aware whether it is or not.	11	fire protection purposes or other purposes?
12	Q Going to Item 2 of the Rule 11, this addresses	12	A At times they do usually for cell construction
13	the immediate cover and implement seeding events on the	13	purposes because the contractor needs a large amount of
14	top deck of the landfill. And it indicates in all	14	water in a fairly short amount of time. So we use the
15	disturbed areas on which the activity has not	15	pond as a storage device to kind of buffer-out that
16	recommenced within 120 days.	16	demand.
17	Again, you could have the area to be	17	Q And BFI has submitted a site plan permit to the
18	undisturbed and then they disturbed it on the 118th day,	18	City of Austin, correct?
19	and under the strict wording of this, there would be no	19	A Yes, sir. I believe December 22nd, 23rd,
20	obligation to start that seeding, correct?	20	around that period.
21	A If they did more waste placement activities up	21	Q And, to your knowledge, has that been
22	there, which I think it would be fairly unlikely, on the	22	distributed to any of the parties in this proceeding?
23	top deck, the majority of that would be at final grade.	23	A I'm not aware of whether it has or not.
24	Q And, once again, the word "activity" is not	24	Q Okay. Did you prepare the site plan?
25	specifically defined in this Rule 11 nor in the	25	A I did, yes.
	Page 944		Page 946
1	application?	1	Q And what is entailed in this site plan for the
2	A I think, as I stated before, I'm not aware	2	City?
3	whether it is or not.	3	A It primarily incorporates the Rule 11 Agreement
4	Q Okay. And you've worked for BFI since the	4	stuff. It shows all of the drainage for the facility.
5	inception of this amendment process, which has been long	5	It shows the pond. The water quality and detention pond
6	and laborious, I know. As you read this Rule 11, do you	6	have been permitted previously through the City.
7	envision this as requiring additional water in order to	7	Q Correct.
8	grow the vegetation that Ms. Noelke was talking about?	8	A This permit is exclusively for the vertical
9	A Yes, I do. Beyond what they're doing	9	expansion of the landfill and the inclusion of the
10	currently?	10	Rule 11 Agreement stipulations.
11	Q Yes.	11	Q To your knowledge, has the City approved the
12	A Yes, I would envision that they would have to	12	site plan permit?
13	apply more water more irrigation than they are using	13	A They have not approved it yet. It is currently
14	currently.	14	under review.
15	Q And do you have personal knowledge of what	15	Q Does the site plan permit recently, submitted
16	water availability BFI has on site with regard to the	16	to the City of Austin, make any modifications to the
17	size of the force mains?	17	sedimentation basins on site?
18	A Yes. I have some knowledge.	18	A No, it does not. I will say short of I
19		19	believe there's a requirement in the agreement about
20	A BFI has a permanent inch-and-a-half water meter	20	maintenance of the basins. Do you want me to check that
		101	1 112
21	that's in the northeast corner of this site. This meter	21	real quick?

36 (Pages 943 to 946)

Q We'll get there. Thank you.

Q So as I understand it, there are two existing

sedimentation basins on the southern boundary, and there

A Okay.

22

23

24

25

	MI DOCKET NO. 302 00 2170		CEQ DOCKET NO. 2007 1774 MSW
	Page 947		Page 949
1	are two sedimentation basins on the western boundary.	1	A That's correct.
2	A That's correct so far.	2	Q And then the detention pond, the detention pond
3	Q At one point in time on some of your maps there	3	to be, that is going to pick up waters coming down from
4	was an indication of a small sedimentation basin on the	4	the downchutes which are proposed?
5	northern portion.	5	A From one downchute, that's correct.
6	A Yeah. It's about midway from the west to the	6	Q So from just one downchute?
7	east. There's one along Blue Goose Road.	7	A Right. There's one downchute that serves the
8	Q Right. And, as I recall, there are no	8	largest single drainage area on the facility, which is
9	sedimentation basins on the eastern portion.	9	87 acres. That downchute is the inlet into Ditch K I
10	A That's correct. Yes.	10	mean into the pond. I'm sorry.
11	Q And then we have currently we have the	11	Q And the revision the Rule 11 revision, which
12	trapezoidal pond. And part of this part of this	12	speaks let me find that section bear with me.
13	permit expansion is approval of the large stormwater	13	This is all fairly new to us.
14	detention water quality pond?	14	Okay. I'm talking about No. 8 of the
15	A That's correct.	15	Rule 11.
16	Q Now, is it my understanding that the City of	16	A Okay. I've got it.
17	Austin and Travis County have already signed off on that		Q "Stormwater runoff from the landfill area
18	large water quality detention pond?	18	designated as Drainage Area 2 shall be routed through
19	A That's correct.	19	the existing detention pond, or the proposed water
20	Q And is it your understanding that BFI still	20	quality/detention pond, when the waste fill in Drainage
21 22	needs the approval of TCEQ to this proceeding in order to go forward with construction of that pond?	21 22	Area 2 has reached the final grades." Prior to the waste fill reaching final
23	A That's correct. Or they would have to do a	23	grade, where does the drainage from Drainage Area 2,
24	modification to their current permit if they wanted to	24	where would that go to?
25	incorporate that pond separate from the amendment.	25	A Yeah. It would go into there's a perimeter
	Page 948		Page 950
1			
1	Q And Ditch K was the subject of the CLOMR,	1	ditch at the toe of that area, both on the north side
2	correct? A And LOMR followed that up.	3	and the east side and Drainage Area 2 kind of wraps around the landfill. So there's ditches on both the
4	Q And LOMR followed that up. And that was	4	east side of the landfill and north side of the landfill
5	reconfiguration or a movement of the floodplain, if you	5	that would collect that water and route it towards
6	will?	6	Outfall 1.
7	A I'll give you that.	7	Q Okay. So that's where's I was getting. So
8	Q And after that activity, the hundred-year	8	Drainage Area 2 pre post-Rule 11 is still going to exit
9	floodplain was up towards the northernmost boundaries of		Outfall 1?
10	the landfill site?	10	A Yes, that's correct.
11	A That's correct. It runs parallel to Blue Goose	11	Q And initially it will go through Ditch K?
12	Road. It's approximately 50 to 100 feet off of Blue	12	A No.
13	Goose.	13	Q Never runs through Ditch K?
14	Q And Ditch K large Ditch K, is that within	14	A No.
15	the new 100-year floodplain?	15	Q Tell me where how the water will be conveyed
16	A Ditch K contains the 100-year floodplain. So	16	from Drainage Area 2 to Outfall 1.
17	the boundaries of the floodplain are the boundaries of	17	A As I mentioned, Drainage Area 2 wraps around
18	Ditch K.	18	the northern and eastern face of the landfill. There's
19	Q And as I understand Ditch K, Ditch K is going	19	two separate ditches, one on the north and one on the
20	to pick up water from certain drainage areas that we'll	20	east, that collects that water at the toe and convey it
21	get to on the map.	21	towards the toward Outfall 1.
22	A Okay.	22	Q Okay. Do you recall the names of those ditches
23	Q And some of the water in Ditch K is just going	23	because that
24 25	to run directly down from Ditch K from where it entered,	24 25	A I can look it up if you will give me just a
د∠	including off-site water.	45	second.

37 (Pages 947 to 950)

50F	AH DOCKET NO. 382-08-2178	Τ.	CEQ DOCKET NO. 2007-1774-MSW
	Page 951		Page 953
1	Q Sure.	1	A That is correct, the water that leaves the
2	A The ditch on the northern face I'm on	2	pond, yes.
3	APP 968.	3	Q And it will go out Outfall 1?
4	Q 968?	4	A That's correct.
5	A Which is Figure 6-4 of Attachment 6.	5	Q And, as I understand, you also have drainage
6	Q Give me just a second, please.	6	from, you know, like with where the gas plant is and the
7	A If you see on the northern side of the	7	white good storage is, I guess D-9 area, that drainage
8	landfill, there's Ditch L, which is delineated by some	8	also goes to Outfall 1?
9	kind of squiggly arrows, and then labeled towards the	9	A Yes. Drainage D-9 goes to Outfall 1.
10 11	northeast corner.	11	Q And all of the drainage leaving Outfall 1, before it gets to Outfall 1, passes through a
12	Q On the northern side? A Yes, sir.	12	jurisdictional wetland pond?
13	Q I see a Ditch J.	13	A I would say essentially all of it. There's a
14	A No. Go further east. Right at the northeast	14	little bit that doesn't, but I would say predominantly
15	corner of the footprint of the landfill.	15	it does, yes.
16	Q Northeast?	16	Q And the water coming from the D-9 area, there's
17	A On the north face.	17	no sediment basins before it reaches the wetland pond,
18	Q Right.	18	is there?
19	A There's a ditch running along the entire	19	A There's no basins. There are other
20	that northern section. And at the right of the	20	MR. GOSSELINK: Objection, Your Honor.
21	northeast corner, it says Ditch L.	21	There are two wetland areas that have been identified on
22	Q I see it.	22	one of these exhibits that have been talked about.
23	A Right below a label that says a 7-by-2 concrete	23	Which wetland area are we discussing before we answer
24	box culvert.	24	this question? It's confusing.
25	Q Got it.	25	MR. HEAD: Yes. Let me try to take away
	Page 952		Page 954
1	A That would convey the water coming off the	1	the confusion. When I say "wetland pond," I mean the
2	northern portion of Drainage Area 2 towards Outfall 1.	2	pond. If I want to refer to the other wetland, it will
3	Q You're wrapping the water from D-2 way around?	3	be the 3.5-acre wetland.
4	A Well, before it's at final grade, these berms	4	MR. GOSSELINK: Okay.
5	won't be in place, so it will be controlled by	5	A To answer your question, there aren't any
6	topography. So water won't be wrapping around at that	6	basins. There are other erosion and sedimentation
7	point. It will be straight flowing down that slope	7	controls that do treat the water going to that pond from
8	and going into that ditch.	8	Drainage Area 9.
9	Q While we're on this Figure 6-4, the	9	Q (By Mr. Head) Right.
10	Downchute D, do you see that one coming out of	10	And in your Attachment 6, you discussed
11	A Yes, sir.	11	your drainage calculations, and I think you also had an
12	Q I guess Drainage Area D-1, that will go into	12	erosion control plan somewhere in that attachment,
13	Ditch K, I assume?	13	correct?
14	A The one from Drainage Area D-1, yes.	14	A That's correct. Appendix 6-A.
15	Q And the only there's another Downchute D,	15	Q And when you discuss never in that section
16 17	and that's going to go into the big detention pond?	16	is there a reference to wetlands, is there?
17 10	A The one in Drainage Area 2, that's correct.	17	A In Appendix 6-A or Attachment 6?
18 19	Q Right. And that's the as I understand this, the only water entering the large stormwater detention	18	Q Either one. A I don't know if there is or not. I could try
20	pond will coming from Downchute B?	19 20	to look for you. I'm sure it's discussed in the
21	A That's correct. It happens to be just over a	21	narrative somewhere, but I could be incorrect about
22	third of the total landfill.	22	that. Normally that would be handled in Part II of the
23	Q Okay. And the water from the detention pond,	23	application. There's a wetland section.
24	that eventually is going to be discharged into Ditch K,	24	Q Well, you mention in your application you do
25	correct?	25	mention four erosion basins, correct?

38 (Pages 951 to 954)

	Page 955		Page 957
1	A Yeah, at least. Yes.	1	Q And in the application, we have calculated 0.7
2	MR. GOSSELINK: Objection. Do you mean	2	tons per acre per year of soil loss at the cap and 2.18
3	"sedimentation"?	3	tons per acre per year of soil loss for the 41 slopes,
4	MR. HEAD: Sedimentation. I'm sorry, Paul.	4	correct?
5	You're right. Sedimentation basins. Good catch.	5	A That sounds about right.
6	Q (BY MR. HEAD) You mention four sedimentation	6	Q And how many acres of 41 slope are in the
7	basins?	7	current application as opposed to the 2002 MOD?
8	A Yes, at least that many. That's correct.	8	A I'm not sure of the exact number. I wouldn't
9	Q But in the text you never mention the wetland	9	have a guess as to what the exact amount is. I could
10	pond as a sedimentation basin, correct?	10	probably figure it out.
11	A That's correct. Because the intent was not to	11	Q Would approximately 68 acres sound right to
12	take any credit from the existing pond.	12	you?
13	= = =	13	A For yeah, I think for a 258-acre landfill,
14	which labels the wetland pond as a sedimentation, slash,	14	it looks about right.
15	water quality pond?	15	Q And so if we have additional acreage, we have
16	A I believe it does say that, and I believe	16	additional height at 41 slope, correct?
17	that's a misrepresentation.	17	A That's correct.
18	Q Did you prepare that exhibit?	18	Q So isn't it true that there will be more soil
19	A I sealed that exhibit, yes. It was prepared	19	loss generated from the landfill at full build-out than
20	under my supervision.	20	with the 2002 modification configuration?
21	Q All right. Off the record for just a second,	21	A Based on the RUSLE calculations or RUSLE
22	please, Judge.	22	calculations, there will be more soil eroded from the
23	JUDGE NEWCHURCH: Off the record.	23	landfill overall than there was in the 2002 MOD
24	(Discussion off the record)	24	configuration.
25	Q (By Mr. Head) And just for the record, Figure	25	Q And prior to closure, have you run any
	Page 956		Page 958
1	_		
1	6A-1 and Figure 6A-2 at Application 000997 and 996, they	1	calculations to determine during active operations,
2	do indicate in the northeast corner an existing	2	prior to final capping and prior to planting the
3	sedimentation/water quality pond, correct?	3	vegetation at the top, how much additional tons per year
4	A That's correct. And I believe that accurately	4	per acre of erosion is anticipated with this expansion?
5	portrays its natural function, but it was not intended	5	A I haven't, primarily because it would be
6 7	to imply that we were utilizing that to in any way to	6	speculation on my part. Because during operation the
	protect sedimentation discharge on the site.	7 8	landfill operator installs erosion control as he sees
8 9	Q Okay. Now, Mr. Mehevec, you prepared what I'll call the RUSLE calculation. You probably pronounce it	9	necessary and he sees problems and addresses them. It would be almost impossible for me to predict any interim
10	RUSLE?	10	
11	A Tomato, tomato.	11	situation with any accuracy. Q So you haven't done those calculations?
12		12	A I have not done those calculations, no.
13	Q All right. A Actually, I did not prepare them. They were	13	
14	prepared and sealed by Mr. Olson.	14	Q And during the active operations on the vertical expansion, you're not going to have the
15			diversion berms on the 41 slopes, are you?
16	Q You are familiar with the RUSLE calculation in the application?	15 16	A Not the same ones that are shown on final
17	A Yes, sir, I am.	17	cover, no.
18	Q As I understand, that's the Revised Universal	18	Q So as I understand the two-to-one sloped
19	Soil Loss Equation.	19	diversion berms on the four-to-one slope, that's
20	A That's correct.	20	something that's going to occur at closure?
21	Q And as I further understand that, what that	21	A The final closure the final cover berms,
22	calculates is at final cover, final closure, that	22	that's correct. They do use soil berms of similar
23	calculates the tons per acre per year soil loss both at	23	design during interim operations currently, and they
24	the cap and at the 41 side slopes?	24	place them as they see areas that may be experiencing
4 T			

39 (Pages 955 to 958)

		1	
	Page 959		Page 961
1	convert it to a temporary downchute or some other	1	Q Give me the
2	feature.	2	A APP 999.
3	Q Do you know the size of those berms?	3	Q 999.
4	A They're usually two- to three-feet high. The	4	Has the Rule 11 made any changes with these
5	top width is probably four-feet across. Now, they're	5	silt fences?
6	not perfectly cut. So they're probably a	6	A It's increased their frequency. There's more
7	three-to-one, two-to-one side slope on them.	7	silt fence required under the Rule 11 than there were
8	Q And I think another witness mentioned yesterday	8	before.
9	there are some temporary downchutes?	9	Q Can you show me where in the Rule 11, please?
10	A There's currently five, I believe.	10	I see it
11	Q Are they vegetated downchutes?	11	A It's in a couple of places. Do you want me to
12	A No. They're synthetic. They're HDPE.	12	go through them one at a time or
13	Q Wouldn't you anticipate during active	13	Q If you don't mind.
14	operations with the expansion more soil loss than with	14	A Okay. Under Section D, No. 2, there is a silt
15	the current permitted configuration, prior to closure?	15	fence to be installed or a mulch berm to be installed at
16	A I wouldn't say so, because I think we have much	16	the top and bottom of each of these temporary downchutes
17	more enhanced interim erosion controls, especially with	17	that we talked about earlier. That was not in the
18	the Rule 11 Agreement brought in, so I don't think that	18	application before.
19	would be true.	19	Under section
20	Q Just if you can do this and we're treading	20	Q Let me stop you while you're looking. The idea
21	on unfamiliar territory pull the Rule 11 out for a	21	behind this is when the sediment comes rolling down the
22	second.	22	downchute, the silt fence supposedly catches it?
23	Imagine I prepared my cross prior to this	23	A Right.
24	Rule 11 showing up and Paul's pleading last Friday at	24	Q Okay.
25	4:30, without the City of Austin controls, would you not	25	A Under Section 6, that's dealing with soil
	Page 960		Page 962
1	agree that there would be more soil loss coming off that	1	stockpiles at the site.
2	landfill with the expansion prior to closure than the	2	Q Uh-huh.
3	2002 model?	3	A It says: Perimeter sediment/erosion control
4	A No, I wouldn't because there are other	4	devices, such as silt fences, hay bales, or other
5	enhancements that were included in the application prior	5	systems acceptable to the City shall be in place prior
6	to the Rule 11 that aren't in the current permit.	6	to establishment of any soil stockpiles on the site.
7	Q And what were those enhancements?	7	And then it's got some additional
8	A There was a requirement that there be a silt	8	requirements that the stockpile height gets above a
9	fence at the toe of all slopes that haven't been	9	certain point.
10	vegetated. That's currently a practice at the site, but	10	Q Okay. So we've got silt fences for the
11	it's not required in the current application. Also,	11	downchutes and we've got silt fences for the stockpiles?
12	under the current application interim I guess you	12	A Right. Item 7, I believe, just reiterates a
13	won't have the pond, so I can't take credit for it with	13	requirement that was already in the application: BFI
14	a I would say that would be the biggest one. We now	14	shall install or maintain silt fences or mulch berms
15	have a line of silt fence at all slopes that aren't	15	within 14 days of completion of intermediate cover at
16	vegetated to catch any silt coming down the slope.	16	the base of all side slope and top deck intermediate
17	Q How high are the silt fences?	17	cover areas until adequate growth vegetations is
18	A I think a standard silt fence is two-feet high.	18	achieved.
19	Q And how often are they inspected?	19	I would say that's actually an enhancement
20 21	A I would have to look that up for you. I can.	20 21	because that would put a silt fence at the break between
22	Q If you know. A Okay. Sorry. I hid it on a drawing, typical	22	the top deck and the side slope, also. Q Okay. As we sit here today, does the Sunset
23	engineering move. It's in a note. The silt fences are	23	Farms facility have silt fencing at the bottom of every
24	inspected weekly or after each rainfall event. And	24	slope?
25	that's on Figure 6-A-4.	25	A That's unvegetated, I believe they do.
	2		<i>y</i> ,

40 (Pages 959 to 962)

		_	
	Page 963		Page 965
1	Q And how many slopes are vegetated?	1	Q Isn't it true that City of Austin rules for
2	A The entire southern portion of the landfill is	2	water quality controls allow from a one-half inch up to
3	vegetated. I think the entire western portion is	3	1.3 inches of capture velocity?
4	well-vegetated. The north, there's probably a third of	4	A Yes. If you have impervious cover that exceeds
5	it that's well-vegetated and a portion that's been	5	20 percent on your site, you have to add an additional
6	active fairly recently.	6	1/10th of an inch for every impervious cover over
7	Q Okay. Now, did you design the sedimentation	7	20 percent. If you have 40 percent impervious cover,
8	basins for the landfill?	8	you would capture 7/10ths of an inch. If you had a
9	A Which one?	9	hundred percent impervious cover, you could potentially
10	, ,	10	capture 1.3 inches or be required to capture that much.
11	8 8	11	Q How much impervious cover did we have at the
12	, 1	12	landfills?
13	, &	13	A I think we're just under 5 percent.
14	9	14	Q Have you done specific calculations as to how
15		15	much of the 25-year/24-hour storm runoff will be
16	,	16	captured by the sedimentation ponds?
17	· ·	17 18	A It will capture the first half-inch of that runoff.
18 19	, ,	19	Q And what happens to the rest of it?
20		20	A If there's a splitter feature in the pond, that
21	*	21	water would be routed around the sediment chamber and
22		22	discharged into the outfall.
23	Ş	23	Q And how big of a rainfall event equates to a
24	side, did we say?	24	half-inch runoff?
25	A Right.	25	A I would think it's about somewhere between a
	Page 964		Page 966
1	Q southern side with regard to capacity to	1	1.2- to 1.4-inch event, somewhere in that range, based
2	rain sediment?	2	on the characteristics of the site.
3	A I'm not aware of any calculations that were	3	Q Okay. This runoff, if you get the rain, you're
4	made at the time they were constructed. However, we	4	going to have runoff that's going to contain total
5	surveyed them and determined they would meet the same	5	dissolved solids, correct?
6	criteria we used to design the ones on the west side.	6	A Suspended or dissolved?
7	Q Okay. So you designed the ones on the west	7	Q Total suspended solids.
8	side?	8	A It will most likely contain some total
9	A Our firm did, yes.	9	suspended solids, yes.
10		10	Q And isn't TSS the concern of the sediment
11	, ,	11	control ponds?
12	•	12	A That's the feature they're trying to capture,
13	ε	13	yes.
14 15	,	14	Q And have you done any calculations as to how
16	calculated what a one-half inch of runoff capture volume would be for the drainage area that goes to each pond.	16	much TSS is actually in this runoff, depending on a 1-1/2 inch rainfall event?
17	And the ponds were designed based on that criteria. The		A No. And I think that would vary greatly
18	configuration and outlet for the pond were also based on		depending on the vegetation level of the drainage area,
19	-	19	how the storm progressed, whether it was a very quickie
20	-	20	storm or very slow storm. I don't think there's a way
21	~	21	to calculate that.
22	A That would be one place. The actual	22	Q So as we sit here today, we don't have those
23		23	calculations?
24	1 ,	24	A That's correct. We follow the criteria that
25	I'm offering it up.	25	the City established.

41 (Pages 963 to 966)

SOAH DOCKET NO. 582-08-2178

25

submitted a report to the Corps about the project.

TCEQ DOCKET NO. 2007-1774-MSW

DOF	HI DOCKET NO. 302 00 2170		CEQ DOCKET NO. 2007 1774 MD
	Page 967		Page 969
1	Q How much sediment removal is achieved by the	1	Q And that Horizon report submitted to the Corps
2	ponds on the southern boundary of the facility?	2	made no mention of the 3.5-acre wetland?
3	A For the water they capture, it's almost a	3	A I believe that's correct. Yes.
4	hundred percent removal because those ponds don't	4	Q And the 3.5-acre wetland, as shown on the
5	discharge. They're basically retention ponds. So they	5	Horizon map in the exhibit here, was in the prior
6	fill up, a volume of water is captured and stays there	6	100-year floodplain, correct?
7	until it evaporates or infiltrates into the soil, which	7	A Partially, yes.
8	at this site, nothing infiltrates very quickly, so the	8	Q And since the reconfiguration, if that's the
9	water generally evaporates out and all of a sudden has	9	correct term, that water has been cut off from the
10	• •	10	3.5-acre wetland; is that not also correct?
	left the pond.		•
11	Q So where do the ponds on the south side	11	A Some of it has, yes.
12	discharge?	12	Q All right.
13	A They discharge onto the Waste Management	13	JUDGE NEWCHURCH: Let's take a 10-minute
14	property. Would you like more specific on each one?	14	break.
15	Q Sure. Please.	15	(Recess: 3:31 p.m. to 3:44 p.m.)
16	A The one at Outfall 2 discharges into a large	16	JUDGE NEWCHURCH: Mr. Head?
17	ε	17	Q (BY MR. HEAD) Mr. Mehevec, the large proposed
18	between two of their units. The pond at Outfall 3	18	stormwater detention water quality pond, as I
19	discharges into I believe a 48-inch, but it may be a	19	understand, has been permitted by the City of Austin and
20	30-inch, storm sewer pipe that routes that water	20	Travis, but you're awaiting approval from TCEQ?
21	parallel to the fence line and then recombines it with	21	A That's correct.
22	the water at Outfall 2, so they both end up in that same	22	Q And I think we discussed that the only entry of
23	ditch.	23	water there would be Downchute B coming into there?
24	Q Are you familiar with the facility's Storm	24	A That's correct.
25	Water Pollution Prevention Plan?	25	Q When do you anticipate, not the construction,
	Page 968		Page 970
1	A I've seen it and read it, yes.	1	but the actual utilization of the detention pond?
2	Q Does the Storm Water Pollution Prevention Plan	2	A As soon as Drainage Area 2 gets to its final
3	have any language with regard to protections of either	3	grades, we will start routing water into that pond and
4			
	the 3.5-acre wetland or the wetland pond on site?	4	utilizing it.
5	A I'm not aware of any, no.	5	Q So is it your testimony that you would install
6	Q Okay. You or your firm was responsible for	6	Downchute B prior to final closure?
7	filing the CLOMR with CLOMR application with FEMA	7	A If we weren't going to close the area at that
8	with regard to the floodplain?	8	time, I think we would either initiate final closure on
9	A That's correct. I was responsible for that	9	the area or install a temporary downchute to get water
10	work.	10	to the pond.
11	Q And did you point out or did anyone with your	11	Q Do you have a time estimate as to when water
12	firm point out to FEMA the existence of the 3.5-acre	12	coming off of the landfill will actually be entering
13	wetland and the wetland pond?	13	that detention pond?
14	A At the time we filed the CLOMR, we didn't	14	A I haven't done any calculations to see how the
15	realize the 3.5-acre wetland existed. It had never been	15	fill would progress to determine when we would have
16	delineated even though that area had been surveyed	16	Drainage Area 2 filled up, no.
17	multiple times by wetland specialists.	17	Q Could it be two to three years from now?
18	Q So Horizon submitted a report attached to your	18	A Yes, it could definitely be two to three years
19		19	from now, because I think our current capacity will get
20	ponds at the northeast corner but did not mention the	20	us to 2011, so I think it would be after that, in fact.
21	3.5-acre?	21	Q Okay. And the existing sedimentation ponds,
22	A No. There was no wetland's report attached to	22	which you had nothing to do with, as I recall, on the
23	the CLOMR request. We did do an authorization through	23	southern portion
24	the Corps of Engineers, a separate agency, where Horizon	24	A I did no design on them.
	1 or 2 g or parate agency, where Horizon	٦ .	11 1 did no design on alem.

42 (Pages 967 to 970)

Q Okay. Do you know whether there was any

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SOAH DOCKET NO. 582-08-2178

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TCEQ DOCKET NO. 2007-1774-MSW

Page 971 Page 973 requirement that those ponds be permitted by any 1 event that exceeded a hundred-year intensity. And both 2 federal, state, or local agency? 2 agencies said they performed well and, in fact, I think 3 A I'm not aware of when they were constructed, so 3 somewhat patted us on the back for our erosion controls 4 depending on what the jurisdiction was at the site at 4 in the channel project. 5 the time. I'm not exactly sure what the answer would be 5 Q When the -- the City and State came out? 6 to that question. 6 A The City and the TCEQ. Yes. 7 Q Are you, as we sit here today, aware of any 7 Q Did they take any samples at the Outfall 1 to 8 permits by state, local, or federal agencies being 8 determine compliance with the Storm Water Pollution 9 issued for those southern two sedimentation ponds? 9 Prevention Plan? 10 A I would say they are permitted through the TCEQ 10 A I know samples have been taken in Outfall 1 11 because they were shown, I believe, on our 2002 MOD as 11 before by other agencies. I'm not sure if they did in 12 existing conditions and accepted that way. I don't 12 that particular event. If I remember, that event was a 13 believe they were permitted through the City or the 13 nighttime event, so they may not have taken a sample. 14 State. 14 Q May not have grabbed a sample? 15 15 Q But as I understand your 2002 MOD, BFI A Right. But they have come out during other 16 requested authorization for the west sedimentation pond? 16 events and grabbed samples. 17 A To construct them, yes. The other two were 17 Q And were those samples all below 100 TSS? 18 already there. 18 A I wasn't given copies of them, so I'm not sure. 19 Q In your view --19 Q So you don't know what the samples said? 20 A Yes, I believe so. 20 A No. But I was never informed that there was 21 21 Q In your view, the issuance of the MOD was the any violation or that they had any concerns about the 22 22 Agency's approval. Is that your testimony? sample. 23 A They didn't disagree with our showing them as 23 Q Okay. And going back to Figure 6A-1, which is 24 24 996 -- I may be repeating a question before -- but on existing conditions. 25 25 Q Okay. Now, Ditch K currently has some pools the eastern side you've got Ditch A. Do you see Page 972 Page 974 and rock berms? Ditch A? 1 1 2 A That's correct. 2 A Yes, I do. 3 Q When you did your hydraulics, your calculations 3 Q Ditch A appears to -- is it just renumbered 4 for this application for pre- and postdevelopment 4 Ditch N? 5 conditions, did you model those pools and rock berms? 5 A No. Ditch N is on the other side of the road 6 A We did indirectly. We used a much higher 6 there. So there's a ditch on both sides of the road. 7 7 Manning's coefficient than I would have used normally, Q Okay. So what sedimentation controls are there 8 and that was to account for the fact that there was both 8 in Ditch A? 9 vegetative and structural obstructions in the channel. 9 A Ditch A is what's termed as a grassy swale. 10 Q And how much -- I know you've done this 10 It's a control by itself. There's also silt fence that 11 calculation, but I'm not a hydraulic guy. But how much 11 wraps the entire pond in the northeast corner that 12 water enters Ditch K at 25-year/24-hour storm both from 12 filters the water before it goes into that pond. 13 on site and off site? 13 O Okay. And what about sedimentation controls in 14 A It's around 700 cfs. I think the total outflow 14 Ditch N? 15 at Outfall 1 is in the range of 1,000 cfs. So I think 15 A Ditch N doesn't exist currently, but it's 16 16 the ditch is probably carrying about 700. proposed to be the same configuration as Ditch A. It 17 Q Wouldn't you agree with me that those pools and 17 would be a grassy swale. And then, again, there's a 18 rock berms are not effective sedimentation control 18 silt fence around the pond. 19 devices for that type of flow on a 25-year/24-hour 19 Q Okay. Well, you've got me confused, and I knew 20 20 you could do it. I see Ditch A. storm? 21 21 A No, I wouldn't agree with that. A Right. 22 22 Q And why not? Q You're telling me Ditch N does not exist, but

43 (Pages 971 to 974)

I'm seeing these little arrows heading towards the

Are you telling me, as we sit here today,

existing sedimentation water quality pond.

23

24

A Well, one, they've been through a hundred-year

State came out and inspected the channel after we had an 25

storm and performed very well. Both the City and the

	Page 975		Page 977
1	that those arrows there's no flow, as we speak or	1	site plan.
2	would be no flow?	2	Q Okay. Let me ask the court reporter to give
3	A Well, what I'm saying is the road that's shown	3	you NNC Exhibits 1 through 5.
4	right there	4	JUDGE NEWCHURCH: Can you remind everyone
5	Q Show me the road.	5	of what they are?
6	A It goes up it goes between you see where	6	MR. BLACKBURN: Sure. It's the MOD from
7	it says Ditch N?	7	2002. And then there were four sheets, two from the
8	Q Yes.	8	MOD, and two from the application that Mr. Shull marked
9	A Just to the right of that, there's a white	9	boundaries upon is what the exhibits are.
10	space that curves around.	10	(Discussion off the record)
11	Q I see that.	11	A I believe I have them, Mr. Blackburn.
12	A And it goes it kind of ends in a little mini	12	Q (BY MR. BLACKBURN) Okay. I'd like you to just
13	T head.	13	go ahead and open them up, because we're going to be
14	Q Yes, sir.	14	going back and forth between them a bit.
15	A That's a road	15	First, I would like you to look at NNC-1,
16	Q Yes.	16	which is the 2002 modification. Do you have that
17	A a proposed road under this application.	17	document?
18	That road doesn't exist currently. So what happens is	18	A I do have that document, yes.
19	flow in that area flows just straight into Ditch A,	19	Q And if you want to page through it, you're
20	which does exist currently. When the road is	20	welcome to, but can you identify this document as the
21	constructed, it will cut off that flow and Ditch N will	21	2002 modification?
22	have to be created just to catch the flow up against the	22	A This document appears to be the initial
23	road.	23	submittal of that modification. There was a revision to
24	Q Okay.	24	this document in August of '02, and that became the
25	MR. HEAD: Pass the witness.	25	final submission.
	Page 976		Page 978
1	JUDGE NEWCHURCH: Mr. Blackburn?	1	Q Okay. Now, I have not been able to find in any
2	MR. BLACKBURN: Thank you, Your Honor.	2	of my materials that modification the modification
3	CROSS-EXAMINATION	3	of the modification. I was afraid there might be one
4	BY MR. BLACKBURN:	4	somewhere.
5	Q Is it Mr. Mehevec?	5	In that modification, were any of the
6	A Mehevec, yes, sir.	6	drainage diagrams changed?
7	Q Mr. Mehevec, I have a number of questions to	7	A Yes. Your diagram that you have labeled as
8	ask you. What I'd like to start with is this Rule 11	8	NNC-2 is changed. Your Exhibit NNC-3 was changed.
9	Agreement. And I believe that it is your testimony that	9	These other two aren't associated with the modification.
10	there is a requirement that you make a submission to the	10	Q Right. And can you tell me how they were
11	City. Is that a site development plan; is that what	11	changed, or do you happen to have the changed documents
12	that is?	12	with you?
13	A Yes, sir. That's correct.	13	A I do have all of the relevant drawings of the
14	Q Now, would that be for the increased height,	14	modification, yes.
15	the expansion of the landfill?	15	Q You do?
16	A Yes, that's correct.	16	A Yes.
17	Q And would that include approval of the drainage	17	Q Might I see those?
18	aspects associated with that?	18	A I believe
19	A It's being reviewed for that aspect, yes.	19	MR. GOSSELINK: I possess them, Your Honor.
20	Q And is the City obligated to approve it under	20	I was going to use them to clarify this matter on
21	the Rule 11 Agreement?	21	redirect.
22	A The City, under the agreement, is obligated not	22	MR. BLACKBURN: You know, if we could save
23	to unnecessarily to deny approval. If the application	23	some time, if we could get it clarified on the front end
24	meets all of the current City code and standards, then	24	as opposed to the back end. I thought this might be
25	they are obligated to approve it, just like any other	25	happening, but I didn't have copies myself, but I was

44 (Pages 975 to 978)

	Page 979		Page 981
1		1	
2	certainly concerned that there might be something like	2	prefiled, is dated 5/5/06, and it is the proposed drainage conditions, the other side of the comparison.
3	this coming.	3	= -
	JUDGE NEWCHURCH: Would the parties like an	4	AM-34 is labeled 6-D-1, Existing Drainage
4	opportunity to confer?		Condition, City of Austin. This is a parallel analysis
5	MR. HEAD: Yes.	5	that was done for the City of Austin, and it is the
6	MR. BLACKBURN: I think that would be an	6 7	existing drainage condition utilizing the same landfill
7	excellent thing.		geometry, but using a different drainage analysis.
8	MR. GOSSELINK: We're been fairly good at	8 9	And AM-35 is labeled is Figure 6-D-2,
	conferring. Let's do it again. JUDGE NEWCHURCH: Off the record.		and I haven't given you the Bates labels. I apologize
10 11		10 11	about that. I just realized that. It's the proposed
12	(Recess: 3:56 p.m. to 4:06 p.m.)	12	drainage condition, again utilizing the same landfill
13	(Exhibit BFI Nos. AM-32 through AM-35	13	geometry, but utilizing the City of Austin drainage
14	marked)	14	analysis. So we have both of those. Both the City and
	JUDGE NEWCHURCH: I think we're going to		you will learn from Mr. Mehevec the TxDOT base analysis.
15 16	proceed by agreement. We just need to work out the mechanics of doing this the most efficiently.	15 16	34 and 35, parallel with 16 and 17. They're two ways to make the same analysis, using two
17		17	different hydrologic calculations.
18	case. Perhaps you could offer these and give	18	· -
19	Mr. Mehevec an opportunity to describe them. I think	19	Adam, am I right on that? THE WITNESS: You're doing great.
20	that might be more efficient.	20	JUDGE NEWCHURCH: So are the parties in
21	MR. BLACKBURN: I think that would be very	21	agreement then the four that are not in the record at
22	efficient, Your Honor.	22	this point are AM-32, 33, 34, and 35. Are the parties
23	JUDGE NEWCHURCH: Okay. Let's do it that	23	in agreement all of these should be admitted into the
24		24	record?
25	way, then. MR. GOSSELINK: May I just offer them	25	MR. BLACKBURN: Yes.
23	Page 980	23	Page 982
1	en masse and let him go through it one at a time?	1	MR. HEAD: Yes.
2	MR. BLACKBURN: I'll be happy to go through	2	JUDGE NEWCHURCH: All right. So they are
3	them, because I'm going to need to have them explained	3	all admitted.
4	to me anyway, so	4	(Exhibit BFI Nos. AM-32 through AM-35
5	JUDGE NEWCHURCH: Okay. Well, give me, at	5	admitted)
6	least, a superficial description so the court reporter	6	JUDGE NEWCHURCH: Thank you for your
7	will have that to write down.	7	cooperation.
8	MR. GOSSELINK: I can do that. Okay.	8	And, Mr. Blackburn, back to you.
9	We're going to offer AM-32, which is the	9	MR. BLACKBURN: And, Your Honor, I hope you
10	_	10	will kind of bear with me a little bit. Some of these I
11	think we've come to call it. Okay.	11	haven't seen. I'm not saying they weren't provided in
12	AM-33 is another modification dated	12	discovery, but I never discovered them. Of course, I
13	February 1, 2006. And what you will note is that this	13	didn't discover a lot of things. I'm certainly not
14	modification removed the 11 acres in the upper	14	disparaging anyone but myself.
15 16	right-hand corner, okay? We took out one cell and we	15	Q (BY MR. BLACKBURN) Where to start. Let's
16 17	discussed that in different parts of testimony. That's	16 17	start with AM-32. That is a document that it has two
18	•	18	pages: One by the TCEQ, followed by a TNRCC document,
18 19	,	19	followed by a I presume a revised Figure 3, or at least a Figure 3 from the prior MOD, that may or may not
20	Mr. Mehevec's testimony, is the existing drainage condition in the application which tracks AM-33. And it	20	be revised. I'm going to ask you that in a second.
21	is the baseline that Mr. Blackburn was looking for	21	A Okay.
22	•	22	· · · · · · · · · · · · · · · · · · ·
23	yesterday within NNC-3. MR_TERRILL: Which one is that one Paul?	23	Q So are we on the same document? A We definitely are, yes.
24	MR. TERRILL: Which one is that one, Paul? MR. GOSSELINK: It's AM-16.	24	Q Okay. Figure 3 that is attached to AM-32, is
25	AM-17, which is already in Mr. Mehevec's	25	that the same or different than the proposed drainage
ر ک	Aivi-17, which is ancady in ivit. Withever 8	23	that the same of different than the proposed dramage

45 (Pages 979 to 982)

			Page 985
1	condition in NNC-1?	1	A No, that's not correct. That is the flow
2	A It's different.	2	emanating from the drainage areas that are shown.
3	Q And how is it different?	3	Q Okay. Does it exit the site?
4	A It's been revised based on NOD comments we got	4	A It does, but with additional flow mixed in with
5	from the TCEQ after the initial submittal and the	5	it.
6	addition of the sedimentation ponds on the west side,	6	Q Okay. But that would just be the contribution
7	which were incorporated into the MOD after it was	7	from the site?
8	submitted initially.	8	A From the drainage area. The landfill was
9	Q Now, if you will look with me with regard to	9	modeled as the drainage boundary.
10	the western boundaries of the site, there are two	10	Q Okay.
11	outfalls, one from DA-4 and one from DA-5. Do you see	11	A And so that is the flow from Drainage Areas 4
12	those?	12	and Drainage Areas 5 respectively.
13	A I do, yes.	13	Q So that's the flow off of the landfill?
14	Q And I believe that Sedimentation Pond A is	14	A Right.
15	associated with the outfall from DA-5; and Sedimentation	15	Q That actually is a nice clarification. I
16	Pond B, that we were previously discussing, is	16	appreciate it.
17	associated with DA-4; is that correct?	17	A Okay.
18	A That is correct.	18	Q AM-33?
19	Q Now, there is a Q identified coming out of	19	A I have it.
20	Sedimentation Pond B and exiting the site; do you see	20	Q Letter dated February 1, 2006.
21	that?	21	A That's correct.
22	A I see the value, yes.	22	Q From the TCEQ.
23	Q And what is that value?	23	A Yes, sir.
24	A It's 26 cfs.	24	Q What is this letter?
25	Q And is that the same value that is found on	25	A This is the approval letter for a modification
	Page 984		Page 986
1	Figure 3 in NNC-1?	1	that we submitted in 2006 to remove approximately
2	A Yes, it is.	2	10-1/2 acres from the landfill footprint in the
3	Q And then if you would look at the outfall I	3	northeast portion of the footprint.
4	guess really from Sedimentation Pond A that leaves the	4	Q So it's a modification to the modification?
5	site out of DA-5, what is the flow on Figure 3 from	5	A It's a modification to the permit, yes.
6	AM-32, the new exhibit?	6	Q To the permit which had been modified in 2002
7	A The flow shown there is 66 cfs.	7	by AM-32?
8	Q And is that the same or different from the flow	8	A Right. The permit has had multiple
9	indicated on NNC-1?	9	modifications. This is one of them.
10	A That's the same.	10	Q But in terms of sequencing, there was the NNC-1
11	Q Okay. Now, is this cover letter on AM-32 an	11	application; there were then some changes that were made
12	approval letter from the TCEQ for the modification?	12	and that were approved in the letter and with the
13	A Yes, it is.	13	alteration in AM-32; and then this is the next change in
14	Q So this would be the final approval?	14	sequence AM-33?
15	A Of this modification, yes, that's correct.	15	A Of this group, yes.
16	Q And as finally approved by the letter at AM-32,	16	Q And, again, looking at the Figure 3 Proposed
17	the flow that's authorized or at least is identified as	17	Drainage Condition which I presume was approved by
18	respectively 26 cfs coming out of Sedimentation Pond B	18	the letter in AM-33; is that correct?
19	and 66 coming out of Sedimentation Pond A?	19	A Yes, that's correct.
20	A Can I make one quick clarification?	20	Q The flow exiting Drainage Area 4 is still shown
21	Q Sure.	21	to be 26 cfs, correct?
22	A That flow is not the flow coming out of those	22	A Yes, that's what we calculated.
23	ponds.	23	Q And the flow exiting DA-5 is still shown to be
24 25	Q It's the flow exiting the site at a location	24 25	66 cfs, correct? A That's correct.
47	near those ponds?	²	A Hats collect.

46 (Pages 983 to 986)

documents that I have been given that are City of a Austin-related, and I believe those are AM-34 and AM-35; a is that correct? A That's correct of Q And is it fair to say that the drainage documents? A Compared with the modification or - Q Mell, compared with the way that you have done if for TCEQ purposes. A Compared with the way that you have done if for TCEQ purpose. A Well, both of these were submitted to TCEQ. These were both from the application. Q Right. Well, then - but AM-16 and AM-17 are the existing and proposed drainage condition from the application. These are two parallel ways of calculating the same thing. THE WITNESS: Yes, sir. Q (BY MR, BLACKBURN) So AM-16 is - is intended to top portray the existing permitted condition on the BF1 THE WITNESS: Yes, sir. Q (BY MR, BLACKBURN) So AM-16 is - is intended to top portray the existing permitted condition on the BF1 The Witness or Zeo, was the AM-33? A That's correct. A That's correct. C (BY MA-33) C (BY MR, BLACKBURN) So AM-16 is - is intended to top portray the existing permitted condition on the BF1 The WITNESS: Yes, sir. Q That would law the area that's shown in your existing own that sit the subject of this case? C (BY MR, BLACKBURN) So AM-16 is - is intended to top portray the existing permitted condition on the BF1 The WITNESS: Yes, sir. Q (BY MR, BLACKBURN) So AM-16 is - is intended to top portray the existing permitted condition on the BF1 The WITNESS: Yes, sir. Q (BY MR, BLACKBURN) So AM-16 is - is intended to top portray the existing permitted condition on the BF1 The WITNESS: Yes, sir. Q (BY MR, BLACKBURN) So AM-16 is - is intended to top portray the existing permitted condition on the BF1 The WITNESS: Yes, sir. Q (BY MR, BLACKBURN) So AM-16 is - is intended to top portray the existing permitted condition on the BF1 The WITNESS: Yes, sir. Q (BY MR, BLACKBURN) So AM-16 is - is intended to top portray the existing permitted condition on the BF1 The WITNESS: Yes, sir. Q (BY MR, BLACKBURN) So AM-16 is - is intended to top portr				Page 989
2 documents hat I have been given that are City of 3 Austin-related, and I believe those are AM-34 and AM-35; 4 is that correct? 5 A That's correct. 6 Q And is it fair to say that the drainage 7 calculations are done a bit differently on those 8 documents? 9 A Compared with the modification or	1		1	
3 Austin-related, and I believe those are AM-34 and AM-35; 4 is that correct? 5 A That's correct. 6 Q And is it fair to say that the drainage 6 calculations are done as this differently on those 8 documents? 9 A Compared with the modification or 10 Q Well, compared with the way that you have done 11 it for TCEQ purposes. 12 A Well, both of these were submitted to TCEQ. 13 These were both from the application. 14 Q Right, Well, then - but AM-16 and AM-17 are 15 the existing and proposed drainage condition from the 16 application, correct? 17 A Yes, a well as AM-34 and 35. We did it two 18 different ways in the application. These are two 19 parallel ways of calculating the same thing. 10 parallel ways of calculating the same thing. 11 application that is the subject of this case? 12 application that is the subject of this case? 13 site, correct? 14 A That's correct. 15 A Because 10 Q Rull, nometheless, I'm trying to ask these 10 questions in my kind of simple, plodding way. 16 So 65, you do agree is about two and a half time of the existing and proposed drainage condition from the 15 application, cornect? 16 A Well, boom the application. These are two 17 A Yes, a well as AM-34 and AM-17 are 18 application, are you talking about the current 19 application are you talking about the current 20 application that is the subject of this case? 21 THE WITNESS: Yes, sir. 22 Q Nay M. BLACKBURN So AM-16 is is intended to portray the existing permitted condition on the BFI 24 A That's correct. 25 A The tour this proposed and the proposed of the p				
4 A That's correct. 5 A A That's correct. 6 Q And is it fiair to say that the drainage accelulations are done a bit differently on those documents? 7 calculations are done a bit differently on those documents? 8 A Compared with the modification or - 9 Gwell, compared with the way that you have done it for TCEQ purposes. 9 A Compared with the way that you have done it for TCEQ purposes. 11 if for TCEQ purposes. 12 A Well, both of these were submitted to TCEQ. 13 These were both from the application. 14 Q Right, Well, then but AM-16 and AM-17 are the existing and proposed drainage condition from the application. Ornect? 15 the existing and proposed drainage condition from the application. These are two parallel ways of calculating the same thing. 19 parallel ways of calculating the same thing. 20 JUDGE NEWCHURCH: Okay. When you said "the application" are you alking about the current application that is the subject of this case? 21 application that is the subject of this case? 22 application that is the subject of this case? 23 TER WITNESS. Yes, sir. 24 Q (BY MR. BLACKBURN). So AM-16 is is intended to portrary the existing permitted condition on the BFI portrary the existing p				
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Q Well, how much is we're going from 26 cfs to 19 65 cfs, correct? 19 A Right. But these two analyses are done with 21 completely different methodologies, and they don't even 22 model the same drainage area. There's no increase in 23 flow. These numbers are different. I'll agree with 24 that. 18 A The value on AM-33 is definitely 66, and the drainage from Outfall No. 5 on APP 967 is 175.4 for the same storm. 21 Q Now, do you agree with me that the boundary that for DA-5 is essentially the dashed line that comes roughly in at the top of the Sedimentation Pond A? A Yes. On AM-33, that's correct.	16		16	near Sedimentation Pond A, which is Outfall No. 5, it
Q Well, how much is we're going from 26 cfs to 19 65 cfs, correct? A Right. But these two analyses are done with 21 completely different methodologies, and they don't even 22 model the same drainage area. There's no increase in 23 flow. These numbers are different. I'll agree with 24 that. A The value on AM-33 is definitely 66, and the drainage from Outfall No. 5 on APP 967 is 175.4 for the same storm. Q Now, do you agree with me that the boundary that for DA-5 is essentially the dashed line that comes roughly in at the top of the Sedimentation Pond A? A Yes. On AM-33, that's correct.	17	A No. I would say that's incorrect.	17	has gone from 66 to 175 cfs. Do you see that?
19 65 cfs, correct? 20 A Right. But these two analyses are done with 21 completely different methodologies, and they don't even 22 model the same drainage area. There's no increase in 23 flow. These numbers are different. I'll agree with 24 that. 19 drainage from Outfall No. 5 on APP 967 is 175.4 for the 20 same storm. 21 Q Now, do you agree with me that the boundary 22 that for DA-5 is essentially the dashed line that 23 comes roughly in at the top of the Sedimentation Pond A? 24 A Yes. On AM-33, that's correct.	18		18	A The value on AM-33 is definitely 66, and the
completely different methodologies, and they don't even model the same drainage area. There's no increase in flow. These numbers are different. I'll agree with that. Q Now, do you agree with me that the boundary that for DA-5 is essentially the dashed line that comes roughly in at the top of the Sedimentation Pond A? A Yes. On AM-33, that's correct.	19		19	drainage from Outfall No. 5 on APP 967 is 175.4 for the
model the same drainage area. There's no increase in flow. These numbers are different. I'll agree with that. 22 that for DA-5 is essentially the dashed line that comes roughly in at the top of the Sedimentation Pond A? A Yes. On AM-33, that's correct.	20	A Right. But these two analyses are done with	20	same storm.
23 flow. These numbers are different. I'll agree with 24 that. 23 comes roughly in at the top of the Sedimentation Pond A? 24 A Yes. On AM-33, that's correct.	21	completely different methodologies, and they don't even	21	Q Now, do you agree with me that the boundary
23 flow. These numbers are different. I'll agree with 24 that. 23 comes roughly in at the top of the Sedimentation Pond A? 24 A Yes. On AM-33, that's correct.	22	model the same drainage area. There's no increase in	22	that for DA-5 is essentially the dashed line that
24 that. 24 A Yes. On AM-33, that's correct.	23		23	comes roughly in at the top of the Sedimentation Pond A?
Q Let's start with that. The numbers are 25 Q And do you agree with me that on AM-16, the	24	that.	24	
	25	Q Let's start with that. The numbers are	25	Q And do you agree with me that on AM-16, the

47 (Pages 987 to 990)

	Page 991		Page 993
1	boundary line for D-7, which is indicated as being 35.93	1	A Okay.
2	acres, includes an area that on AM-33 Figure 3 is shown	2	Q What I'm interested in your marking on and
3	known going to the northeast, if you will, a tip up to	3	this is AM-33 there is an area that has been added in
4	the northeast corner?	4	AM-16 that now it's a triangle that is now included that
5	A That is correct.	5	was shown in the AM-33 as draining to the north and then
6	Q And that tip has now been rerouted in AM-16	6	to the east. Do you see that?
7	back to the south to Outfall No. 5, correct?	7	A Yes, sir.
8	A No. The flow has been correctly routed. It	8	Q Could you outline that triangle on I believe
9	was not rerouted. It was incorrectly shown in AM-33,	9	that this is AM-33.
10	because we do not have accurate topographic data at the	10	A Do you want me to transpose from AM-16 to
11	time for that area.	11	AM-33?
12	Q So you're saying you made a mistake whenever	12	Q Yes, to draw that triangle.
13	you figured when you did Figure 3 on AM-33?	13	A I will do my best.
14	A No, sir. I'm saying that based on the	14	Q You have drawn a triangle on AM-33, correct?
15	1 & 1	15	A That's correct.
16	delineated the watershed. We later, after taking more	16	Q Now, that triangle that I asked you to draw,
17	extensive survey of that area, realized that that was	17	that is part of the landfill, correct?
18	not a correct delineation.	18	A Yes, it is.
19	Q Now, are you aware that when the TCEQ approved		Q So when you said that you redid your
20	your modification that the modification indicated no	20	topographic map, that hadn't been built yet, has it?
21 22	increase over existing conditions when 26 cfs outfall was shown in what is now called Outfall No. 4 and when	21 22	A That portion of landfill had probably not been
23	66 was shown at Outfall No. 5?	23	built yet. Q And, in fact, you can engineer that to flow
24	A I am aware of that, yes.	24	that direction, can you not?
25	Q So what you're saying is you really didn't	25	A Yes. In fact, on the landfill, it is flowing
	Page 992		Page 994
1	correctly represent that at that flow, at that outfall,	1	that direction. It's flowing towards the north.
2	based on the configuration of the landfill?	2	Q But you're showing it coming back to the south
3	A No, I'm not saying that.	3	on AM-16?
4	Q Well, isn't the topography that you're showing	4	A Right, because once the water leaves the
5	here topography that you create?	5	landfill and gets onto the buffer, it actually turns
6	A Only on the landfill.	6	around and it flows back towards Outfall 5.
7	Q Isn't that the direction isn't that where	7	Q But you can engineer it to go on around the
8	the arrows are going to the north within what's	8	corner, can't you?
9	MR. BLACKBURN: Let me approach, if I	9	A Are you asking if we could have designed a
10 11		10 11	landfill that would have forced this water around the corner?
12	Q (BY MR. BLACKBURN) I'm going to get you let		Q Yes.
13	me get you a nice marker. I have a blue marker.	13	A I didn't explore that possibility, but it's
14		14	possible that we could have carried berms to take it
15		15	around the corner.
16		16	Q But, in fact, that is what you represented as
17		17	occurring in the modification, right?
18		18	A Well, based on the topographic information
19		19	available, that's what it looked like was going on.
20	to AM-16. Would you pull those two	20	Q Did anyone ever give you approval to reroute
21	THE REPORTER: Excuse me. This is the	21	that water to the south?
22	original exhibit.	22	A I have not rerouted any water.
23	A Do you want me to mark on this one?	23	Q Your arrows do not go where they're shown as
24		24	going on AM-33, do they?
25	if you marked on the real thing.	25	A Those arrows are diversion berms on the cap.

48 (Pages 991 to 994)

1	Page 995		Page 997
1	Q Right.	1	AM-16.
2	A Water on the landfill cap is flowing in that	2	A Okay.
3	direction along those berms.	3	Q In terms of the drainage area draining to
4	Q And these	4	Outfall No. 5, would you agree with me that that
5	A Once it hits the ground, it follows natural	5	drainage area is shown as increasing from 27 acres in
6	topography, which I did not design or alter.	6	AM-33 to 35.93 acres in AM-16?
7	Q Did you see at the very top of the diagram at	7	A Those are the correct numbers, yes.
8	AM-33 the arrow that indicates the flow is going around	8	MR. BLACKBURN: Excuse me just a second,
9	the corner?	9	Your Honor.
10	A That's a continuation of a berm, yes.	10	JUDGE NEWCHURCH: Yes, sir.
11	Q Does it, in fact, do that?	11	MR. BLACKBURN: I have one colored copy,
12	A It looks like it does, yes.	12	and then the rest are black-and-white.
13	Q And it continues on around and goes all the way	13	JUDGE NEWCHURCH: Thank you.
14	down to the end of DA-6?	14	MR. BLACKBURN: Which number are we on?
15		15	THE REPORTER: This should be No. 6.
16	-	16	(Exhibit No. NNC-6 marked)
17	have a slope on them. So the ones that start at the top	17	Q (By Mr. Blackburn) Mr. Mehevec?
18	of four-to-one can make it farther before hitting the	18	A Yes, sir.
19	ground. The lower berms are forced to run into the	19	
20	-	20	Q I'd like you to look at NNC No. 6. I believe this is a map from the application, APP 000227. And I'm
21	-	21	
22		22	going to ask you: Have you ever seen this map before?
23	7	23	A Yes, I have.
	1		Q And do you see a wetland area of 3.5 acres
24	no increase in flow coming off the site in the	24	that's identified there?
25	modification, did you not?	25	A Yes. I see an area that's identified as a
	Page 996		Page 998
1	A Right. And we compared the same analysis and	1	wetland, 3.5 acres.
2	the modification existing and proposed.	2	Q Okay. Now, Have you prepared grading plans for
3	Q One might suggest that you were misrepresenting	3	the site?
4	the flow in your modification.	4	A I have in the past, yes.
5	MR. GOSSELINK: Objection; argumentative.	5	Q Do you not indicate grading going across this
6	JUDGE NEWCHURCH: Response?	6	area where the 3.5-acre wetland is?
7	A And I would strongly disagree with that.	7	A We did in the past, yes.
8	JUDGE NEWCHURCH: Just a second.	8	Q And that's, in fact, in the application right
9	Do you have a response?	9	now, is it not?
10	A I disagree with that statement.	10	A If it is, it's based on some old designs we had
11	JUDGE NEWCHURCH: No, not you.	11	for the channel project.
12	MR. BLACKBURN: He does, Your Honor, and so	12	Q So are you telling me it's a mistake if, in
13	do I. I will withdraw the question.	13	fact, there is a representation of grading occurring
14	Q (BY MR. BLACKBURN) Do you have to bring before	14	across that wetland?
15		15	A Well, I haven't seen the document you're
16	•	16	referring to so I can't tell you if it's representing
17		17	something we're proposing to do or if it's a copy of
18	-	18	something we submitted prior. But when we were going to
19		19	build the channel project, we were going to be grading
20	down at the bottom left and beyond 66 cfs in the sort of	20	this area because no wetlands had been identified in
21	top left?	21	this area. The wetland was since identified and we
22	•	22	abandoned those plans to protect the wetland.
		23	Q To your knowledge, has recycling material been
23			
23 24	Q Thank you.	24	stored in this wetland?

49 (Pages 995 to 998)

			- 1001
	Page 999		Page 1001
1	Q Are you sure of that?	1	been mentioned in his report. I don't know.
2	A Of all of the site visits I have ever made,	2	Q Let me cross-check that. APP 218 is
3	which are very numerous, I've never seen recycling	3	Mr. Sherrod's report or at least a report that was
4	materials sitting out there.	4	prepared by Horizon Environmental that puts forth the
5	MR. BLACKBURN: I move for the admission of	5	jurisdictional determination, and it's dated okay,
6	NNC-6.	6	it's dated October 2005, but it's indicated as being
7	JUDGE NEWCHURCH: Any objection?	7	revised on January 18th, 2007. Do you know when that
8	MR. GOSSELINK: No.	8	wetland was, in fact, delineated?
9	JUDGE NEWCHURCH: It's admitted.	9	A I was with Mr. Sherrod the day that he first
10	,	10	came upon the wetland. I know the channel project was
11	, , ,	11	under construction, which was my purpose for being at
12	find and ask the court reporter to help you find I	12	the site. I believe the channel was being I actually
13	believe this is Mr. Shull's exhibits, Exhibit No. RS-7.	13	don't remember what year we were starting construction
14	,	14	on the channel, but I do remember going out there and
15	,	15	talking to him about it. And then he came back later
16	A Okay. I have it.	16	and delineated it by himself.
17	Q There appears to be a grading plan.	17	Q And, in fact, it was delineated in October
18	A Which sheet are you on?	18	of 2005, was it not?
19	Q Okay. Go to Sheet 4 of 15, please.	19	A I'll take your word for that.
20	A Okay.	20	Q And the submission to the City appears to be in
21	Q Now, do you see Proposed Conditions and Grading	21	2006, does it not?
22	Plan?	22	A No. The original submission this project
23		23	has been revised multiple times. The original was
24	Q And do you see where it shows grading going	24	submitted it was originally submitted in 2002. It
25	right across the wetland?	25	was revised in 2005, and it was revised again in 2007.
	Page 1000		Page 1002
1	A That was what was submitted to the City when we	1	Q If you will look at Sheet 4 of 15.
2	did the channel site development plan, yes.	2	A Right.
3	Q And is that what you're proposing to do at this	3	Q Sheet 4 of 15 is dated April 19th, 2007; is it
4	point in time?	4	not?
5	A No.	5	A Right. And I believe it's indicated that that
6	Q And this is what you were referring to as	6	is the second revision to this sheet.
7	having been changed?	7	Q Right. But it still has the grading contours
8	A This is what we were proposing to do until the	8	on it.
9	delineation of the wetland area.	9	A Right, because the only change was to add the
10	Q Did the City approve this?	10	pond.
11	A The City did approve this, yes, because they	11	Q I'm sorry. I thought you had decided to drop
12	had come out to inspect the site, along with our	12	the grading
13	wetlands people, and there were no wetlands detected in	13	A We had.
14	that area. The wetland was later delineated, and we	14	Q as soon as you found the wetland?
15	modified our plans to not fill that area.	15	A We did decide that, and we did not grade that
16	Q So to the extent you identify grading in any of	16	area.
17	these exhibits across that wetland area, you're telling	17	Q That change was not represented on your
18	me that I should disregard that, that those have been	18	drawing, was it?
19	changed?	19	A That's correct.
20	A Right. And, in fact, that project has been	20	MR. BLACKBURN: Excuse me, Your Honor.
21	completed and signed off by the City and that grading	21	It's going to take just a second.
22	was not done as a part of that project.	22	JUDGE NEWCHURCH: Off the record.
23	Q Are you aware of when the wetland was	23	(Off the record)
24	delineated by Mr. Sherrod?	24	Q (BY MR. BLACKBURN) Would you turn to Page 1093
25	A I'm not aware of the exact date. It may have	25	of the application, please.

50 (Pages 999 to 1002)

			1
	Page 1003		Page 1005
1	A Which volume is it?	1	because that water was not being routed through the
2	Q It's Volume 2, if I'm not mistaken. That's	2	pond. And if it falls in the pond, it obviously will be
3	what I was just trying to go through to figure out which	3	routed through pond, which will lower the flow coming
4	volume.	4	out at Outfall 1.
5	MR. TERRILL: Mr. Blackburn, what was the	5	Q It might affect the timing, might it not? And,
6	page?	6	in fact, isn't HEC modeling all about the timing of the
7	MR. BLACKBURN: 1093.	7	various inputs basically assembly?
8	A Okay. I have it.	8	A That is one piece of the model.
9	MR. BLACKBURN: Is everybody with me?	9	Q And, in fact, that's where most of the
10	JUDGE NEWCHURCH: Yes.	10	hydrologic impacts come from, does it not, is that
11	Q (BY MR. BLACKBURN) Is this a schematic diagram	11	you're adding various input areas and you're comparing
12	of how the HEC 1 computer model basically pulls the flow	12	their timing and that's why you use a computer for it,
13	data together and assembles it?	13	right?
14	A This is a schematic HEC-HMS is the program	14	A Well, the timing is one piece. The major
15	we use of how the model has been set up for	15	contributor is the rainfall itself and the runoff from
16	Outfall 1.	16	the individual drainage areas. How they run together
17	Q And so, basically, it shows where different	17	does affect the peak flow, but the major contribution is
18	contributing areas are sort of routed into the model; is	18	the actual flow coming from those areas.
19	that correct?	19	Q So when you did this, you actually knew that
20	A That's correct, but it is not to scale. It	20	this is what you were doing?
21	simply shows where things are located related to each	21	A Did I realize that the pond was included in
22	other.	22	Drainage Area 10 and that there was some water that
23	Q Right. No, I understand.	23	would fall directly on the pond?
24	A All right.	24	Q Right.
25	Q My question is this: Where is rainfall that	25	A Yes, I was probably aware of that.
	Page 1004		Page 1006
1	falls on the pond, for example, the detention reservoir,	1	MR. BLACKBURN: Thank you. Pass the
2	where does that rainfall get put into the model?	2	witness.
3	A It's included as water that falls directly	3	JUDGE NEWCHURCH: Is there redirect?
4	on the proposed pond?	4	MR. GOSSELINK: There will be, probably
5	Q Correct.	5	quite a bit. Do you want me to get started, or what do
6	A It's included as part of Drainage Area 10.	6	you want me to do?
7	Q And it is not actually routed through the	7	JUDGE NEWCHURCH: Well, if there's going to
8	reservoir, is it?	8	be quite a bit, we should probably break for the day,
9	A No.	9	then. Let's go off the record and talk about next week.
10	Q And, in fact, doesn't that affect essentially	10	(Discussion off the record)
11	the accuracy of the modeling itself?	11	JUDGE NEWCHURCH: Back on the record.
12	A It would tend to lower the flows very slightly.	12	And I think we're proceeding by agreement.
13	Q And lowered flows, is that a concern to you?	13	Mr. Mehevec, you discovered something that needs to be
14	A Is a lower peak flow of concern to me?	14	changed in your prefiled testimony?
15	Q Yeah.	15	THE WITNESS: That's correct.
16	A No, it's not a concern.	16	JUDGE NEWCHURCH: And what page which
17	Q I mean, isn't it the higher peak flow that one	17	exhibit, first of all?
18	would be concerned about in terms of comparing this	18	THE WITNESS: Bear with me one minute.
19	landfill and its impacts to existing conditions?	19	JUDGE NEWCHURCH: This is the insert to
20	A If it was a significant increase using	20	AM-1, so it's AM-31. Is that what you changed?
21	comparable methodologies, then yes.	21	THE WITNESS: Yes.
22	Q But we don't know if it's a significant	22	JUDGE NEWCHURCH: And which page?
23	increase or not because you didn't model that, correct?	23	THE WITNESS: This would be Page 46A, what
24	A Well, I will state to you that my professional	24	was called 46A.
25	opinion is that it can only serve to lower the flow	25	JUDGE NEWCHURCH: What line?

51 (Pages 1003 to 1006)

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	1
	Page 1007
1	THE WITNESS: The change would be in
2	Line 22, the last line of the page.
3	JUDGE NEWCHURCH: What is that change?
4	THE WITNESS: I would move to strike the
5	word "additional" and to insert the word "timely"
6	before the word "routing."
7	MR. HEAD: Timely and what word?
8	THE WITNESS: "Timely routing of stormwater
9	to and through the detention sedimentation pond."
9 10	JUDGE NEWCHURCH: All right. Does anyone
11	object to that change being made?
12	Then let it be made on the official record.
	And we've talked while we were off the
13 14	
	record about witnesses in preparation for next week.
15 16	And when we reconvene on Monday, we will complete
16	Mr. Mehevec's testimony. And the parties should be
17	prepared for cross-examination of witnesses McInturff,
18	Lewis, and Worrall.
19	And we will reconvene at 9:00 o'clock
20	Monday morning.
21	Is there anything else? We are recessed.
22 23	we are recessed. Thank you.
24 25	(Proceedings recessed at 4:55 p.m.)

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