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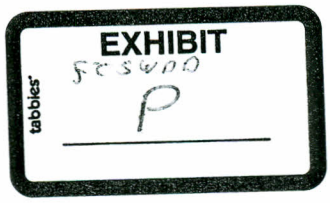
BEFORE THE ENVIRONMENTAL QUALITY COUNCIL
STATE OF WYOMING

IN THE MATTER OF THE) DOCKET NO. 11-5602
OBJECTION TO THE PROPOSED)
RENEWAL PERMIT SAND DRAW)
LANDFILL, SHWD FILE)
#10-195,)
-----)

COPY

DEPOSITION OF PATRICK TROXEL

TAKEN ON BEHALF OF THE
FREMONT COUNTY SOLID WASTE DISPOSAL DISTRICT
AT LANDER, WYOMING
OCTOBER 13, 2011 AT 9:03 A.M.



REPORTED BY:
JOAN MARSHALL, C.S.R.
Notary Public

1 rephrase the question for me?

2 Q. Yes. You're speaking as both a member of
3 the DEQ and as a resident of Fremont County, and so
4 when you make the statement, "It's been the
5 Department's recommendation to the board that we
6 maximize vertical expansion," that was a Department
7 position, correct?

8 A. Yes.

9 Q. And then the last sentence of that
10 paragraph says, "So I think the numbers definitely
11 are on their way up, and it's a matter of 10- to
12 14-year gain." Where did the 10- to 14-year gain
13 come in? I mean how was that arrived at?

14 A. I -- those numbers came from a -- the
15 proposal at the time from Inberg-Miller Engineers
16 regarding the vertical expansion that was proposed.

17 Q. The Department's position has not changed
18 since you made this statement; is that correct?

19 A. Could you be more specific in your
20 question, please.

21 Q. Sure. I have in two areas the
22 Department's position was that you want to maximize
23 vertical expansion, and you were looking at 10 to
24 14 years of additional life. The Department's
25 position has not changed on those two items, has

1 it?

2 A. The Department's position has not changed
3 in regards to the original discussions regarding an
4 additional 10 to 14 years of expansion.

5 Q. And tell me what that means by their
6 position hasn't changed. What is their position?

7 A. You -- there are several communication --
8 written communications between Carl Anderson, the
9 administrator and Fremont County regarding the
10 original -- I'll call it the original agreement to
11 expand vertically the 10 to 14 years, and that has
12 been maintained as the agreement.

13 Q. So this is in January 2002, and so 10 to
14 14 years of vertical expansion would mean 2012 to
15 2016, correct?

16 A. I would agree.

17 Q. And it's still the Department's position
18 to maximize the vertical expansion?

19 A. I would not agree.

20 Q. Tell me why you don't agree.

21 A. The administrator has again -- again,
22 there have been written communications indicating
23 that, I believe -- I don't know the exact date, but
24 the year is 2018 as the agreed-upon expansion.

25 Q. On what basis has the date changed from

1 an area of 2012 to 2016 to now 2018?

2 A. I do not know.

3 Q. Well, I'm lost here. You're the person
4 who approves the permits?

5 A. No.

6 Q. What do you do? You review them?

7 A. Yes.

8 Q. And following your review completion,
9 what happens?

10 A. That's a very broad question. It depends
11 on the results of the review what happens.

12 Q. Well, let's take the current review. The
13 current review, one of the comments you submitted
14 in there is unless certain proofs were provided by
15 the District, they had to cease receiving waste at
16 that facility on December 31st, 2018; is that
17 correct?

18 A. No.

19 Q. What was that comment? Not verbatim,
20 but --

21 A. I cannot tell it to you verbatim, but
22 I -- there is a requirement to provide a
23 demonstration regarding continued disposal in the
24 original 80 acres beyond 2018 or they would have to
25 either move into the expansion area or take it to

1 another facility or do something different.

2 Q. They couldn't put waste there anymore?

3 A. In the original 80 acres, correct.

4 Q. And my question is: How did you arrived
5 at the December 31st, 2018 date?

6 A. I do not recall.

7 Q. It seems like a pretty important date
8 that, it seems to me -- and let me make a statement
9 and ask you a follow-up question. A portion of
10 the, if not all of the DEQ's regulatory functions
11 are to ensure that the environment is protected.
12 Would you agree with that?

13 A. Yes.

14 Q. And so it seems by setting the date of
15 December 31st, 2018, it's your belief that unless
16 the demonstrations are made, any disposal at that
17 landfill after that date would be detrimental to
18 the environment. Is that correct?

19 THE DEPONENT: Can we confer?

20 MR. ESCH: I think you have to first
21 answer his question there. Ask him to rephrase
22 or. . .

23 A. Could you -- yeah, would you rephrase
24 that for me, please.

25 / / /

1 BY MR. SOLLARS:

2 Q. Well, my question was this -- you agreed
3 that one of the functions of the DEQ is to provide
4 protection for the environment. And so my question
5 was: It appears that you've made a determination
6 that unless a demonstration is made by the
7 District, that any disposal after December 31st,
8 2018 would be detrimental to the environment. Is
9 that correct?

10 A. No.

11 Q. Tell me why it's not correct.

12 A. We have not made that assertion.

13 Q. Well, then why is that a cutoff date if a
14 demonstration is not made?

15 A. Because the solid waste rules and
16 regulations require a facility -- in order to
17 dispose in a facility without a liner, it is
18 required they demonstrate. And there's a -- it's
19 specific in the rules, and I can read that to you
20 if you'd like, specific to the rules the
21 requirements of that demonstration to construct
22 without a liner. The original time frame that was
23 given to the District to do that was in recognition
24 of issues at the facilities and the needed time to
25 make that demonstration.

1 I would have to -- I would have to go --
2 I would have to go through the files and look at
3 specifics and details to give exact time frames and
4 exact dates, but in general, that was why the
5 additional time was given, was to make that
6 evaluation.

7 Q. And the liners that you talked about,
8 engineered containment systems --

9 A. Correct.

10 Q. -- I think is the proper term, those
11 apply to new disposal areas?

12 A. I would have to look up the definition.

13 Q. Please do.

14 MR. ESCH: Can we take five minutes real
15 quick?

16 MR. SOLLARS: Absolutely. We'll go off
17 the record.

18 (Whereupon, a recess was taken at 9:48
19 and subsequently reconvened at 9:54.)

20 MR. SOLLARS: Was there a question
21 pending?

22 MR. ESCH: You know, I think you were
23 asking him to find in the regulations about the
24 liner demonstration.

25 / / /

1 BY MR. SOLLARS:

2 Q. Okay. Yes. And you have it open, so I
3 assume you've done so.

4 A. Yes.

5 Q. Can you tell me which section on the
6 liner?

7 A. Chapter 2, Section 4(j) and (k).

8 Q. What does that say?

9 A. Section 4(j) is the engineered
10 containment system requirement. Section 4(k) is the
11 design/construction of engineered containment
12 systems.

13 Q. So I'm probably interested in (j), the
14 requirements section. What does it say with
15 regards to when one is required?

16 A. I'm assuming you mean applicability.

17 Q. Yes.

18 A. "Applicability: Effective on the dates
19 specified in paragraph (j)(ii) of this section, new
20 Type I sanitary landfills, new landfill cells at
21 existing Type I sanitary landfills, and horizontal
22 expansions of area fills at existing Type I
23 sanitary landfills must meet --"

24 (Whereupon, discussion was held off the
25 record.)

1 A. "-- at existing Type I sanitary landfills
2 must meet the requirements of Sections 4(j) and
3 4(k) of this chapter unless the operator
4 demonstrates to the administrator that all of the
5 following conditions are met," colon.

6 BY MR. SOLLARS:

7 Q. So how does that section apply to a
8 vertical expansion?

9 A. Section 4(j) does not identify, in what I
10 read, vertical expansion.

11 Q. So it's your testimony, then, that the
12 engineered containment system liner is not
13 applicable to a vertical expansion?

14 A. Yes.

15 Q. Since -- and I'm going to use the date
16 again, 1999. For some reason, I think that's when
17 the old permit originally expired before there were
18 extensions, so that's what I'm talking about there.
19 And the date could be off. I'll tell you that now.

20 The District has submitted at least two
21 prior applications for a permit before the current
22 pending application. Do you recall that?

23 A. Yes.

24 Q. And were you the reviewer on those
25 applications?

1 of you from the District, by the consent decree, it
2 had to be submitted December 31st, 2010. And you
3 agree with me that that was met?

4 **A. Yes.**

5 **Q.** And I think actually I got your pleadings
6 to dismiss the legal action on the basis that the
7 District had, in fact, fulfilled its obligations.

8 In that submission, the District's
9 engineers -- I believe Trihydro; is that correct?

10 **A. Correct.**

11 **Q.** -- had proposed a closure date of the
12 current 80 acres to 2037. Do you recall that?

13 **A. I believe that's the date.**

14 **Q.** And what that roughly corresponds with in
15 Exhibit 3 in paragraph 2 is the 26 years of current
16 capacity. Would you agree with that?

17 **A. Yes.**

18 **Q.** What I need to know -- I'm going to leave
19 those tabs on there. You can mark this as 4.
20 Let's make this 5. That will be 5. I got them out
21 of order.

22 (Whereupon, Troxel Exhibit Numbers 4 and
23 5 were marked for identification.)

24 BY MR. SOLLARS:

25 **Q.** I'm going to hand you Exhibit 5, and I'll

1 represent to you that this was the District's
2 response to Mr. Anderson's letter that was
3 Exhibit 3. Okay? Have you seen this letter
4 before?

5 **A. I have.**

6 **Q.** And, in fact, you were copied on it. And
7 you see that the paragraph in Exhibit 3 that we
8 read that's saying the life of the existing 80
9 acres would be greater than 6 but less than 26, the
10 District never agreed to that. Okay?

11 **A. Yes.**

12 **Q.** And, in fact, if you'll read under item
13 1, the second sentence, it says, "Rather, the
14 District representatives expressed a need to place
15 waste in the 80 acres for so long as space was
16 available under the vertical expansion."

17 My question is: The District was
18 proposing to maximize vertical expansion, right?
19 Correct?

20 **A. I would assume so, yes.**

21 **Q.** I mean that's what it says. They want to
22 maximize it, put it there as long as possible,
23 right?

24 **A. Yes.**

25 **Q.** Now we'll go to 4.

1 Did I give you a copy of 4, Luke?

2 MR. ESCH: Yes.

3 BY MR. SOLLARS:

4 **Q.** And I've got some tabs on here. They
5 were for my convenience but probably also serve you
6 as well. Exhibit 4 is a March 28th, 2011 letter
7 from Mr. Anderson to the District chairman,
8 Mr. McDonald, and it includes review comments. Am
9 I correct in that?

10 **A. Yes.**

11 **Q.** And I'm correct that there's been two
12 review comments submitted by the DEQ with regards
13 to this application?

14 **A. This one identifies three permit review
15 comments.**

16 **Q.** Ask a bad question, don't get the answer
17 you want.

18 If you'll look at the first page of the
19 review comments --

20 **A. Yes.**

21 **Q.** -- it says review completed, and then it
22 says first, March 25th, 2011.

23 **A. Correct.**

24 **Q.** What I was getting at is subsequent to
25 this, there was a final review done?

1 **A. I believe so, yes.**

2 **Q.** Now, I want to go through -- if you'll
3 turn to page 2 of Mr. Anderson's letter, it says
4 that on January 18th, 2002, the Department sent a
5 notice that the remaining permitted life of the 80
6 acres was 2.8 years, and the Department committed
7 to a vertical expansion to add up to 14 years of
8 life. So that would be 2016; am I correct?

9 **A. Yes.**

10 **Q.** Is that where Mr. Anderson came up with
11 this date of December 31st, 2018?

12 **A. I do not know.**

13 **Q.** But certainly it's contrary to the
14 January 1st, 2028 that he also made a proposal on?

15 **A. It is not the same date.**

16 **Q.** But you don't know the reason why either
17 date would have been acceptable?

18 **A. Correct.**

19 **Q.** Okay.

20 **A. It seems to explain it in the next
21 sentence.**

22 **Q.** What does it explain, just in your terms,
23 in the next sentence?

24 **A. It indicates, "On March 17th, 2003, the
25 District submitted a plan and timetable to complete**

1 filling of the existing 80 acres by December 13th,
2 2018, giving the District approximately 15 years of
3 additional capacity beyond what had previously been
4 permitted and more time to establish a long-term
5 plan for waste management."

6 Q. So it was based upon --

7 A. "The Department considers these documents
8 to be a commitment by both parties that disposal in
9 the original 80 acres would not continue beyond
10 December 31st, 2018."

11 Q. Is that based upon any scientific
12 evidence that you know --

13 A. I do not.

14 Q. -- or just a commitment?

15 A. I do not know. It says the District
16 submitted a plan and a timetable.

17 Q. If you will turn to -- it should be the
18 first tab, page 6 of 31. Okay. Now, what these
19 are are comments. These are your comments; is that
20 correct?

21 A. I would have to read them, but in all
22 likelihood, they are.

23 Q. I want to look at the -- on that, it's
24 the comments at the bottom, the second paragraph,
25 second line says. "The application also suggests

1 decreases in the static water levels. And then it
2 says, "None of these conditions mentioned in
3 support of perched groundwater in and of themselves
4 confirm the presence of perched groundwater." On
5 what basis did you make that statement?

6 A. The basis for that statement is that
7 having relatively consistent groundwater elevations
8 does not in and of itself define perched, nor does
9 fluctuations, nor does a gradient.

10 Q. But the District's representatives,
11 engineers, geologists, whatever, have come to the
12 conclusion that it's perched. And do you have any
13 data that disputes that?

14 A. No.

15 Q. Would I be correct in assuming that
16 saying you've analyzed your data, you've come to
17 this conclusion, you, meaning the District's
18 engineers, but I, meaning the reviewer, doesn't
19 agree with it? Is that accurate?

20 A. Yes.

21 Q. But you have no basis to say that it's
22 inaccurate, just questions?

23 A. No.

24 Q. What basis do you have to say that it's
25 inaccurate?

1 that shallow groundwater may be perched.
2 Historical data submitted by the applicant has
3 consistently indicated that wells are in
4 hydrogeologic communication." What basis do you
5 have for making that statement?

6 A. Historical groundwater reports and
7 information submitted by the District indicating
8 that there is a potentiometric surface and
9 groundwater flow and direction and a gradient.

10 Q. You need to explain all of that to me
11 because I know it makes sense to you but not me.

12 A. In order to have a -- in order to have a
13 gradient, it would be similar to a slope. And in
14 order to have a slope and a flow direction, the
15 wells all -- all the groundwater in the given wells
16 would be in the same unit or in communication with
17 each other in order to have a slope and a gradient.

18 Q. If you'll turn to the next page, and I'm
19 going to paraphrase some of this, shorten the
20 record, but the first paragraph says that the
21 permit application states that the lack of recharge
22 in the northern portion and relatively consistent
23 static water levels suggest the presence of one or
24 more perched zones. However, the application also
25 notes water level trends and annual increases and

1 A. Let's see. In the one, two, third
2 paragraph on page 7 of 31, Section 3.7,
3 paragraph 3, sentence number 2, the determination
4 was that the data provided does not sufficiently
5 support the presence of perched zones or define the
6 nature and extent of these zones.

7 Q. What do you mean by that, by the nature
8 and extent of these zones?

9 A. Nature would be characteristics of it,
10 and extent would be lateral is where -- lateral and
11 vertical extent of the perched zone itself or the
12 zone or the cause for it being perched.

13 Q. Is it accurate, then, to say that on the
14 issue of the perched groundwater, that the District
15 has presented data that it interprets to indicate
16 that these zones are perched, but it's your
17 position that the data is not sufficient to
18 conclusively show that it's perched, but you have
19 no additional data to show that it's not? Is that
20 correct?

21 A. Yes.

22 Q. Let's go to the second tab. It should be
23 page 9 of 31. And this talks about Section 4.4 of
24 the application, which is total facility capacity,
25 correct?

1 **A. There are -- yes, there are time frames**
2 **within statute and the rules about renewals and**
3 **determinations based on renewals.**

4 **Q.** And I understand that's 90 days for
5 initial submission.

6 **A. For a renewal, the rule allows for**
7 **90 days.**

8 **Q.** I know on a previous occasion there was a
9 significantly longer period that was taken,
10 somewhere in the range of 250 or 259 days, and it
11 was on one of the previous applications that had
12 been filed. Do you recall that?

13 **A. Not the exact number of days, but I do**
14 **recall there have been instances where the review**
15 **cycle was longer than the 90 days.**

16 **Q.** And do you recall the reasons that it
17 took longer?

18 **A. I do not.**

19 **Q.** All right. So it's submitted to you.
20 You have 90 days to review it pursuant to the
21 rules. Do you solely review it?

22 **A. Typically, yes, I would be the sole**
23 **reviewer, with consultation usually with the**
24 **program manager, Bob Doctor, at completion and**
25 **discussion with him about findings, and that would**

1 **be reviewed.**

2 **Q.** So you review it. You do your comments
3 and your findings on technical adequacy and whether
4 it's complete. You write those down, and then you
5 and Mr. Doctor sit down and review those?

6 **A. Typically, yes.**

7 **Q.** Does anyone else typically review them?

8 **A. Well, because in this case with a final**
9 **review, they would then go to Carl Anderson, the**
10 **administrator, for a final review and approval and**
11 **issuance. They all -- our reviews and comments and**
12 **determinations are all finalized by the**
13 **administrator.**

14 **Q.** All right. My ultimate question is going
15 to be why this was a final review. As background
16 for that, it appears that the District submitted an
17 application. You submitted a first review. The
18 District made comments to that first review. You
19 then issued a final review. Why was this final
20 rather than having the District -- rather than
21 giving the District an opportunity to respond to
22 the comments?

23 **A. Well, I -- when I submitted my review to**
24 **the administrator, in that discussion, the**
25 **administrator, Carl Anderson, wanted this review to**

1 **be complete, and that is why, as they are -- they**
2 **were determined to be complete and technically**
3 **adequate with the permit conditions.**

4 **Q.** I'm digesting what you said, "Complete
5 and technically adequate with the permit
6 conditions." So does that mean that based upon the
7 application and your final review, that the
8 Department would submit a proposed permit with
9 conditions that would then go through the public
10 hearing process?

11 **A. Yes.**

12 **Q.** Let's go to the first tab here, and it
13 should lead us to page 7. And it's page 7, I guess
14 it's the first full paragraph that starts with
15 finally.

16 **A. Uh-huh.**

17 **Q.** It says, "Finally, groundwater monitoring
18 data indicates groundwater quality at the Sand Draw
19 Landfill has been/is being altered."

20 Do you recall the data that indicated
21 that?

22 **A. Yes.**

23 **Q.** Would you tell us what it was.

24 **A. It was analytical data submitted by the**
25 **District to the Department that indicated**

1 **differences in groundwater quality, some of those**
2 **being -- I don't remember the exact dates, but**
3 **there were detections of VOCs, and there are other**
4 **constituents that were also detected, that there**
5 **are differences in the water quality at the**
6 **facility based on that analytical.**

7 **Q.** And I understand that the VOCs occurred
8 on two separate occasions. Is that your
9 recollection?

10 **A. I can't be specific about whether it was**
11 **just two, but yes.**

12 **Q.** And that each time it was detected, it
13 was at very low levels?

14 **A. Yes.**

15 **Q.** And substantially below the drinking
16 water standards for VOCs?

17 **A. Yes.**

18 **Q.** What is the quality of the groundwater?
19 I mean is there a classification system?

20 **A. There is a classification system, but the**
21 **groundwater at that facility has not been**
22 **classified.**

23 **Q.** And so when you say altering, you're
24 altering the quality?

25 **A. Correct.**

1 Q. It would mean that the quality is for the
2 classification that it's in?

3 A. No. When I say you're altering the
4 quality of the groundwater, it means you have, for
5 instance, the presence of VOCs, which are
6 non-naturally occurring contaminants, that when
7 they show up in groundwater, alters groundwater
8 because they are non-naturally occurring.

9 Q. But what is the quality of the
10 groundwater? That's based upon the classification?

11 A. Well, the quality is used in -- through
12 the water quality rules to establish a groundwater
13 classification.

14 Q. Okay.

15 A. The quality is the analytical results of
16 groundwater chemical data.

17 Q. So as I understand it, there are four or
18 five classifications of groundwater?

19 A. Yeah. I don't know the exact number, but
20 there are several within water quality.

21 Q. And those classifications determine the
22 acceptable use that the water can be put to?

23 A. I would agree with that.

24 Q. And so the quality is tied into the
25 classification because if the quality is high, it's

1 acceptable for human consumption. If the quality
2 were real poor, it might be non-potable. Do you
3 agree with that?

4 A. I -- yeah, I would agree with that.

5 Q. So you cite a section from the statute,
6 Chapter 2, Section 5, subsection (X), and it states
7 that "Solid waste disposal facilities shall not be
8 allowed to alter groundwater quality as determined
9 by groundwater monitoring."

10 If we don't know the classification, how
11 do you know that you're altering the quality?

12 A. Well, the quality -- you can have very --
13 variations in quality within a given class of use.

14 Q. Okay.

15 A. So you can have a variability -- well,
16 not variability. You can have the quality of one
17 location, and another location can be different but
18 still fall within the same class of use because
19 they -- their quality may be different from each
20 other, but they're still within that use category
21 because there's not one number. There's a -- as --
22 I think as an example, there's an up to. You know,
23 there might be a TDS number of 200. Well, if
24 you're below that, whether you're one or you're
25 199, you may be in the same class of use, but

1 that's different quality, but it's within the same
2 category.

3 So what we are referring to here is
4 quality, not class, not change of class of use but
5 a change of quality. So to go from a non-naturally
6 occurring constituent like VOCs, which is normally
7 zero, to have any is a change in quality but not
8 necessarily a change in class of use.

9 Q. So am I correct what you're saying here
10 is that the introduction of -- and we'll use the
11 numbers two or three -- two or three instances of
12 VOCs at very, very low levels is what you're
13 constituting as altering the groundwater?

14 A. Not those alone.

15 Q. What else?

16 A. There are -- at that facility, there are
17 other constituents that are present, and there are
18 differences on some.

19 Q. Can you give me some examples?

20 A. Probably the best example is sulfate.

21 Q. Where does that come from?

22 A. That is a common landfill contaminant.

23 Q. And are the sulfates above or below --
24 the reported sulfate levels, are they above or
25 below the Federal guidelines?

1 A. The -- there is -- I'm not sure if
2 sulfate has a Federal MCL or not.

3 Q. Okay.

4 A. There is a statistically significant
5 difference on site of sulfates.

6 Q. What does statistically significant mean?

7 A. They were -- the data that has been
8 collected has been evaluated using a statistical
9 model, and the difference between the up gradient
10 and the down gradient is great enough that it's
11 statistically significant.

12 Q. Probably my ignorance, but I'm not still
13 clear on what makes the statistical significance.
14 Does that mean any change, or it has to be a
15 certain amount of change?

16 A. It's usually above the 95 percent
17 confidence interval. This is the world of
18 statistics. But as an example, I would say if you
19 used the number 1 and you went 1, 1.1, .9, 1.1, .9,
20 1.1, 1 --

21 Q. That's enough.

22 (Whereupon, discussion was held off the
23 record.)

24 A. -- that would be different than going 1,
25 3, 5, 300.

1 Q. Is that the procedure, maybe is a better
 2 word, that you would expect if the District
 3 submitted a permit application, there were comments
 4 in it that they didn't agree to, that they would
 5 then publish and submit their objections to those
 6 comments during the, I guess, comment period?
 7 A. **I think that was identified as the**
 8 **required protocol in order for them to get to the**
 9 **point of where they are.**

10 Q. Okay.
 11 (Whereupon, Troxel Exhibit Number 8 was
 12 marked for identification.)

13 BY MR. SOLLARS:

14 Q. I'll hand you Exhibit 8. That is the
 15 proposed permit that was provided by the DEQ to the
 16 Solid Waste -- excuse me, the proposed -- what is
 17 it, proposed advertisement or proposed permit?

18 A. **This is a proposed permit.**

19 Q. Let's go to the bottom, permit condition
 20 number 1. "The operator of this facility shall
 21 remove all documents from the permit application,
 22 including but not limited to appendices V and Y,
 23 which have not been signed and stamped by a Wyoming
 24 professional engineer or geologist."

25 Do you recall what appendices V and Y

1 were or who they were from?

2 A. **Vaguely, yes.**

3 Q. And who were they, if you recall?

4 A. **I don't remember which appendices was**
 5 **which, but one of them I believe was a document**
 6 **authored by Dr. Donald Siegel, and they may have**
 7 **both been authored by him. To be honest with you,**
 8 **I can't -- I'd have to go look at them to remember**
 9 **the titles and exactly who authored them.**

10 Q. If the engineer on the project reviewed
 11 those and was willing to stamp them, would that
 12 then remove this condition?

13 A. **They -- if they are stamped and signed by**
 14 **a Wyoming P.E. or P.G., then they would be -- they**
 15 **would be -- I guess they would be -- they would**
 16 **meet the requirement for being part of a permit**
 17 **application.**

18 Q. Was the District given the opportunity to
 19 have their engineer review and determine whether or
 20 not he felt he could affix his stamp to it?

21 A. **I do not recall.**

22 Q. Then if you go to the next page, and
 23 we'll look at permit condition number 3. It says,
 24 "No later than --" is that October 1st, 2013?

25 A. **Yes.**

1 Q. "The operator of this facility shall
 2 demonstrate that the facility is not altering and
 3 will not alter groundwater." Is that what it says?

4 A. **That's what it says.**

5 Q. Can you show me in these regulations the
 6 requirement that they provide proof that they're
 7 not altering and will not alter groundwater? And I
 8 guess what I would lead you to is Chapter 2,
 9 Section 2, Subsection (b)(iii)(A)(X)(3). Okay. If
 10 you could find that in the book.

11 A. **Can I answer the question first?**

12 Q. Absolutely.

13 A. **Chapter 2, Section 5(X), Groundwater**
 14 **Discharges: "Solid waste disposal facilities shall**
 15 **not be allowed to alter groundwater quality as**
 16 **determined by groundwater monitoring."**

17 Q. Would you look at the section I pointed
 18 you to.

19 A. **Please repeat it.**

20 Q. Chapter 2, Section 2 -- get you there
 21 first -- Subsection (b).

22 A. **Just one second. Section 2.**

23 Q. Subsection (b).

24 A. **Little (b)?**

25 Q. Little (b), little (iii), (A)(X)(3).

1 A. **Little (iii)?**

2 Q. Right, (A).

3 A. **Capital (A)?**

4 Q. Capital (A).

5 A. **(X)?**

6 Q. (X)(3).

7 A. **Okay.**

8 Q. And that states what?

9 A. **"An evaluation of the facility's**
 10 **potential to impact surface and groundwater quality**
 11 **based on the facility design and the hydrogeologic**
 12 **information required in Subsection (b)(iii)(A)(X)**
 13 **of this section."**

14 Q. So the section that you pointed us to, I
 15 believe, Chapter 2, Section 2, Subsection 5
 16 before --

17 A. **Yes, 5(X).**

18 Q. -- says that the landfill facility cannot
 19 alter the groundwater quality.

20 A. **Correct.**

21 Q. This section that I just pointed out to
 22 you says that you have to do a demonstration of the
 23 potential.

24 A. **Correct.**

25 Q. Your permit condition says, one, they

1 have to do a demonstration that they're not
2 altering the water, and two, that they will not
3 alter the groundwater. How do you prove you will
4 not ever alter the water?

5 **A. You would -- in practicality, you would**
6 **take the design details and the information from**
7 **the facility and model -- run it through a modeling**
8 **exercise and look at the results of that and what**
9 **they would predict.**

10 **Q.** And so what you're really doing by
11 modeling is you're showing the potential, not the
12 absolute that you will not?

13 **A. Correct.**

14 **Q.** And yet isn't that what you're requiring
15 in your permit condition, that they demonstrate
16 that they will not alter the groundwater?

17 **A. Yes.**

18 **Q.** Which is not what the statute says,
19 correct -- or the regulation?

20 **A. It does not use the same language,**
21 **correct.**

22 **Q.** One is a potential, the other, the permit
23 condition is an absolute, correct?

24 **A. I would -- I don't necessarily agree that**
25 **it's an absolute, but I understand -- I can see how**

1 **that would be looked upon as saying that it was an**
2 **absolute. I believe the intent is the same as the**
3 **potential.**

4 **Q.** And if they don't make -- under permit
5 condition number 3, if they don't make that
6 demonstration by October 1st, 2003, then they have
7 to cease receipt of waste no later than
8 December 31st, 2018?

9 MR. ESCH: Object because it just says
10 2013, not 2003, October 1st, 2013.

11 MR. SOLLARS: Oh, and I said three?

12 MR. ESCH: Yeah.

13 BY MR. SOLLARS:

14 **Q.** Okay. With that clarification, is that
15 what it's saying?

16 **A. It says, "If the operator fails timely to**
17 **make such a demonstration, then the original 80**
18 **acres shall cease receipt of waste no later than**
19 **December 31st, '18 and promptly begin closure**
20 **activities, and the lifetime renewal permit shall**
21 **include either a performance-based design or an**
22 **engineered containment system design for all units**
23 **of the expansion area that will receive waste after**
24 **December 31st of 2018."**

25 **Q.** And my question was the words "If the

1 operator fails timely to make such a
2 demonstration." The timely refers to the
3 October 1st, 2013 date?

4 **A. Yes.**

5 **Q.** And would you agree with me that the way
6 that first sentence is written, it's impossible to
7 make that demonstration that you will not alter
8 groundwater?

9 **A. I would not agree.**

10 **Q.** Why not?

11 **A. Because I think if you have the**
12 **information that you need and you model it, there**
13 **is the capability to demonstrate that you will not**
14 **alter groundwater.**

15 **Q.** But, in fact, aren't you -- you have the
16 capability to demonstrate that based upon your
17 model, you will not, but you never have the
18 capability to demonstrate flat out that you will
19 not alter the groundwater?

20 **A. Okay.**

21 **Q.** Do you agree with that?

22 **A. I agree.**

23 **(Whereupon, discussion was held off the**
24 **record.)**

25 **///**

1 BY MR. SOLLARS:

2 **Q.** Patrick, while he's doing that, that
3 first section you cited, Chapter 2, Section 2, and
4 then you had 5 --

5 **A. 5(X), Section 5(X).**

6 **Q.** Okay. 5(X). There's no requirement in
7 the proposed permit to, if they fail to
8 demonstrate, make the demonstration -- we'll just
9 call it that -- that they have to file any further
10 documents, is there?

11 **A. They -- if they fail to do that, they**
12 **have to cease receipt of waste and promptly begin**
13 **closure activities, and then they have to include**
14 **either a performance-based design or an engineered**
15 **containment system design for all units of the**
16 **expansion area that will receive waste after**
17 **December 31st of 2018.**

18 **Q.** There's not a permit condition that they
19 revise their closure contour?

20 **A. There is not.**

21 **Q.** Okay.

22 MR. ESCH: Rick, are you at a good
23 stopping point?

24 MR. SOLLARS: Yes. Let's take five
25 minutes.

1 (Whereupon, a recess was taken at 1:58
2 and subsequently reconvened at 2:07.)

3 BY MR. SOLLARS:

4 Q. Actually, I just have a few more short
5 questions for you, Patrick.

6 A. Okay.

7 Q. Condition number 3 of the proposed permit
8 says that if the demonstration is not made by
9 October 1st, 2013, that we have to -- we, meaning
10 the District -- has to cease receiving trash by
11 December 31st, 2018 and move into the expansion
12 area under an engineered containment system; is
13 that correct?

14 A. There's the option for a
15 performance-based design or an engineered
16 containment system in the expansion area.

17 Q. What is the performance-based design?

18 A. That is because it -- because there is
19 probably not a definition for it, I would say it is
20 a similar effort that we are requesting in the
21 original AD, which is the modeling effort and the
22 demonstration that as it's designed and based on
23 the technicalities of the facility, that it won't
24 impact groundwater.

25 Q. And an engineered containment system is

1 what I referred to as a liner?

2 A. Correct.

3 Q. Do liners leak?

4 A. Yes.

5 Q. And what happens when they leak?

6 A. It depends on the leak and the design.

7 Q. I'm not understanding "depends on the
8 leak." Do you mean a pinhole versus a big rip
9 or --

10 A. Yes.

11 Q. Okay.

12 A. Typically if you have a liner that has
13 any sort of defect in it based on the way they're
14 designed with the entire engineered containment
15 system, which includes leachate recovery and
16 essentially a drainage layer, in recognition that,
17 you know, no material is perfect -- there are
18 always imperfections -- that it's designed to
19 remove 95-plus percent of the contamination through
20 the leachate collection and recovery system so that
21 if you do have any pinholes or pinhole leaks, the
22 amount of material that is available to be released
23 or to go through that defect is significantly
24 reduced.

25 Q. But if they fail, you would still have

1 leachate getting into the surface of the landfill

2 and potentially into the groundwater?

3 A. Potentially.

4 Q. The District also operates the Lander

5 Landfill. What is the comparison of detectable or

6 reportable VOCs at Lander in comparison to Sand

7 Draw?

8 A. What do you mean by comparison?

9 Q. Are they greater in both number and type?

10 A. Yes.

11 Q. Are they greater in levels?

12 A. Yes.

13 Q. And yet the DEQ has allowed the Lander

14 Landfill to continue to receive trash through the

15 year 2024.

16 A. Correct.

17 Q. Can you explain why the landfill that

18 has, I'll call it, a greater leakage of VOCs would

19 operate six years beyond a landfill that has lesser

20 leakage of VOCs?

21 A. I cannot.

22 Q. Does that make sense to you?

23 A. That determination was made by the
24 previous administrator, Dave Finlay.

25 Q. In your opinion -- I'm trying to figure

1 out how to phrase this so maybe one of us will

2 understand it. Okay. Under this scenario that the

3 Sand Draw Landfill would be allowed to continue to

4 receive trash until December 31st, 2018 -- correct?

5 A. Correct.

6 Q. -- if a demonstration was not made as in

7 the permit conditions, then at that point, it would

8 have to be capped and closed, correct?

9 A. Correct.

10 Q. Can you tell me what the environmental

11 damage would be if it were allowed to continue

12 receiving trash until 2037 as opposed to 2018?

13 A. I cannot.

14 Q. Why can you not?

15 A. There's been no modeling done. There's
16 been no demonstration that -- that's the purpose of
17 the demonstration. That has not been provided. So
18 I can -- so I can't tell you what the environmental
19 impact would be in that scenario.

20 Q. And you also can't tell us that it would

21 be greater -- the environmental impact would be

22 greater by allowing it to continue receiving trash

23 to 2037 than closure at 2018?

24 A. Not definitively, no.

25 Q. I can't even think of any more questions