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BEFORE THE WATER AND WASTE ADVISORY BOARD
STATE OF WYOMING

FILED

APR 12 2010

Jim Ruby, Executive Secretary
Environmental Quality Council

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PUBLIC MEETING ON SOLID AND
HAZARDOUS WASTE DIVISION TO
CONSIDER, DISCUSS, AND MAKE
RECOMMENDATIONS REGARDING GRANT
REQUESTS FOR REIMBURSEMENT TO
LOCAL GOVERNMENTS CONDUCTING
SOLID WASTE LANDFILL MONITORING
PURSUANT TO W.S. 35-11-521 FOR THE
SOLID AND HAZARDOUS WASTE DIVISION

WQD STAFF PRESENTATION OF ITS PROPOSED
REGULATION GOVERNING THE UNDERGROUND
INJECTION AND STORAGE, OR SEQUESTRATION,
OF CARBON DIOXIDE.

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9:10 a.m., Friday
March 13, 2009

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TRANSCRIPT OF PUBLIC MEETING PROCEEDINGS

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Transcript of Public Meeting Proceedings in the
above-entitled matter before the Water and Waste Advisory
Board, commencing on the 13th day of March, 2009, at the
hour of 9:10 a.m., at the Albany County Shooting Pavilion,
3510 South 3rd Street, Laramie, Wyoming, before Chairman
Bill Welles presiding, with Ms. Marjorie Bedessem, Mr. Tim
Chesnut, Ms. Lorie Cahn, Mr. David Applegate, Board
Members. Mr. Mike Jennings, Mr. LeRoy Feusner, and
Mr. Kevin Frederick also in attendance.

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P R O C E E D I N G S

(WWAB meeting proceedings commenced
9:10 a.m., March 13, 2009.)

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CHAIRMAN WELLES: If we are ready to go,
I'll call this Water and Waste Advisory Board meeting to
order.

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A couple of procedural thoughts that we have to
pay attention to. In order for Kathy, who is our reporter,
to correctly maintain the minutes, please identify yourself
when you speak, so she can pick up that and put it into the
minutes.

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And I'd like to welcome you all to Albany County.
I heard Mark (sic) say that this is the first meeting
that's ever been held in this building.

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BOARD MEMBER CHESNUT: Obviously he's a
country music fan, because I'm Tim.

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CHAIRMAN WELLES: Oh, I'm sorry. I'm
sorry. This is my first attempt at being chairperson, so
you'll have to bear with me.

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Anyway, I'd like to welcome you all here. This
is a public meeting. Typically in the past we've had
videoconferencing and/or audio. Today we don't, so -- but
it is a public meeting. If you do have questions, I guess
I would have you hold off until we're sort of done with the
business part of it, but you are welcome to ask questions.

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At this point I'd like to have the Board

2 introduce themselves. I'm Bill Welles from Buffalo,
3 representing agriculture.

4 BOARD MEMBER BEDESSEM: Marj Bedessem from
5 Laramie, representing the public.

6 BOARD MEMBER CHESNUT: Tim Chesnut from
7 Albany County, and I'm representing Democrat on the board.

8 BOARD MEMBER CAHN: Lorie Cahn from
9 Jackson, representing the public at large.

10 BOARD MEMBER APPLGATE: Dave Applegate
11 from Casper -- from Casper, representing industry.

12 CHAIRMAN WELLES: I'd certainly like to
13 welcome two new board members for your first official board
14 meeting. And obviously we do have a full quorum. We're
15 all here. It is Friday the 13th, so let's be careful.
16 Drive carefully and be thoughtful in your speeches.

17 We're going to start out this morning with the
18 solid and Hazardous Waste Division. And we've been at this
19 for some time, and what we're doing is approving
20 applications for the process.

21 And I'll just turn it over to Mr. Jennings.

22 MR. JENNINGS: All right. Thank you,
23 Mr. Chairman. Appreciate it.

24 If you've got your agenda in front of you, you
25 would have gotten to -- and again, I apologize if anybody

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1 didn't get the late packets. For future reference, I'm
2 going to have a spare with me in case that happens. But it
3 should be -- it should be basically a three-page item. And
4 I've tried to, per some of our discussions at previous
5 meetings, I've tried to line these out so we can kind of
6 review them literally step by step. I have Step 1 items
7 listed first, and go to Step 2, Step 3. Step 1 being
8 reimbursement for work plan development. Step 2 being
9 reimbursement for field work. And Step 3 being
10 reimbursement for sampling and analysis of the monitoring
11 wells.

12 First one we've got --

13 BOARD MEMBER CAHN: Mr. Chairman? Sorry.
14 Can we please do this by a packet of full reimbursement
15 recommendation all at one time for all three steps, please?
16 So I move that we -- if that's okay with you, unless you
17 have some comments you want to make.

18 MR. JENNINGS: No problem.

19 BOARD MEMBER CAHN: I move that we approve
20 full reimbursement recommendations for C, Natrona County
21 Road, Bridges, and Parks - Pathfinder Landfill; Step 1;
22 D, Sweetwater - Point of Rocks Landfill, Step 1; E,
23 Sweetwater - Reliance Landfill, Step 1. Am I going too
24 fast?

25 MR. JENNINGS: Nope.

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1 BOARD MEMBER CAHN: F -- no. Sorry. G,
2 Sweetwater County - Superior Landfill, Step 1; H, Fremont
3 County - Shoshoni Landfill, Step 1; J, Big Horn County -
4 Number 2, Step 2; K, Big Horn County - North Big Horn
5 Number 2, Step 2B; S, Medicine Bow, full reimbursement,
6 Step 3C.

7 But let me ask you a quick question on that. Has
8 any of those that I've put in the motion, ones that
9 Trihydro that we need to excuse --

10 BOARD MEMBER BEDESSEM: No.

11 BOARD MEMBER CAHN: -- that we need to take
12 off of this -- I know there's one in the first packet.

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BOARD MEMBER BEDESSEM: I think it's just
F; is that correct, Mike?
MR. JENNINGS: That may have been it.
BOARD MEMBER BEDESSEM: I think it's just
F.
BOARD MEMBER CAHN: Okay. So I -- but
that's a partial, so that's not in this one. So that's my
motion.

BOARD MEMBER CHESNUT: Second it.
CHAIRMAN WELLES: Been moved and seconded.
Any questions?

All those in favor?

BOARD MEMBER BEDESSEM: Aye.

BOARD MEMBER CHESNUT: Aye.

BOARD MEMBER CAHN: Aye.

CHAIRMAN WELLES: Opposed?

Motion passes.

BOARD MEMBER CAHN: Sorry to take the steam
out of your sails.

MR. JENNINGS: If it speeds up the process,
I'm good with that, absolutely.

BOARD MEMBER CAHN: It's a long drive back
to Jackson.

MR. JENNINGS: The one thing, and you may
have noticed on this, at the bottom of the first page I
indicated all four Sweetwater County landfills were
included on the same application. And I'm going to have to
kind of refamiliarize myself real quickly with that one.
Let's just -- we'll hang off on that one for a second. If
you'd like, we'll just start with Alcova Number 1, and go
through that briefly on this.

The reduction on that one was a fairly simple
one. We had to reduce the initial total by \$4.94 for
ineligible 50 percent administration fee markup of
reimbursable expenses, something they tacked on. And with
the exception of 2 and a half percent communication fees,
which we agreed on at a previous meeting, we don't do
markups like that.

And so, again, the total amount on that came off
the gross of 6,244.66, minus the \$4.94, leaving a balance
of 6,239.72. At 50 percent, that came out to a total of
reimbursement recommendation of \$3,119.86.

BOARD MEMBER CAHN: I move we approve the
partial reimbursement.

BOARD MEMBER APPLGATE: Second.

CHAIRMAN WELLES: All those in favor?

BOARD MEMBER APPLGATE: Aye.

BOARD MEMBER CAHN: Aye.

BOARD MEMBER BEDESSEM: Aye.

CHAIRMAN WELLES: Opposed?

Motion passes.

MR. JENNINGS: Okay. Second one is Alcova
Number 2. And on your packet, if you'll turn again to the
second page of the application sheet, exact identical
issue, \$4.94 for ineligible 50 percent administration fee
markup. Started out with \$6,811.57, minus \$4.94, leaving a
balance of \$6,806.63, times the 50 percent, wound up with a
recommended reimbursement total of \$3,403.32.

BOARD MEMBER CHESNUT: I move we approve
item B as presented.

BOARD MEMBER BEDESSEM: Second.

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CHAIRMAN WELLES: All those in favor?
BOARD MEMBER CAHN: Aye.

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1 BOARD MEMBER CHESNUT: Aye.
2 BOARD MEMBER BEDESSEM: Aye.
3 CHAIRMAN WELLES: Opposed?

4 Motion passes.

5 MR. JENNINGS: Okay.

6 BOARD MEMBER BEDESSEM: If we're going

7 to --

8 MR. JENNINGS: We didn't mention
9 Rock Springs. I'm just double-checking on that
10 Rock Springs one. I want to make sure it's indeed -- they
11 were all on the same application, and I'm going to just
12 double-check and see if I was correct on that when I
13 indicated that it was a partial reimbursement. So bear
14 with me for just a minute on this.

15 BOARD MEMBER BEDESSEM: I will abstain from
16 voting on F.

17 MR. JENNINGS: Okay. Rock Springs was just
18 a little bit different. If you look on the page 2 of the
19 application sheet. What Rock Springs had included in their
20 invoicing on that for Step 1 was some information regarding
21 a vertical expansion, which is not related to the
22 monitoring well program. And it was for a total of 100 --
23 additional amount was \$194.24. And so on the initial total
24 that was asked for of \$5,959.13, minus the \$194.24, left a
25 balance of \$5,764.89. And that 50 percent reimbursement,

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1 we were recommending \$2,882.45 for that.

2 BOARD MEMBER APPLGATE: Yeah, I have a
3 question on that invoice.

4 MR. JENNINGS: Sure.

5 BOARD MEMBER APPLGATE: If you look at the
6 invoice itself, Trihydro, the --

7 MR. JENNINGS: Okay.

8 BOARD MEMBER APPLGATE: Task A100
9 groundwater investigation --

10 MR. JENNINGS: Yes.

11 BOARD MEMBER APPLGATE: -- where you've
12 got that 194, but below that it says Task B100 Rock Springs
13 vertical expansion.

14 So my question is did you identify the right task
15 as far as the --

16 MR. JENNINGS: Your point is well taken.
17 In my conversation with them -- and forgive me, I simply
18 did not note that on there -- I was reasonably certain --
19 it's been a while, but I'm reasonably certain it was per
20 the \$194.24. But having brought that up, and noting the
21 change, I believe there was a question about that. I think
22 you're right in certainly pointing that out. I think they
23 were in error on that. And that's why I indicated
24 specifically my conversation with Kevin Herman on that one.
25 I would have been more correct had I specifically noted the

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1 error on that.

2 My memory, if it serves me correctly, is that it
3 was for the \$194.24. And that the work plan itself had
4 more to do with that B100, and they simply flipped those
5 back and forth.

6 But now that you bring it up, David, you have
7 inserted some doubt in my mind, after this passage of time,
8 and I can't absolutely state that that's what it's for,

9 although that's how I recollect it.

10 I'm not sure how you'd like to approach that. I
11 apologize.

12 BOARD MEMBER CAHN: My suggestion would be
13 we approve it with -- or make a motion on it without those
14 costs in there. And then if you can check with the
15 applicant, and if those were costs for the vertical
16 expansion, can they just come back and ask for
17 reimbursement.

18 MR. JENNINGS: I have no problem with that
19 at all.

20 BOARD MEMBER CAHN: That way we can get
21 reimbursement started.

22 MR. JENNINGS: And/or, may I suggest, if
23 for some reasons I've erred and the \$2,000 was for vertical
24 expansion, we may need to revisit that also. But if indeed
25 it is correct, I will bring that to their attention. I

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1 will verify that, and if everything's okay, we can be good
2 to go with what you proposed here. If not, we can
3 certainly revisit this. I have no problem with that at
4 all.

5 CHAIRMAN WELLES: Any other discussion on
6 that point?

7 So we do have a motion on the table; is that
8 correct?

9 BOARD MEMBER CAHN: I move that we approve
10 those as recommended as a partial reimbursement, for Mike
11 Jennings to check with the applicant on whether there are
12 additional costs that should be part of the reimbursement.

13 BOARD MEMBER CHESNUT: Second.

14 CHAIRMAN WELLES: All those in favor?

15 BOARD MEMBER APPELLEGGATE: Aye.

16 BOARD MEMBER CAHN: Aye.

17 BOARD MEMBER CHESNUT: Aye.

18 CHAIRMAN WELLES: Opposed? None.

19 BOARD MEMBER BEDESSEM: Abstain.

20 CHAIRMAN WELLES: I'm sorry. Marj has to
21 abstain due to conflict.

22 MR. JENNINGS: Looks like we're on page 2,
23 and it should be letter I, Fremont County - Shoshoni
24 Landfill. Probably easier just to go to the comments
25 section on that.

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1 And reimbursement covered Step 1 and Step 2 costs
2 for work plan development and field work. Initial total
3 submitted for the reimbursement for \$2,495.77 for Step 1
4 work plan development; \$25,209.42 for Step 2 field work
5 activities. All claimed cost involved in Step 1 work plan
6 development were approved. We're going to recommend full
7 reimbursement on that one at the 50 percent rate, so
8 \$2,495.77, at the 50 percent rate, equals recommended
9 reimbursement of \$1,247.89.

10 The expenses submitted for Step 2 field work
11 activities, we're only recommending a partial on that.
12 Subtracted \$7,899.49 in ineligible costs from the initial
13 total of 25,209.42, which would leave \$24,309.93 eligible
14 for reimbursement. And the particulars are below, if you
15 wish to go through those.

16 On one of their line items -- it's right there,
17 if you wanted to look at the information on there -- they
18 indicated that they had a half hour discussion with the
19 District Board concerning converting the landfill from

20 municipal solid waste to C&D waste. Frankly, that doesn't
21 have anything to do with the monitoring well program, so I
22 reduced that charge by \$60, assuming the other half hour
23 was indeed spent on issues involving monitoring well
24 reimbursement program.

25 Next labor line item involved a mobilization

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1 charge for driving a vehicle from the Bridger Valley
2 landfill to Riverton. Again, these activities would have
3 occurred in Fremont County -- or Shoshoni landfill. Didn't
4 feel it was appropriate for somebody to be charging a mob
5 charge for some other project in another part of the state,
6 taking it to the Shoshoni landfill. If it come from their
7 office in Riverton, we felt that would have been
8 appropriate, but not bringing it in from the -- from the
9 Bridger Valley landfill. So based on that we reduced that
10 by \$329.

11 The next labor item involved a \$55 charge for a
12 download note copying and vehicle unload. The date
13 corresponds with the date of surveying activities, which
14 were not eligible and were already pulled from the billing
15 report from the consultant. That was something they had
16 pulled, and because those dates corresponded with that, I
17 could only presume that those activities were --
18 essentially occurred at the same time as those activities,
19 and that's why that \$55 was pulled.

20 Because of the labor charges in the top three
21 items there, what the consultant does is charge 2 and a
22 half percent communication fee on those labor charges. So
23 when you reduce that from their actual labor charge total,
24 that's where the additional \$11.10 comes from, reducing it,
25 assuming that those were ineligible activities, pull them

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1 off the labor and reduce the labor charge by \$11.10.

2 And then the next item involved a charge for 253
3 miles driven during that mob charge from Bridger Valley, so
4 that was -- the first part was the labor part, the second
5 part is the actual mileage. And again, because we didn't
6 consider that that was necessarily appropriate, we reduced
7 that -- those miles by \$127.77 that they charged.

8 From the second page, materials line item 8117
9 involved a \$40 utility trailer. Again, that date
10 corresponded with the date of surveying activities which
11 were not eligible. I could only presume that that vehicle
12 was -- that trailer was being used for those activities, so
13 I pulled those \$40.

14 Next item is 8500. It involved a \$22.50 for
15 digital level. And again, that goes right back to
16 surveying activities, which they acknowledged were not
17 eligible.

18 Next one is materials line item 9023, dated
19 July 5, 2008. \$184.57 charge for motel room for June 25th,
20 26th for one of their field workers. And as I've noted
21 on here, the charge appears to have been based upon an
22 expense account submitted by the worker for the week ending
23 June 27, 2008, but a separate bill, which was included with
24 it, and it's all in that additional information there, it
25 represented the lodging cost for the dates in question.

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1 And it appeared to me, based upon what I could see, the
2 \$184.57 was a duplicate instrument, and as such I pulled it
3 out and made it ineligible for reimbursement.

4 And then the last item there, material line --

5 materials line item 9023, dated August 30th of 2008,
6 involved a \$69.55 charge for motel room that, based upon
7 the receipt, was located in Buffalo, Wyoming. That's not
8 at the project location. They maybe have -- I'm assuming
9 had another project going on up there, but in the criteria
10 it specifically talks about lodging and whatnot. Pretty
11 much has to be at the site of the location. Buffalo is a
12 long ways from Shoshoni, and so I deducted that per the
13 grant criteria.

14 BOARD MEMBER CHESNUT: Mr. Chairman, I move
15 we approve partial reimbursement recommended for Item I,
16 Fremont County.

17 BOARD MEMBER APPLGATE: Second.

18 CHAIRMAN WELLES: We have a motion and
19 second.

20 All those in favor?

21 BOARD MEMBER APPLGATE: Aye.

22 BOARD MEMBER CAHN: Aye.

23 BOARD MEMBER CHESNUT: Aye.

24 BOARD MEMBER BEDESSEM: Aye.

25 CHAIRMAN WELLES: Opposed?

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1 None.

2 MR. JENNINGS: Next item we have is going
3 to be L, Big Horn County Solid Waste Disposal District,
4 Burlington/Emblem or Emblem/Burlington, however way you
5 want to look at it.

6 Okay. If you want to go to the comments page.
7 Initial total cost on this application was \$26,798.43.
8 They arrived at that figure by utilizing our requirements
9 relative to breaking out materials and labor charges from
10 mob-demob billing, which is something we requested, because
11 initially what they were doing was they charged -- they
12 basically rolled labor and mileage into a fee per mile.
13 And because of our criteria, we needed to break that out,
14 because we utilize the IRS rates to determine whether it's
15 eligible or not. We requested that those be broken out.

16 And they were also using the \$80-per-day vehicle
17 use rate in lieu of mileage. And as I mentioned here, the
18 Department bases reimbursement on the actual billed cost to
19 communities, districts, et cetera, less the ineligible
20 items. So we took the original billing of \$26,323.26.
21 They had put 26,798.43 on there. And again, the reason
22 they arrived at that was because they had corrected this
23 mob stuff, but the actual bill that went to the district
24 was for 26,323.26.

25 MR. FEUSNER: Dollars and cents.

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1 MR. JENNINGS: Dollars and cents. Sorry.
2 So that's why -- that's why I had to revise the
3 initial total on that. And so basically any of the
4 deductions coming off of that are based on that total.

5 We reduced it by \$300 for work conducted at the
6 shell landfill, but charged to the Burlington/Emblem
7 facility.

8 The submittal was further reduced by \$32.50 for
9 labor charges accrued during an equipment delay, which
10 specifically in our criteria we don't -- basically we don't
11 allow billing for equipment delays.

12 And by an additional \$22 for copies of other Big
13 Horn facilities charged to the Burlington/Emblem facility.
14 In other words, they did a lump charge for a number of
15 facilities, but since this was a discrete application, we

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16 just divvied it up and said, okay, here's what's actually
17 eligible for that facility.

18 And then we reduced it by an additional \$366.24
19 for a hotel bill that could not be substantiated by field
20 labor activities that should have occurred on the same date
21 as indicated on the receipt, by the same individual noted
22 on the bill.

23 And the backup information, pretty much all of
24 that is covered on there. If you have any questions on the
25 specifics I'll be more than happy to show you where I

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1 arrived at those, but that's essentially what the reduction
2 was on that, for a total of \$720.74. So at the new actual
3 initial total of \$26,323.26, minus 720.74 in ineligible
4 items, left a reimbursable total of \$25,602.52. At the 75
5 percent rate, we're recommending \$19,201.89 recommended
6 reimbursement.

7 CHAIRMAN WELLES: Any further questions?

8 BOARD MEMBER CAHN: I move we approve the
9 partial reimbursement as recommended -- as suggested --
10 recommended by DEQ.

11 BOARD MEMBER BEDESSEM: Second.

12 CHAIRMAN WELLES: All those in favor?

13 BOARD MEMBER APPLGATE: Aye.

14 BOARD MEMBER CAHN: Aye.

15 BOARD MEMBER CHESNUT: Aye.

16 BOARD MEMBER BEDESSEM: Aye.

17 CHAIRMAN WELLES: None opposed.

18 Motion passes.

19 MR. JENNINGS: Next one's going to be for
20 Dubois. Again, that's a Fremont County one. If you'll go
21 to the comments section. Reimbursements covers Step 2
22 costs for work plan development and field work for the
23 Dubois landfill.

24 The initial total submitted for the reimbursement
25 was for \$96,312.96 for Step 2 field work activities.

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1 Department's recommending only partial reimbursement. We
2 subtracted \$118.64 in ineligible costs from that initial
3 total.

4 And if you'll drop below, I'll just go over those
5 real quickly here. Materials line item 9023, dated
6 February --

7 THE REPORTER: Can you go a little slower,
8 please?

9 MR. JENNINGS: I'm sorry.

10 Dated February 23, 2008, involved a motel charge,
11 which included \$12.04 in the billing for faxes and copies.
12 The consultant routinely does a 2 and a half percent
13 communication fee on labor charges, and that should include
14 copies, telephone, faxes, information like that. And so I
15 simply removed that from that particular billing, again
16 \$12.04.

17 Same materials line item also involved another
18 motel charge of \$24.61, which is a billing for faxes. And
19 again, that should be covered under the 2 and a half
20 percent communication fee that they charge elsewhere in the
21 invoicing. So essentially that winds up kind of being a
22 double billing on that, so we pulled that one out also.

23 Same line item, dated May 10, 2008, involved an
24 \$80.99 charge for motel room for one of their employees in
25 Casper on May 8, 2008. Labor line items for the project

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1 showed no associated activities in Casper for that
2 employee, for that project, on that date or the subsequent
3 date in question, with the exception of some paperwork.
4 And since, again, it was an away from the site of the
5 actual field work activity and for the monitoring program
6 grant criteria, lodging expenses located away from the site
7 of the work are not eligible for reimbursement, so the
8 \$80.99 was pulled.

9 And in the last one was an incorrect rental input
10 charge of a dollar. I just happened to spot that, pulled
11 that one out.

12 So, anyhow, the total of all of those wound up to
13 be \$118.64. So when you remove those from the initial
14 total of \$96,312.96, that left a reimbursable total
15 \$96,194.32. At the 50 percent rate, we're recommending
16 reimbursement of \$48,097.16.

17 BOARD MEMBER CHESNUT: Mr. Chair, I move we
18 approve Item M as recommended.

19 CHAIRMAN WELLES: Do I have a second?

20 BOARD MEMBER BEDESSEM: Second.

21 CHAIRMAN WELLES: Marj second. All those
22 in favor?

23 BOARD MEMBER CAHN: Aye.

24 BOARD MEMBER CHESNUT: Aye.

25 BOARD MEMBER BEDESSEM: Aye.

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1 BOARD MEMBER APPELATE: I had a question.
2 CHAIRMAN WELLES: Oh, sorry.
3 BOARD MEMBER APPELATE: Is this pretty
4 typical for the cost of the investigations for these
5 landfills to be on the order of a hundred thousand? Is
6 that what we're seeing in general?

7 MR. JENNINGS: It runs -- it's all
8 predicated on how many wells, depth of wells, difficulty of
9 drillings. This is a more expensive one. They've -- I've
10 seen relatively inexpensive ones on the order of 10 to
11 \$15,000, and I've got a number of them sitting out there
12 that are in this range.

13 BOARD MEMBER APPELATE: Just curious, do
14 we have confidence we're going to get basically the same
15 information from the various investigations, being the
16 scope that's being done is pretty similar, given that range
17 of costs?

18 MR. JENNINGS: A lot -- a lot depends on
19 what the work plan specifically called out for as far as
20 what the project managers were looking for on that, but as
21 far as just the basic information, are you talking about as
22 far as the chemical data and all that, or --

23 MR. APPELATE: I'm just curious if we're
24 going to have basically the same -- ultimately you're going
25 to be using this information to understand the extent of

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1 groundwater impacts at these various landfills. I'm just
2 curious of the scope in terms of the investigations that
3 are being done are fairly comparable. If you have multiple
4 consultants and multiple contacts with them, this might end
5 up with a variety of levels of detail in terms of the
6 information you have for the various landfills. I'm just
7 curious if the scopes are fairly similar.

8 MR. JENNINGS: And, David, to be honest, a
9 lot has to do simply with the size of the facility, because
10 if the footprint's larger, it takes more wells to basically
11 determine do we have a release, yes or no. So some of

12 these are going to be fairly cut and dried. Obviously, if
13 we don't find any water and/or contaminants, it will be
14 fairly simplistic. If we do find contaminants, depending
15 upon the nature of them, they can get more expensive.

16 These costs, having dealt with this for a year, I
17 can tell you they're going to run all over the place.
18 It's -- I do have some additional information, which I'd
19 like to present to you to kind of fill in some of the gaps
20 as far as where we're at with some of this stuff when we're
21 done. All I can do to answer your question is, because
22 there's no -- the work plans, they are what they are, they
23 have to meet certain minimum criteria, and absolutely we're
24 going to get that information, but some of the details
25 involved in it, and/or what they had to do to get it, is

0023 kind of where some of the variability is.

1 MR. FEUSNER: Dave, LeRoy Feusner.

2 Since this legislation was set up so that local
3 municipalities and landfills could use their own
4 contractors, you're going to see a very wide range in
5 costs. If, on the other hand, the State had managed this,
6 the cost would have probably resulted in a little more
7 uniformity and consistency, but because the opportunity
8 exists for the local landfills to use their own
9 consultants, the cost will be a widespread deal.

10 BOARD MEMBER APPLGATE: Let me maybe just
11 kind of clarify my question. I think it's very good that
12 we're looking at detail at the invoices, and trying to make
13 sure that we don't reimburse for things that aren't
14 reimbursable, but in the end those are pretty small amounts
15 compared to the overall invoicing total. So I don't want
16 to lose sight of the bigger picture is that we are spending
17 hundreds of thousands, ultimately millions of dollars,
18 trying to understand the actual problem. And that if we
19 have a wide variability in the amounts for the
20 investigations, we probably -- I'm just suggesting that we
21 look closely at those work plans and ask ourselves are we
22 going to in the end, when the money's spent, have fairly
23 comparable information across -- across the board, because
24 I think that's what we'll be making the decisions from --

0024 1 or you guys will be making the decisions from.

2 BOARD MEMBER CAHN: We don't look at those
3 work plans. That's DEQ.

4 BOARD MEMBER APPLGATE: I understand. So
5 I guess I'm asking them to look at those work plans. If
6 they see a wide variability in the costs, to just -- do
7 they feel comfortable they're getting the same quality of
8 information across the board.

9 MR. DOCTOR: Mr. Chairman, Bob Doctor,
10 hiding in the back.

11 We have guidance and standards, and of course
12 we're working with a lot of the same consultants that are,
13 you know, a handful of firms in general all over the state
14 doing the work. So from work plan standpoint, yes, I think
15 things are fairly consistent there. And so we're using the
16 same standards and practices for environmental work that
17 are common practice in the industry. So from a -- from a
18 perspective of the data we're getting, those things are,
19 yes, they're comparable. Yeah. It's the cost that
20 sometimes we're seeing some distinctions in, so -- did that
21 help?

22 BOARD MEMBER APPLGATE: It does.

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MR. DOCTOR: Thank you.

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MR. JENNINGS: And just as one last point

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on that. I realize some of the amounts that have been

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removed are relatively minuscule in comparison with the total costs. Personally I strive for consistency, so that if I treat one one way, I treat everybody the same. That's what I'm trying to do.

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BOARD MEMBER APPLGATE: I think that's valuable. I'm not trying to be critical. I don't want to lose sight of the larger objective. Not that a hundred thousand dollars to me is unreasonable for investigating a landfill. I don't think it is. I'm just curious how that fits in and whether or not, again, that would be typical.

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So if I saw one that came in for much less than that, I guess that would make me wonder, okay, are we getting the same quality of information here. If one spent \$10,000 rather than a hundred, what's the difference between those two landfills. That's what I'm asking, that we don't lose sight of the fact at the end here we're supposed to have a set of information for a whole set of landfills, and hopefully that information will allow us to understand them consistently.

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MR. JENNINGS: I think -- I believe that on balance, the information we're going to get is very similar. It's simply the difficulties in getting that information which is really driving the differences in costs on this.

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BOARD MEMBER APPLGATE: Thank you.

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CHAIRMAN WELLES: It's a good question. Appreciate that, because that illuminates a lot -- it's good for everybody to be on the same page.

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So we have a motion and second; is that correct? We still need all those in favor.

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BOARD MEMBER APPLGATE: Aye.

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BOARD MEMBER CAHN: Aye.

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BOARD MEMBER CHESNUT: Aye.

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BOARD MEMBER BEDESSEM: Aye.

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CHAIRMAN WELLES: Any opposed? None opposed.

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Motion passes.

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That was -- where were we? That was Dubois.

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MR. JENNINGS: Dubois.

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CHAIRMAN WELLES: Okay.

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MR. JENNINGS: Next one is Moorcroft. And

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you'll note at the bottom, on Step 2 issues, at the very bottom of that, I indicated that the Step 2 reimbursement request for Moorcroft 1, 2, and 3 were contained in the same application, and also the Step 3 request for Moorcroft Number 1. Step 3 again being sampling analysis. It's also contained in the same application as Step 2 request. I tried to break that one out from the others. They're kind of interrelated. It's what they submitted, and I had to work my way through it. It's a little bit complicated.

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Hopefully my notes on this will help you through it a little bit. And so with your indulgence, I'll see if I can't explain this one to you.

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Reimbursement covers Step 2 Landfills 1, 2, 3.

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And again, Step 3 for Landfill Number 1 -- by the way, that was the only one that's eligible for sampling analysis, as it ceased to receive waste prior to September 13, 1989.

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9 Anyway, these are cost for field work, sampling
10 analysis at the Moorcroft landfills. Advised initial total
11 submitted for reimbursement and based on invoice totals was
12 \$109,786.07 for Step 2 field work, and \$8,729.72 for Step 3
13 sampling and analysis activities. Total for both, then, is
14 going to be \$118,515.79. We're only recommending partial
15 reimbursement for the expenses submitted for Step 2 field
16 work activities. We subtracted 8,089.25 in ineligible
17 costs from initial field work total of 109,786.07, leaving
18 \$101,696.86 eligible for reimbursement.

19 And same is also true of Step 3 sampling and
20 analysis where we pulled \$4,416.83 in ineligible costs from
21 their initial total of \$8,729.72, leaving \$4,312.89
22 eligible for reimbursement.

23 I'm going to the specifics below here, as far as
24 the step 2 portion of it, and it goes into -- and I've got
25 them -- the invoices follow after this, if you want to
check on the details of that.

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1 So basically for invoice LF 106, we removed
2 \$392.24 for excessive mileage rates. And if you want to
3 turn to that invoice, just to kind of give you a feel for
4 where I was coming on that. Again, we were using the IRS
5 rate, and -- which at that time of that work was 50 and a
6 half cents per mile. And if you'll note under the drilling
7 supervision on that one, they were using a rate of 75 cents
8 per mile. So basically what you're seeing on that is that
9 figure corrected using the IRS rate which was in effect at
10 the time of that work. And so basically that resulted in a
11 deduction of \$102.90 from that particular line item.

12 Then there was some travel to Moorcroft, same
13 thing, 1100 -- or 1,181 miles. Again, applying the 50 and
14 a half cents to that one, when initially they were using 75
15 cents. It's a difference of \$289.34. And so you add those
16 two together, we're going to come up with \$392.24. And
17 again, that was simply correcting the mileage rate that
18 their consultant was using to what we will reimburse at,
19 which, again, we determined was going to be the IRS rate.

20 BOARD MEMBER CHESNUT: Where were they
21 coming from to Moorcroft, San Francisco?

22 MR. JENNINGS: There was -- they do a lot
23 of back and forth stuff because of where their home office
24 is located. Lots of different things piled into that. I
25 had checked on the numbers on that, and they seemed

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1 reasonable on that, but some of these, a lot of times their
2 crews, they'll go home on weekends. These things happen,
3 and we agreed to help them out with that as far as
4 reimbursement on that.

5 Okay. So that's for LF 106. The next one is LF
6 207. Again, same situation with that one. If you add
7 those up, you're going to come up with total of \$244.86
8 that we reduced from that particular invoice.

9 Then LF 307, same situation. We removed \$187.10
10 for excessive mileage rates. Then the town itself had
11 submitted a separate invoice, which is -- wasn't per se
12 from the consultant, but the invoice number from this
13 hardware store is 76077. That's the reference I used for
14 it. They had purchased 16 padlocks to cover all the
15 monitoring wells within their -- for their landfills. Only
16 10 of these were actually eligible, because 10 of them were
17 installed per the monitoring reimbursement program. So I
18 simply removed the cost of six of them from that total.

19 And so that's why there's a reduction of \$61.54 on that
20 one.

21 Then if you go to LF 09, Step 3. What they had
22 done with that one on Step 3 is they had included invoicing
23 for sampling and analysis at their number 2 facility. It
24 had received -- received waste after the cutoff date of
25 September 13, 1989. And because of that ineligibility, it

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1 was reduced by -- basically by half, so \$4,312.89 was
2 removed from that one. Again, simply because they applied
3 sampling and analysis invoicing for a facility that was not
4 eligible.

5 The next invoice -- by the way, if I'm going too
6 fast, slow me down.

7 THE REPORTER: Slow down, please.

8 MR. JENNINGS: LF 10, again, similar

9 situation. There was \$12.04 removed from that one for
10 excessive mileage rates.

11 And then the problematic invoices LF 108, that
12 was from the consultant. And although they've been -- this
13 has been discussed with them, and in some projects they've
14 been doing it, and for whatever reason this one it didn't
15 happen, they did not separate the mileage and the labor
16 from their mob charges, basically lumping them up as a
17 straight charge per mile. And being unable to
18 distinguish -- and we asked them, that's -- it's been
19 asked, and -- but just to let you know, I've already spoken
20 with the town of Moorcroft. If indeed they can get this
21 straightened out, I'd be more than happy to revisit the
22 labor issue with this one at a future date. If they can
23 get the consultant to get this straightened out, I have no
24 problem with going back and reimbursing on that.

25 But because they failed to separate that out, the

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1 mob charge was a buck 10 a mile on that, and these are
2 vehicles greater than three-quarters ton. We agreed for
3 that one, and so basically we applied that charge to what
4 they had actually used here, and that reduced it by
5 \$5,979.90, because there's no accounting for labor on that
6 one.

7 We also removed an additional \$32 from that
8 invoice for a charge for one-inch diameter caps. All the
9 piping on this well construction is two-inch diameter.
10 When I called them about it, they weren't really sure why
11 or how that had happened. It was in the invoice, so we
12 just removed it. Not a big problem.

13 We also removed \$1,179.57 on a materials charge
14 for two-inch diameter screen PVC pipe. It had been billed
15 as a separate line item in this invoice for the screening
16 they used. I got ahold of the well completion data. I
17 checked the actual footage of screen pipe that went in. It
18 agreed entirely with the previous line item information.
19 So for whatever reason, this additional stuff came in on
20 the materials charge, and because it sure appeared to me to
21 be a double billing of some form, that particular item was
22 removed from the total. And so the invoice total on that
23 one, which was \$64,507.95, was reduced by \$5,979, an
24 additional \$32, and an additional 1,179.57, leaving a total
25 for that invoice of \$57,316.48.

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1 So when you add all these up, basically that's
2 where we came up with subtracting \$8,089 in ineligible
3 costs for field work, and an additional \$4,312.89 -- excuse

4 me, 4,416.83 in ineligible costs from that sampling and
5 analysis. So the total -- total -- grand total on this one
6 is going to be \$76,272.62 for the field work, \$3,234.67 for
7 the Step 3 sampling and analysis. This is after we've
8 applied the 75 percent rate to it. So we're recommending a
9 total reimbursement for all three facilities for Step 2
10 field work for facilities 1, 2, and 3, and for Step 3
11 sampling and analysis for facility number 1 of \$79,507.29.

12 BOARD MEMBER CAHN: Mike, I just want to
13 thank you for your due diligence that you do. And these
14 packets, the way you present them, are very helpful for us.
15 It's very easy to follow your rationale.

16 MR. JENNINGS: Thank you. If at any time
17 you determine that you need -- if there's a better way to
18 do this, if I can help you to understand this better, let
19 me know. I'll be glad to try anything. This was a very
20 complicated one, and I'm sorry about that. It is what it
21 is.

22 BOARD MEMBER CAHN: But it's easy to follow
23 what you've done, so appreciate your due diligence on this.

24 MR. JENNINGS: And again, just to let you
25 know, on that labor charge relative to that mob stuff, if

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1 they wish to revisit it, I've told them, said if they can
2 come up with that, I'll be happy to try to reimburse them
3 on it.

4 CHAIRMAN WELLES: Do you feel this is sort
5 of an education problem, getting them up to speed as to
6 what the requirements are and how they have to submit, or
7 are they just really trying to pull one on us?

8 MR. JENNINGS: Oh, I'm not going to go
9 there, but I think what -- I think what the problem is,
10 what I have seen, though, is that for -- this is a large
11 company, got a lot of projects going on, and for some of
12 the submittals, they've absolutely done that, but for
13 whatever reason, other submittals they haven't done it.
14 Now, whether or not field offices aren't getting the word,
15 I don't know. All I know is I get this, it's like, well,
16 okay, this is how we're going to treat this until somebody
17 can get it straightened out.

18 CHAIRMAN WELLES: But in terms of the --
19 sort of the oversight on behalf of the town of Moorcroft,
20 do you think it's -- is it partially there, also, or not?

21 MR. JENNINGS: I -- because of the
22 technical aspect of some of this relative to what they're
23 doing, I've had this discussion with some of them. Yes, I
24 would love it if they would go through this and find these
25 things too, but because they're dealing with issues, which,

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1 to be honest, I'm not sure the clerks or whoever would be
2 responsible, I'm not sure they really understand what to
3 look for. I do, because -- and I'm getting better at it,
4 too, I might add. But I know what to look for. I know how
5 to do the numbers. How to figure this out. I wouldn't
6 necessarily expect them to do that, but I am trying to get
7 the word out that please start taking a harder look at
8 these invoices, because I'm having to try to catch this
9 stuff, and I would rather they did it up front.

10 But we're having a -- we're doing a presentation
11 at a rural water conference later this month, and I'm going
12 to be discussing where this program's at with that. And
13 that is one of the issues I'm going to bring up, just from
14 an educational standpoint, because I'll be talking to a lot

15 of operators. And I'm going to, again, ask them to please,
16 please, please try to review these invoices in detail.
17 And I've always offered everybody, as they're
18 going through this stuff, give me a call. The person that
19 I was dealing with at Moorcroft, she and I swapped
20 correspondence on any number of occasions, and it was very
21 helpful and beneficial. Hopefully as future requests come
22 down the line from them, they'll have a better feel for
23 that. But I tell everybody, if there's any question in
24 your mind, you give me a call, I'll stand right by your
25 shoulder and go through it with you. And some are taking

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1 me up on that. Doing the best I can to bring them up to
2 speed.

3 BOARD MEMBER BEDESSEM: Seems when it comes
4 to this situation where there's ineligible costs, that's
5 one thing, but when you go through your invoice review and
6 there's billing errors? Then goes back to the community
7 and then they're in the position of, well, they've already
8 paid this, then what do they do with the respect to their
9 relationship with their consultant and correcting those
10 billing errors. So, if anything, this is a good lesson in
11 making sure people's accounting staffs are on their A game
12 and that you've got good project management and invoice
13 review.

14 MR. JENNINGS: Yeah. I couldn't agree
15 more. Yep.

16 BOARD MEMBER CHESNUT: And I think a lot of
17 this is coming from problems we've had in Albany County,
18 smaller communities aren't able to have grants writers and
19 people like that to do it, so they don't know the rules of
20 the game and have to come up to speed too. So I'm glad you
21 can help them with that.

22 MR. JENNINGS: It's been a learning process
23 for me, as I'm sure everybody else. You bet.

24 BOARD MEMBER BEDESSEM: Well, I move to
25 approve the recommendations presented by DEQ for Items N,

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1 O, and P for Moorcroft, Step 2 and Step 3 requests.

2 MR. JENNINGS: Now, that would also --
3 forgive me. That would also include --

4 BOARD MEMBER BEDESSEM: Q.

5 MR. JENNINGS: -- if I'm not mistaken,
6 Moorcroft Number 1-3A, I believe, would also be --

7 BOARD MEMBER BEDESSEM: N, O, P, and Q.

8 MR. JENNINGS: Yes.

9 BOARD MEMBER CHESNUT: Second.

10 CHAIRMAN WELLES: Okay. All those in
11 favor?

12 BOARD MEMBER APPLGATE: Aye.

13 BOARD MEMBER CAHN: Aye.

14 BOARD MEMBER BEDESSEM: Aye.

15 CHAIRMAN WELLES: Opposed? None.

16 Motion passes.

17 On to Bosler.

18 MR. JENNINGS: Okay. Bosler.

19 BOARD MEMBER BEDESSEM: Our last one?

20 MR. JENNINGS: We have Bosler and Medicine

21 Bow.

22 BOARD MEMBER BEDESSEM: I think we approved
23 Medicine Bow already.

24 BOARD MEMBER CAHN: Approved that in full
25 reimbursement.

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MR. JENNINGS: Right. You're right.

Bosler is it.

BOARD MEMBER BEDESSEM: Thank you, also, Mike, for putting these headings on the top. It makes it much easier, when we're going through the packets, to pull the right documents.

MR. JENNINGS: You're welcome. I did it for me, too, because I was getting lost on these things. It helps.

BOARD MEMBER CHESNUT: They all start looking the same.

MR. JENNINGS: Okay. For Medicine -- excuse me. For Bosler -- got to get it tracked down here.

MR. FEUSNER: Excuse me, Bill?

CHAIRMAN WELLES: Yes.

MR. FEUSNER: This is Bosler, and it's in Albany County.

BOARD MEMBER CHESNUT: I'll abstain on this one.

CHAIRMAN WELLES: You don't have to leave the room.

BOARD MEMBER CHESNUT: I won't. I'm not going to Bosler.

MR. JENNINGS: Bosler. Again, this is for a Step 3. This is for second quarter sampling and analysis

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reimbursement. And it's a little convoluted, but basically we're recommending partial reimbursement. Best I can determine, they did a lump sum, or what I described as a turnkey bid on their sampling and analysis. And our policy has been, again, per the criteria, we reimburse on actual work performed involving time and materials.

And so when we get turnkey bids like this of lump sums, basically what I do is look at the invoice and to determine was there sufficient amount of time and materials within that invoicing to cover the lump sum? If it exceeds the lump sum, we pay -- we reimburse at the lump sum. If it's less than the lump sum, we reimburse for the time and materials for actual work performed. And the problem that I determined with Bosler was that the time and materials that were actually conducted on this were considerably less, in my estimation, than what the turnkey was for. So I had to do my reimbursement based on that.

And as a point of information, I spoke with Sheila Schermetzler. She had left an e-mail for me yesterday. She wanted to pull this reimbursement so that they could have time to get ahold of their consultant to discuss some of the issues within my reimbursement response. And I spoke with Sheila this morning. What the Department would like to do, and what we recommended to her was we'd like for them to get their money back as quickly

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as possible, as much as possible, and so we would like to continue forth with this application. And she has agreed to it, and reimburse on this.

If indeed they determined that they'd like to try to come back and try to get some of the other money or try to determine if indeed they're eligible for some other money I pulled from this at a later date, I said that's fine. You're more than welcome to do that, to resubmit an application if you can address the points I've discussed on there. And, in other words, again, to try to give them

11 everything back to them that's due to them. But Sheila has
12 agreed to let this proceed at this particular rate with the
13 proviso that if they wanted to bring this back later on,
14 that we would do so. I indicated that I have no problem
15 with that. So just to let you know about that.

16 Okay. You can certainly follow along with this.
17 Again, it was -- the initial submittal for this was \$4,950.
18 The invoicing total was for \$5,001.44. Going through the
19 invoicing, I subtracted \$2,089.50 in ineligible costs,
20 which left a total of 2,900 -- and that comes off the
21 \$5,001.44, leaving \$2,911.94 eligible for reimbursement.
22 At the 75 percent rate, that would be for recommended
23 reimbursement of \$2,183.96.

24 To go through the specific items and why I
25 removed them, labor line item 21, dates August 21st and

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1 August 29th of 2008, it involved charges specifically on
2 the invoicing for final report review. To the best I can
3 figure out on that, and particularly considering the dates
4 involved, that would have been for their Step 2 drilling
5 report. And that was not for Step 3 sampling and analysis.

6 And since we have already fully reimbursed for
7 Step 1 and Step 2 stuff, in addition to their first quarter
8 sampling and analysis, I deemed those charges were not
9 applicable for -- for Step 3 sampling and analysis, and
10 they were removed.

11 Second one, labor and line item, same line -- or,
12 excuse me, line item 31, it involved charges for driving
13 and sample preparation, et cetera, and dropping off samples
14 and paperwork for \$560 and \$170 respectively. The dates on
15 line item of December 8th and December 9th corresponded
16 with the sampling for their third quarter sampling and
17 analysis, not for the second quarter, which occurred in
18 September. That report has not been approved by the
19 Department yet. And that stuff -- and as I told
20 Miss Schermetzler, please put that on for your third
21 quarter reimbursement, because that, in my estimation, is
22 where that belongs. So, again, those funds were reduced
23 from that line item.

24 Labor line item 71 -- and again, this is back in
25 August of 2008. And early September 2008 involved charges

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1 for finished report; edit, update subsurface exploration,
2 et cetera; finalize subsurface and monitoring reports, et
3 cetera; and invoicing received itemization, et cetera, for
4 262 -- \$260, \$72, \$180, and \$48, respectively. And as I've
5 indicated on there, those activities were prior to field
6 work commencing for the sampling analysis for this second
7 quarter event.

8 And best guess I've got on this is, they appear
9 to be associated with the Step 2 drilling report
10 generation. And again, those -- that particular
11 reimbursement has been fully taken care of, so I reduced
12 those totals.

13 The next line, 8003, involved mileage charges of
14 \$161.46 for third quarter sampling and analysis. And
15 again, the Department has not approved that report. That
16 kind of goes along, again, with labor line item 31.
17 They're not for second quarter, and so that was reduced by
18 that amount.

19 Materials line item 8705, again, the latter part
20 of August, involved charges for bound copies at \$245, and
21 \$245 respectively. We received our copy of the drilling

22 report shortly after that August date, and again, because
23 this also occurred prior to any of the sampling analysis
24 activities, I can only presume that it had to do with the
25 step 2 drilling report.

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1 Finally, materials line item -- excuse me, line
2 item 9124 involved shipping charges of \$11.42. They
3 appeared to be associated with those -- with the shipping
4 out of those reports, again, by my estimation, for the
5 drilling report.

6 And then the last one of \$69.85 for 2 and a half
7 percent communication fee based upon labor charges. When I
8 reduced the labor from these other items and then apply
9 that to the 2 and a half percent, we reduced that total by
10 \$33.62. So add those all up, we got \$2,089.50 of
11 ineligible charges on that. So bottom line on this one,
12 again, we're recommending \$2,183.96 total reimbursement.

13 Again, I do want to emphasize that if indeed they
14 can find some substantiation for some of those other
15 materials, that indeed would lead me to believe they were
16 for third quarter -- or second quarter sampling and
17 analysis, be more than happy to revisit the issue.

18 BOARD MEMBER CAHN: I move we approve the
19 partial reimbursement as recommended for Bosler landfill.

20 BOARD MEMBER BEDESSEM: I have one question
21 first.

22 So, Mike, you're saying a number of these charges
23 that were probably associated with the Step 2 activities
24 are likely very legitimate charges, they just neglected to
25 put them on their Step 2 reimbursement?

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1 MR. JENNINGS: Well, I believe what they
2 did was they did a lump sum for Step 2. And we -- we
3 totally reimbursed --

4 THE REPORTER: I'm sorry. I can't --

5 MR. JONES: I'm sorry.

6 MS. ANDERSON: I'm sorry.

7 THE REPORTER: That's just distracting.

8 MR. JENNINGS: Reimbursed on a lump sum.

9 Now, that is one thing I mentioned to
10 Miss Schermetzler, if you're receiving additional billing
11 for those activities that are somehow outside this lump sum
12 contract that they had, that they're going to have to pay
13 on, I'll be more than happy to look at that, but at least
14 from what I saw, that billing was for a lump sum.

15 We have reimbursed on that. That was done. So
16 I'm not entirely sure why these wound up on this billing,
17 but I -- like I say, I left the door open for them to
18 certainly take a look at that, and if indeed it can be
19 shown that these can be applied to this or some other
20 fashion, I'll be more than happy to take a look at it.

21 BOARD MEMBER BEDESSEM: Okay. There's some
22 other issues here, other than which, you know, particular
23 reimbursement packet it shows up in?

24 MR. JENNINGS: Yeah.

25 BOARD MEMBER BEDESSEM: Potentially you'll

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1 find out?

2 MR. JENNINGS: Yeah.

3 BOARD MEMBER BEDESSEM: Thank you. I just
4 wanted to --

5 CHAIRMAN WELLES: Okay. We have a motion.

6 Do we have a second?

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BOARD MEMBER BEDESSEM: I second.

CHAIRMAN WELLES: Okay. We've a motion and a second. All those in favor?

BOARD MEMBER BEDESSEM: Aye.

BOARD MEMBER CAHN: Aye.

BOARD MEMBER APPLGATE: Aye.

BOARD MEMBER CHESNUT: Abstain.

CHAIRMAN WELLES: One abstention for

Bosler. And I believe that's --

MR. JENNINGS: We believe we are done with those.

CHAIRMAN WELLES: We are done.

MR. JENNINGS: what I'd like to do, with your indulgence, just kind of like to bring you up to speed real quick on where we're at with this stuff, if that would be okay.

BOARD MEMBER BEDESSEM: Yes.

MR. JENNINGS: I did a grant summary, and that's predicated on approval of the items that we

submitted today. And so this is updated based on that. And -- oh, that's good -- total work plan grants awarded to date, again, this is for step 1 work plan development, is \$93,189.84. And that's 35 out of a potential 115 facilities.

CHAIRMAN WELLES: One hundred fifteen?

MR. JENNINGS: That's the population, nearest we can pinpoint it, that is potentially eligible for this program.

Total investigation grants, which would be step 2 field work, to date, \$709,284.48. And that's 32 out of that population of 115 facilities. And mind you, though, that follow-up field work reimbursements, which are eligible for this, those aren't -- that does not up that total on the facilities. That's just based on the number of facilities that have received reimbursement, whether it's one time or two times the field work activities.

Total sampling and analysis grants awarded to date, and again, that's step 3, is 5 out of 115. Now, just to let you know, anecdotally, I know there's lots and lots of sampling and analysis that's occurring, and has occurred. And for whatever reason -- and again, there are a lot of facilities that are simply not eligible because they're either currently active, or they did not cease receipt of waste after September 13, 1989. So what that

total number is of that actual is considerably less than that. I won't know until we -- because I don't know how many actually ceased receipt of waste. They have to supply that information to me to verify when this happened. So to get a true bite on that, it will be some time before I can tell you how many are actually eligible for step 3.

CHAIRMAN WELLES: Did you have a dollar figure for that?

MR. JENNINGS: \$29,487.80. And so the total to date for all three steps is \$831,962.12.

BOARD MEMBER BEDESSEM: So, Mike, what's your take on why you only have 35 out of 115 facilities participating in the program so far, as far as the --

MR. JENNINGS: Let me tell you -- I'll give you the Crystal Report, because this might give you a better feel for how many are actually doing what out there. There's lots of them doing work, they just haven't

18 submitted for reimbursement yet, which is beginning to
19 terrify me, because at some point I'm going to get
20 hammered. This one was a lot, and the next ones are going
21 to get worse.

22 BOARD MEMBER BEDESSEM: This is -- for
23 example, step 1 is 35 submittals for reimbursement for the
24 work plans, but as far as the Department's concerned, how
25 many work plans have been submitted and approved and are --

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1 you know, they're proceeding on, but not with submittal
2 yet?

3 MR. JENNINGS: I've got the answer right
4 here for you. This is called our Crystal Reports. We kind
5 of do some updating what's been submitted, what's been
6 approved. Total for all of this -- we have three
7 districts, and total number of work plans requested out --
8 some of those -- there's a handful of those 115, there's
9 some ownership issues as in who's the responsible party, so
10 they're still kind of in this gray area out there, but
11 we've requested 104 work plans. We have received 94. We
12 have approved 92. So there's a lot of folks out there,
13 there's a lot of money sitting on the table they simply
14 haven't come and gotten yet.

15 Okay. As far as the field work activities, we've
16 received 53 reports out of that 115 total. And you can
17 back that off, if you want to apply that, actually, to the
18 104, because that's more realistic, because, again, we'd
19 have some of those gray area ones. And of those 53 that we
20 received, we've approved 40 of them. And this particular
21 report was dated March 6th.

22 CHAIRMAN WELLES: Why do you call that the
23 Crystal Report?

24 MR. JENNINGS: It's a software program --
25 CHAIRMAN WELLES: Okay.

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1 MR. JENNINGS: -- that's used for this.
2 And, sorry, that's just what I call it.

3 But I hope that gives you -- like I say, there's
4 a lot of money sitting on the table out there. And I
5 presume they're going to be coming at some point in time in
6 the near future to pick that up.

7 BOARD MEMBER BEDESSEM: All in the same
8 day?

9 MR. FEUSNER: Are these all the same?

10 MR. JENNINGS: The colored ones are the
11 same. I did those because they're much easier to read.
12 And then, I'm sorry, I just had these regular copies here,
13 and they're a little bit harder to see what's going on.

14 MR. FEUSNER: Do you have another one?

15 MR. JENNINGS: Nope.

16 BOARD MEMBER CHESNUT: Did you say 94 out
17 of 115 have submitted something?

18 MR. JENNINGS: Yeah, 94 have -- 94 work
19 plans have been submitted. I think it was 92 approved.
20 so we've got a lot -- a lot of work plans that have already
21 been approved pending the work. And again, if you look at
22 the -- the reports have been submitted after the -- after
23 the drilling has been completed, so obviously as the
24 process moves along, there's still plenty of them out
25 there, they may have completed the drilling. Simply

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1 haven't finalized the report and gotten to us yet. So
2 there's a fair amount of activities going on there, it's

3 just, again, from reimbursement standpoint it's like, well,
4 we're still waiting.

5 BOARD MEMBER CHESNUT: What about these
6 other 21? Do you know what's going on with them?

7 MR. JENNINGS: You mean the outliers?

8 BOARD MEMBER CHESNUT: Well, as I remember
9 one week after the information about the Bosler landfill,
10 it's like we've got to get this done now. It's mandated
11 we've got to do it. I was just wondering why these others
12 haven't got it.

13 MR. JENNINGS: Well, let me -- I'll put my
14 boss on the stand here.

15 Bob, could you give them a quick and dirty on
16 that one?

17 MR. DOCTOR: Mr. Chairman.

18 Tim, we have some facilities -- Bosler came
19 close. There was some question who actually operated that
20 landfill.

21 BOARD MEMBER CHESNUT: Yeah. Or where it
22 even was.

23 MR. DOCTOR: Yeah. And I would say maybe
24 not everybody's stepping up to the plate like Albany County
25 did and taking ownership of that, you know, saying we need

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1 to do this. So there's some others where we've had some
2 question about who might be responsible. So we were trying
3 to get the low-hanging fruit first. And some of these are
4 very small landfills, remote, we thought we'll try to get
5 those as we can, but we need to focus on some of the other
6 landfills. So we are working on those and trying to get
7 them.

8 I would have to say Albany County has done a very
9 good job of stepping up to the plate and getting wells
10 drilled out there at that facility. But we have a few
11 others --

12 BOARD MEMBER CHESNUT: We were lucky to
13 have some ranchers with long memories that knew where that
14 was.

15 MR. DOCTOR: Yeah, and that's where we are
16 working with those folks, but it's taking a little more
17 time.

18 CHAIRMAN WELLES: That's unusual for a
19 rancher to have a long memory.

20 BOARD MEMBER CHESNUT: Yeah, especially
21 about landfills.

22 MR. JENNINGS: And the last thing I have
23 for your edification here is some time back I was asked to
24 provide some sort of a cost estimate as far as what might
25 total expenditures be. I'm just going to preface this with

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1 there's serious fudge factor in this, but predicated on
2 what was submitted for work plans. In other words, they
3 are required to supply a cost estimate in the work plan for
4 all three facets of the program. If indeed they're
5 eligible for Step 3, they have to supply that also.

6 And so based on those cost estimates that I have
7 in a database, and it was predicated on -- and I've got
8 some copies here, and I think we just passed those out, but
9 if it's just -- and the cost estimates, by the way, they
10 typically highball those, because we request they go to 200
11 feet or first water, whichever comes first. And so
12 obviously at a lot of facilities we've got shallower water,
13 so clearly the costs are going to be considerably reduced.

14 Some of the consultants felt very good about
15 where the water was, so their cost estimates were
16 relatively precise, guesstimating water's going to be here,
17 here's what it's going to cost you. Others, basically,
18 were not that certain. So, for instance, if it was a
19 three-hole program, their cost estimates were based on 200
20 foot. And -- which considerably added to the total --
21 total cost of that.

22 So at any rate, there's a lot of slop in these
23 cost estimates that were submitted, but based on those, for
24 the 80 cost estimates that I had available at the time I
25 put this together, it worked out to \$4,699,963.77, not that

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1 that's a big issue. And if I extrapolated that out --
2 well, in a cost per facility, that's \$58,750. Extrapolated
3 out for 115 eligible facilities, that would be \$6,756,250.

4 If I just assumed that it was 75 percent grant
5 reimbursement for everybody, which it is not. There are a
6 number of facilities only eligible for 50 percent, but for
7 the sake of trying to at least come up with something that
8 we could understand here, that would -- per facility that
9 would be \$44,063 eligible reimbursement per facility.
10 Hundred and -- and going to the next one here. Let's see,
11 at 75 percent reimbursement, that would be 5,067,100.88
12 (sic) which considerably --

13 THE REPORTER: I'm sorry. You have to slow
14 down on those numbers.

15 MR. JENNINGS: Sometimes I get paid by the
16 word. \$5,067,188. The legislature put aside \$7,970,000
17 for this program.

18 Additionally, though, our best estimate is one
19 third of the eligible facilities would require some
20 iterative work. In other words, what we found, basically,
21 was the flow directions were incorrect or we needed
22 additional wells. So assuming a standard project cost for
23 that -- again, that was just to simplify this -- would
24 basically require an additional 1,674,000 and change of
25 additional funds.

0053

1 Okay. The total cost estimate, then, for initial
2 work plus iterative work at 75 percent reimbursement would
3 be \$6,741,582. Of the 115 total facilities, based on some
4 statistics we've got, just observations from other
5 programs, we are guesstimating 55 of 115 total facilities
6 might be contaminating groundwater at a level where they
7 could require follow-up nature and extent projects, which
8 are also eligible under this program.

9 Currently 14 of the existing facilities that we
10 have are in nature and extent examination, which leaves a
11 balance of 41 additional facilities. So if you applied the
12 41 times an average project cost of \$44,063, that's an
13 additional \$1,806,583.

14 So based on these estimates, and this is very
15 crude and very rough, it looks like we could have about
16 \$8,548,165 for the program. Right now the cost is
17 considerably under that, but, again, there's a lot of work
18 out there that we have yet to finalize and get to see
19 what's going on.

20 Last thing I have for you here is just to give
21 you some idea where we're at with released or suspected
22 releases. This is another report we've got going on here.
23 We have 35 facilities that, in our estimation, have what we
24 consider a confirmed release. We have 17 additional

25 facilities that have a suspected release. We have 86

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1 facilities with incomplete data. And we have six
2 facilities that do have adequate monitoring, but we have
3 not detected a release as yet.

4 And by the way releases, it may be fine today; a
5 year from now it may not be. Just kind of depends on
6 what's happening. Facilities where pollution exceeds
7 groundwater protection standards, we have 12 in the state
8 with a statistically confirmed release above the
9 groundwater protection standard. We have 21 with a
10 suspected release above the -- a suspected release above
11 the groundwater protection standard.

12 We have a hundred facilities with incomplete data
13 to compare with groundwater protection standards. We have
14 10 facilities with adequate monitoring and no increased
15 aboveground water protection standards. Just, again, to
16 kind of fill you in on that.

17 And that's about all I have. Does anybody have
18 any questions?

19 BOARD MEMBER CAHN: I have a question.
20 It's a little -- I can't help but noticing that a number of
21 the improper billing was from one particular consultant,
22 Inberg-Miller. And I'm just wondering what process there
23 is -- I'm a little bit concerned about, and obviously the
24 county's not necessarily having the skill and expertise to
25 go through those invoices in the level of detail that you

0055

1 have. So what kind of feedback is there to get back to
2 the, you know, not just like you get back to the county and
3 say these are ineligible, what kind of feedback is there
4 for somebody to get back to -- for having problems with
5 particular consultants to get back and say, hey, you know,
6 we're seeing billings for hotel rooms in other parts of the
7 state where it's not related to the project, things like
8 that.

9 So that's just my question, what's the feedback?
10 Or is that just really the county's responsibility?

11 MR. JENNINGS: Well, first and foremost the
12 counties are the district. They're my clients. They're
13 the ones I specifically operate with, because they're the
14 ones who request the reimbursement. However, in the
15 process of trying to go -- for instance, with the Moorcroft
16 stuff, spent a lot of time reviewing with them, and then
17 they interfaced with their consultant. And I'm sure a lot
18 of information has been passed that way.

19 That was a different consultant, but it's the
20 same thing with all of them. When they've got questions,
21 and a lot of times they will -- particularly when I'm
22 removing large sums from there, I certainly offer to sit
23 down with them, to go through this stuff. I point this
24 stuff out, and I try to do it in a timely fashion so they
25 get this stuff squared away before we come here. For

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1 instance, with the Moorcroft one, because there were a lot
2 of problems associated with it, and -- but I still left the
3 door open, hey, we can certainly revisit some of these
4 issues.

5 And it's getting better in some respects, but
6 because one of the firms you mentioned there probably has
7 the lion's share of the work in the state, I'm not
8 necessarily surprised that they might be involved in some
9 more of these problems, but there's a learning curve with

10 this, and I think they're getting better at it. But we've
11 also -- like I say, I've been having discussions. When
12 they wish for me to talk with their consultant, I will do
13 that also. And I try to impart this information. And
14 oftentimes it's just variability. There's certain things
15 which I hadn't seen before. That you mentioned the motel
16 one. I had not seen a submittal like that where there was
17 one way out there.

18 And to be honest, I'm also getting better at
19 that, too. Frankly, I may have missed some things in the
20 past, but I'm trying to be a little better with this stuff
21 and pick up on this stuff. But I think it's getting
22 better, but we are trying -- trust me, I'd much rather it
23 went better on some of this stuff, and we're working on it.

24 MR. DOCTOR: Mr. Chairman, I had a
25 question.

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1 I don't know if any of you on the board,
2 especially maybe you, Tim, as a commissioner, have heard of
3 counties going back to the consultant and asking to get a
4 refund of the overcharges. And I haven't heard of that.

5 You may be able to find that out with your
6 connections, Tim, better than I can. I hope that they go
7 back and do that. Now, in some cases, somebody in your
8 profession, Tim, we have been providing reimbursement
9 before they actually pay the bills, if they can. So in
10 that case they may actually not pay that -- those
11 overcharges. Hopefully we're able to help counties catch
12 these errors before they actually make the payments. And
13 that doesn't always happen. And we're not always sure of
14 that. I think to some degree our ability to ride herd on
15 consultants is fairly limited, but we're trying the best we
16 can to at least help inexperienced small towns and local
17 governments and these clerks that just don't understand
18 this stuff, to get a better grasp for what these invoices
19 mean. So maybe it will correct itself.

20 BOARD MEMBER CHESNUT: I know our grant
21 writer, Sheila, is very -- Mike, you talked to her last
22 night and today. She'll stay on top of it. I'm sure she
23 will go back to them and ask for reimbursement.

24 MR. DOCTOR: If you have any other
25 suggestions for what we can do -- I think the main thing is

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1 Mike's been spending a lot of time working directly with
2 small town and county clerks who just don't have the
3 background in this stuff to make the difference. And
4 hopefully, you know, the firms that we're seeing so many
5 errors in the invoices, I hope that that does improve,
6 because it does take a lot of Mike's time to find all these
7 errors. And I know some of them are a dollar here and a
8 dollar there, but there's been some others, duplicate
9 billings for several thousand dollars for well supplies
10 that we hate to see counties pay for.

11 So I don't know, Mr. Chairman, if there's any
12 other suggestions.

13 CHAIRMAN WELLES: The only other comment I
14 would have, Mike, is the last numbers that you went
15 through, the number of facilities with confirmed releases,
16 et cetera, et cetera, you don't have that as a handout. So
17 could you e-mail that to us or mail us a hard copy? The
18 reason I say that, and this is a question, but also a
19 suggestion, what -- who else do you report to? who is
20 monitoring what DEQ is doing with this program? Is there a

21 legislative review team or something? How does that work?
22 MR. FEUSNER: Mr. Chairman, what will
23 happen probably later this year, we will be giving a
24 summary to the minerals committee on the status of this
25 program.

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1 CHAIRMAN WELLES: Okay.
2 MR. FEUSNER: And we're in concert with the
3 integrated solid waste planning functions that are going on
4 also. But we have not been asked specifically yet for any
5 of these detailed numbers, but the interest is increasing,
6 so I anticipate a great need. So right now we are managing
7 it and tracking it in-house, but I anticipate we'll have to
8 be releasing this information shortly to the legislature.

9 CHAIRMAN WELLES: I think you should,
10 because I think you're doing a good job and people need to
11 know it. And I think the public needs to understand the
12 scope of the program, you know, where you're at. And
13 hopefully that will also, you know, bring forth better
14 participation, maybe. I don't know.

15 MR. FEUSNER: We're hopeful. We'll have to
16 see what time and experience proves out.

17 MR. JENNINGS: And based upon your query, I
18 will certainly, as far as the numbers relative to impact of
19 facilities, I'll -- by golly, I'll update you every time we
20 meet. No problem with that.

21 CHAIRMAN WELLES: I appreciate that. I
22 think it's personally, you know, I take it back to Johnson
23 County and share it with people there so they know what's
24 happening statewide, and it helps them. And they're --
25 they've got a good network. I mean, those folks in the

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1 landfill business have a good networking system, I think,
2 from what I've learned.

3 BOARD MEMBER CHESNUT: Mr. Chair.
4 Now, is this a program the State just decided to
5 take on, or was this federally mandated?

6 MR. FEUSNER: This was a program that was
7 passed by the legislature in 2006, during the budget
8 session then. It was a direct result of an initial bill
9 that had been introduced at that point in time, whereby the
10 State was identifying potential for groundwater
11 contamination. It was derived from the standpoint that
12 over the years prior to 2000, that the State was an arid
13 state, that landfills did not leak, and that was a lesson
14 hard learned.

15 And as we're starting to see, landfills are
16 leaking very seriously. So this is an effort to determine
17 the magnitude of the problem, identify the magnitude of the
18 money that might be involved, and recommend a means or a
19 mechanism to the legislature, after July 2010, on how to
20 solve the problem. So it's an ongoing issue. It's going
21 to take many years, if not decades, to correct.

22 BOARD MEMBER CHESNUT: Thank you.
23 MR. DOCTOR: Mr. Chairman -- go ahead,

24 I'm --

25 BOARD MEMBER BEDESSEM: Go ahead, Bob.

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1 MR. DOCTOR: I was going to mention for
2 your benefit, Tim, you're hearing -- you probably have
3 heard a lot that we're changing rules in some way or we
4 haven't changed the rules in years. Most -- really all the
5 standards that we're going on now and monitoring

6 requirements have been in place for decades. what we're
7 seeing is the results of that monitoring now manifesting
8 itself.

9 Over time we're seeing releases and we're
10 reacting to those under our current rules and regulations.
11 So it seems like there's a change, but actually it's just
12 our monitoring data now is showing us that we have a
13 problem that we didn't expect to happen. So that's very
14 important. You're going to hear that a lot that DEQ's
15 changing things, and really we're not. we're implementing
16 existing rules because it's based on the data.

17 And Marj knows all this full well, and she's
18 close so you can bug her any time.

19 MR. FEUSNER: Lastly, Tim, this is only a
20 state program, and not mandated by federal government.

21 BOARD MEMBER CHESNUT: Do we give our data
22 to EPA or anything like that, or just stay here in the
23 state? Is it something --

24 MR. FEUSNER: They haven't asked for
25 anything yet, so we're managing it ourselves and handling

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1 our own problems.

2 MR. DOCTOR: We meet with them regularly,
3 and we know them, so I keep them updated on what's going
4 on. A lot of their primary role in the solid waste program
5 has more to do with recycling, waste reduction, those types
6 of things, and they're providing us some help there, asking
7 us for information and we've paid for a lot of the
8 information, but we are working closely with them. And
9 they've been very helpful providing information, but we're
10 not mandated, especially on this groundwater program, to
11 report anything to EPA.

12 BOARD MEMBER BEDESSEM: I just had one last
13 suggestion, Mike, with respect to cost estimates. I know,
14 you know, you may be having to report to the legislature,
15 as far as funding and so forth, these types of cost
16 estimates. And we all know that there's so many
17 assumptions and simplifications, similar to the integrated
18 solid waste management, where those are planning cost
19 estimates and there's lots of assumptions in there. And to
20 support that, as you go through all these calculations, if
21 you could go ahead and round these so that it brings that
22 home to the nearest hundred thousand or whatever, because
23 on one hand we say, for example, at the top here that it's,
24 you know, very rough estimate, but then our numbers are
25 down to the dollar --

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1 MR. JENNINGS: I recognize that I have a --
2 BOARD MEMBER BEDESSEM: -- it would just
3 help --

4 MR. JENNINGS: -- fault of doing decimal
5 points.

6 BOARD MEMBER BEDESSEM: In other words,
7 bringing it home to the legislature, whoever else might
8 look at it, it would better serve --

9 MR. JENNINGS: The point is well taken.

10 CHAIRMAN WELLES: I thought you got paid by
11 the word, not the decimal point.

12 MR. JENNINGS: That's what I kept
13 hoping for.

14 I have one last, if I may, I have a number of
15 requests, reimbursement applications, they were either
16 incomplete and either pending some information. I have two

17 that came in late, and simply from a time constraint, I
18 could not get them processed in time. I'm just wondering
19 if -- if as we had discussed previously, if there's any
20 potential for you folks to do one of these stopgap
21 meetings, say a couple months from now, to maybe speed
22 up -- if indeed those folks wish it. I was certainly going
23 to ask them, but I'm obviously going to defer to you folks
24 first.

25 MR. FEUSNER: Let me expound on this a

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1 little bit. This is a quarterly meeting for now. Two
2 months would be the next quarterly meeting. The question
3 really resolves around we're not sure what water quality is
4 going to have in terms of other subjects in the next
5 quarter.

6 And as Mike indicated, the number of these
7 applications are going to start to increase, so they're
8 going to be coming in a lot more frequently. Do we want to
9 have in-person meetings, or do you want to have telephone
10 conference calls in combination with water quality? In
11 other words, if water quality had an issue to discuss, we
12 could do this by conference call, or if your preference is
13 do you want to do it in person in the future now, for these
14 reimbursement requests.

15 BOARD MEMBER CAHN: I'll speak up and say
16 that if possible, you know, we've been doing them by
17 conference call, you know, I certainly appreciate that
18 opportunity, and so I think it saves everybody a lot of
19 driving. If water quality is having a meeting anyways
20 during that quarter and you're ready, I don't have any
21 problem with bringing the reimbursements to the meeting if
22 we're going to be meeting anyways, but I think, you know --
23 I don't think it's necessary necessarily to have the face-
24 to-face for these issues. We're not accepting -- it's not
25 public -- I mean, we do accept public comment, if your

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1 applicant has a problem, but -- so I don't know.

2 BOARD MEMBER BEDESSEM: If water quality is
3 looking at, you know, rule development, where it benefits
4 us to see a presentation, so forth, we certainly don't want
5 to do that over a conference call. And if you can combine
6 it, because they have something on the agenda, fine, we'll
7 have a face-to-face meeting, but if we just -- if you're
8 piled up on reimbursement requests and just like to have
9 one to get these done, I'm sure we would all be amenable to
10 doing that.

11 MR. FEUSNER: Okay. Let me ask this, if
12 water quality had something that would require board to be
13 present for the meeting, could we not do a conference call
14 for us separately, even though you're getting together
15 during -- during the same day, instead of being at the
16 meeting?

17 BOARD MEMBER CAHN: Sure. In other words,
18 at our meeting we would then have a phone there and you
19 guys -- you would call in on the phone?

20 BOARD MEMBER BEDESSEM: That's fine.

21 BOARD MEMBER CAHN: As long as the
22 connections are going to -- this room doesn't have a phone,
23 so that's why I'm over here, because this room doesn't have
24 a phone. I was not to --

25 MR. FEUSNER: We'll see how that works out,

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1 and try to make it the most convenient for everybody.

2 MR. JENNINGS: And just simply from a
3 logistics standpoint, because we do have the 30 days public
4 notice that we have to do on this, so if we were going to,
5 say, have a shortened-up meeting, not necessarily on a
6 quarterly scale, probably the earliest we could do them is
7 like 40 -- 45 days after the fact, something like that,
8 which would be about the shortest we could get one in.
9 Just, again, based on that public notice stuff.

10 But if that's something you folks would
11 entertain, again, what I do is go to -- to the applicants
12 and say how bad do you need your money? And again, you
13 folks, if your schedules permit it, that's certainly
14 something I'd like to offer them in terms of getting their
15 money back quicker.

16 BOARD MEMBER CAHN: We're not obligated to
17 have quarterly meetings if there's no business of the
18 Department. You know, we've had them once a year and we've
19 had them twice a year, and three times a year, just
20 depending on how much business is coming up in the
21 Department.

22 BOARD MEMBER BEDESSEM: She's our
23 institutional board member.

24 MR. JENNINGS: I suspect with this
25 reimbursement thing, you're not going to have any problems

0067 1 finding quarterly meetings. We're going to be able --

2 MR. FEUSNER: Maybe for more --

3 MR. DOCTOR: Mr. Chairman, if Mike gets a
4 number of applications built up, I'll just call you and
5 say, you know, I've got like 10 or 15, let's do a
6 conference call, what do you think? And we'll let you make
7 that decision. And we'll be in contact with Kevin or
8 anybody else that may need to bring something else to your
9 attention that would really cause us to get together, but
10 that's your call, too.

11 BOARD MEMBER BEDESSEM: And if they're in
12 close proximity, as LeRoy suggested, if we can just do that
13 on the same day, you know, we're all here at this meeting,
14 and then could do the conference call.

15 CHAIRMAN WELLES: Rather call me, e-mail
16 all of us at the same time, because then everybody -- it
17 just simplifies it.

18 MR. DOCTOR: Right.

19 MR. FEUSNER: I believe we're finished.

20 CHAIRMAN WELLES: Does the Board have any
21 others questions?

22 BOARD MEMBER CAHN: Did you want to set a
23 potential date for 45 days from now, or --

24 MR. JENNINGS: what I'd like to do is talk
25 to the applicants and see if there's a pressing need. If

0068 1 there is, I'll get back in touch, if that's okay.

2 CHAIRMAN WELLES: Okay.

3 BOARD MEMBER BEDESSEM: Sounds good. Thank
4 you very much.

5 CHAIRMAN WELLES: Before we --

6 BOARD MEMBER CHESNUT: Helps to have a
7 PowerPoint, too. Oh.

8 CHAIRMAN WELLES: That's coming next.
9 That's the Water Quality Division.

10 So at this point, I guess I would say let's take
11 a 10-minute recess. And during that time, if you will help
12 me, we'll sign this so it's correct.

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(WWAB meeting proceedings recessed
10:39 a.m. to 10:58 a.m.)

13
14
15 CHAIRMAN WELLES: As I said to everybody, I
16 think who's here can move your chair around where you're
17 comfortable and you can see. would it help, I guess, if we
18 turned that screen just a hair? Can we do that? Is that
19 complicated?

20 BOARD MEMBER CAHN: Well, this is --

21 CHAIRMAN WELLES: Turn that too.

22 MR. FREDERICK: Sure.

23 CHAIRMAN WELLES: I'm just thinking so
24 everybody can really see it. Does that work or not?

25 MR. FREDERICK: Try to relocate the

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1 projector.

2 CHAIRMAN WELLES: Is that better?

3 MR. JONES: Yeah, thank you.

4 CHAIRMAN WELLES: Okay. We'll call the
5 meeting back to order. And we are going to have a
6 presentation by Kevin Frederick, program manager of the
7 groundwater protection section of DEQ.

8 So, Kevin, it's all yours.

9 MR. FREDERICK: Thank you, Mr. Chairman.

10 BOARD MEMBER CAHN: Do you have a copy of
11 your presentation?

12 MR. FREDERICK: I do.

13 BOARD MEMBER CAHN: Great. I'll pass them
14 around.

15 Did I mess things up when I moved it?

16 MR. FREDERICK: I don't think so -- oh,
17 yeah.

18 BOARD MEMBER CHESNUT: That looks good.

19 MR. FREDERICK: I do have a sign-up sheet
20 that I would like to pass around and ask everyone to sign
21 in, too, please.

22 BOARD MEMBER CAHN: I'll pass out your
23 handouts.

24 MR. FREDERICK: I'd also like to quickly
25 introduce another DEQ attendee with us today, Diane

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1 walker-Tompkins. Diane is attending today because she'll
2 probably be bringing a draft regulation before the Advisory
3 Board at the next meeting relating to water and wastewater
4 treatment plant operator certification regulations. And
5 this would be -- this gives Diane an opportunity to see
6 firsthand how Advisory Board meeting is conducted and so
7 forth. So we'll be seeing more of her in the future.

8 BOARD MEMBER BEDESSEM: would that be next
9 quarter or --

10 MS. WALKER-TOMPKINS: Hopefully. The
11 attorney says I'll have it back next week, so if that's the
12 case, I'll be contacting you guys to see if I can get on
13 the agenda.

14 MR. FREDERICK: I think that's what
15 John Wagner was planning. John Wagner, the administrator
16 of water Quality Division, does send his apologies for not
17 being able to attend today. He was planning to attend.
18 Came down with a pretty good cold yesterday and fell out
19 sick today, so he won't be attending.

20 With that, I'd like to give you a brief
21 presentation on our Geologic Sequestration Proposed
22 Regulation Chapter 24 of Water Quality Division Rules and
23 Regulations.

24 As Mr. Chairman, as you mentioned, my name is
25 Kevin Frederick. I manage the groundwater section within

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1 the water Quality Division at DEQ. One of the programs
2 that we administer within our section is the Underground
3 Injection Control Program. And this proposed regulation is
4 fundamental to that program and those regulations.

5 I would like to also acknowledge the presence
6 today of Wendy Chung. Wendy is with EPA Region VIII
7 Underground Injection Control Office in Denver. And Wendy
8 works pretty closely with us on a lot of our UIC
9 activities.

10 And thanks for coming, Wendy.

11 Just a quick overview of what I'd like to talk
12 about during the presentation today. A little bit of
13 background on what geologic sequestration is; some of the
14 Wyoming Geologic Sequestration, or GS, legislation that has
15 been developed in the past relating to what we're doing
16 here today in some fashion; the development of the proposed
17 GS regulation; Chapter 24, the process that we applied in
18 putting this regulation together; and then a brief overview
19 of the proposed rule itself.

20 Geologic sequestration is also known as carbon
21 capture and storage. It's essentially taking carbon
22 dioxide out of an emissions stack or stream that's
23 presently being emitted to the atmosphere and compressing
24 that to a supercritical phase and dehydrating it and then
25 injecting it underground under high pressure and high --

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1 and temperature, at depths that are typically below at
2 least 2800 feet below surface.

3 The waste stream, once it's captured, the carbon
4 dioxide may be piped or transported somewhere for
5 injection. Currently that's being done in Wyoming, where
6 Exxon sends CO2 gas to Salt Creek -- Anadarko Salt Creek
7 field up near Midwest, where it's then injected for
8 enhanced oil recovery.

9 And typically, again, the injection process is
10 through a disposal well, injection well, deep injection
11 well, regulated under the underground injection control
12 regulations.

13 BOARD MEMBER CAHN: Kevin, just for future,
14 if you have something -- this is a really helpful diagram.
15 I have been struggling with looking through the regulation
16 without having this kind of a diagram to kind of show the
17 process, but I'm having -- I mean, I can't read this,
18 either on there or on here. So I would just appreciate
19 next time if you have that kind of -- if you could make
20 sure to do that page at full scale. I wouldn't mind if you
21 could e-mail us full -- at least this presentation so we
22 could look full scale at that paper. I think that would be
23 really helpful.

24 MR. FREDERICK: I think I e-mailed you,
25 actually, a copy this morning.

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1 BOARD MEMBER CAHN: Okay. Maybe a few days
2 before the meeting would be great.

3 MR. FREDERICK: I didn't know if you were
4 attending or not, so that's a good comment. Thank you.

5 Some of the technical challenges and risks that
6 are associated with geologic sequestration evolve from the
7 presence of abandoned wells, for instance, that may
8 intercept the injection zone. And if these wells haven't

9 been identified and properly plugged and sealed, there's a
10 possibility that the CO2 that's injected may actually
11 intercept that well and find its way back to the surface.

12 Storage of significant volumes of carbon dioxide
13 likely cause large-scale displacement of native fluids.
14 what we mean here is as you're injecting carbon dioxide
15 underground, the space that it's going to be taking up, the
16 pore space within the formations is -- presently contains
17 some sort of fluid. More often than not it's a water.
18 It's typically somewhat saline or salty. And as the CO2's
19 injected into that formation, then, it will begin to
20 actually displace and move that water out of that pore
21 space. And it has a tendency, then, to push that water out
22 in front of this carbon dioxide boom, and essentially
23 begins to develop where your injection well is completed
24 into the subsurface formations.

25 You'll also see associated with that some

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1 hydraulic influences in wells that may be completed in that
2 same formation quite some distance away from where the
3 injection's actually taken place. And again, as you're
4 injecting the carbon dioxide gas into the rock, it moves
5 the fluid out of the pore space, as the -- as the fluid
6 moves, then it has a tendency to actually influence the
7 water levels and so forth in wells that are in the same
8 formation some distance.

9 A couple of things that we do know about CO2 is
10 that long-term storage and disposal in the subsurface is
11 relatively new. There are a few projects that have been
12 going on internationally, primarily, over the last several
13 years, but for the most part here in the United States, no
14 real field of scale -- commercial scale operations have
15 taken place. So this is somewhat of a new process for us,
16 and there's obviously some uncertainty, and so forth, that
17 we struggle with as we move ahead and work towards getting
18 pilot scale carbon dioxide sequestration projects underway,
19 and working toward full-scale commercial implementation.

20 One of the major interests in geologic
21 sequestration, or concerns, is to try to ensure that we're
22 protecting existing and future underground sources of
23 drinking water. And they can be sources of underground
24 water that are currently being used to supply drinking
25 water sources or domestic tribal water supply wells, for

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1 instance, even stock wells and irrigation wells, as well as
2 those aquifers that could be capable of providing water
3 sources in the future for those particular types of uses.
4 So even if there's not an existing use, we still want to
5 protect for future potential uses as well.

6 Carbon capture and storage is not necessarily a
7 silver bullet, but it's been recognized as a key climate
8 change mitigation technology. And again, the idea here is
9 to essentially keep the greenhouse gases from being
10 released into the atmosphere of the CO2, in particular, and
11 discharging it through an underground injection well
12 underground.

13 These are actually slides that I've borrowed from
14 EPA's presentation on carbon capture and storage. I
15 believe this presentation was back in February of 2008 in
16 Washington, D.C.

17 Ensuring that permitting regulations are in place
18 will enable commercial-scale CCS projects to move forward.
19 I think our legislature recognized the importance of having

20 a permitting regulation in place. That's certainly what
21 motivated us to get to this point with Chapter 24.

22 Clear guidelines or regulations will reduce
23 uncertainty for project proponents. We've got lot of
24 interest in our draft regulation. Those of you who may be
25 aware, there are currently some projects that are in

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1 essentially a pilot phase development that are being
2 considered here in Wyoming. I know that the University of
3 Wyoming is working on some pilot scale projects and been
4 interested in seeing, you know, what our regulatory
5 approach is going to look like so that when they're ready
6 to launch these projects, they're well on the path to
7 having a project in place that's something we can actually
8 permit.

9 The UIC program, as I mentioned, is essentially
10 the background and framework for carbon sequestration. The
11 Safe Drinking Water Act requires EPA to develop minimum
12 federal regs for state and tribal UIC programs to protect
13 underground sources of drinking water. The UIC program
14 regulates underground injection of all fluids, including
15 liquid, gas, or slurries. That's how the carbon
16 sequestration regulations are essentially developed under
17 the UIC program, or under the Safe Drinking Water Act.

18 And to note that natural gas (hydrocarbon)
19 storage, oil and gas production, and some hydraulic
20 fracturing are exempt from UIC requirements, but that the
21 existing UIC program provides regulatory framework for
22 geologic sequestration of CO2.

23 The underground injection control actually
24 includes regulations governing several different types of
25 underground injection disposal practices and wells. Class

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1 I wells are typically industrial, nonhazardous or hazardous
2 waste that inject fairly deep beneath the surface.

3 Class II wells are generally produced water
4 disposal wells associated with oil and gas production
5 operations.

6 Class III wells are typically shallower and are
7 associated with mineral development and extraction.
8 In-situ uranium mining and leaching is probably the most
9 common one here in Wyoming.

10 Class V wells are broad category that includes
11 different types of disposals to the shallow subsurface.
12 These are large capacity septic systems, drainage wells,
13 things like that. Typically aren't very deep, and
14 oftentimes discharge into a shallow aquifer that's often of
15 high quality or relatively high quality.

16 Wyoming is a primacy state in that we apply to
17 EPA back in 1983 to administer the permitting and
18 regulatory requirements under the Safe Drinking Water Act
19 for the underground injection wells here in Wyoming. And
20 we were approved in 1983 to administer the regulations.
21 Essentially, the approach that had been taken was to
22 develop regulations for Class I wells, Class II wells, and
23 Class III wells, as well as Class V wells, that mimicked or
24 mirrored the existing federal regulations in the Code of
25 Federal Regulations, so that Wyoming's regulations would be

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1 essentially as stringent or equivalent to the federal
2 regulations.

3 That is one of the requirements to obtain primacy
4 to implement the program. Not all states do, but Wyoming

5 currently implements permitting and regulatory oversight
6 programs for all the UIC wells found in Wyoming, and we
7 have since 1983.

8 The new regulation would -- for geologic
9 sequestration would establish a new set of wells, Class VI,
10 a very creative number, and that's how EPA's proposed to
11 administer the CO2 injection wells in the federal regs, and
12 I'll talk about those in a little bit. And so that's the
13 approach that we're going to be recommending.

14 BOARD MEMBER CHESNUT: what are Class IV
15 wells?

16 MR. FREDERICK: Class IV wells are an old
17 early set of waste disposal wells that were injecting
18 typically hazardous wastes and possibly radioactive wastes
19 above a potential source of the drinking water. And those
20 have since been banned, and they're no longer -- they're no
21 longer allowed. They're no longer permitted. If you want
22 to inject hazardous waste or radioactive waste now, you
23 have to go much deeper beneath the deepest underground
24 source of drinking water. And for all practical purposes,
25 they're no longer in existence.

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1 A little background on the Wyoming legislation
2 related to carbon capture and storage or geologic
3 sequestration. This has all been evolving over the past
4 year and a half, more or less. Not only here in Wyoming
5 but nationally as well.

6 And the Wyoming legislature in the '07-08 budget
7 session drafted in the past House Bill 89, which is a key
8 piece of legislation that essentially established pore
9 space ownership as being part of the surface estate, as
10 opposed to the mineral estate. And that was -- that was a
11 key move in order to actually begin to identify who
12 actually had ownership of the subsurface, where carbon
13 dioxide might be eventually stored in the subsurface.

14 The legislature also passed House Bill 90 during
15 that session a year ago. It established as a requirement
16 to obtain a DEQ permit or permit from DEQ for injection of
17 CO2. It established a requirement that rules and
18 regulations and standards be developed by Water Quality
19 Division under the Underground Injection Control Program.

20 And it also established a working group that's
21 comprised -- cochaired, I should say, by the director of
22 DEQ, the Wyoming state geologist, and the director of the
23 Oil & Gas Conservation Commission to establish a group to
24 begin to look at and develop recommendations for financial
25 assurance provisions. And these are essentially intended

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1 to begin to explore what type of liability assurances will
2 be in place to ensure that over the long term of the carbon
3 capture and storage project, which may go 30, 40, 50 years
4 or longer, that in the event there is an accident or a
5 problem, and to provide for funding to allow for periodic
6 maintenance or continuing monitoring and reevaluation of
7 location of the CO2 plume to see that it's acting as it had
8 been predicted to behave in the subsurface, to actually
9 begin to craft a mechanism or mechanisms that would begin
10 to identify that, for instance, in the operating phase of
11 carbon dioxide injection, perhaps the owner/operator has
12 the responsibility and needs to make sure that he has
13 capability to bring the resources to bear in the event that
14 wells need to be plugged and abandoned.

15 And looking longer term, whether there is or

16 needs to be a funding mechanism to make sure that resources
17 are available to be able to go out year after year after
18 the operation has ceased to do some monitoring in the field
19 and continue to make sure that the CO2 is actually staying
20 where it was intended to be placed in the subsurface.

21 I also wanted to point out that that working
22 group, by the way, is scheduled to report to the
23 legislature this coming September, with those proposed
24 recommendations on what type of system they have in place
25 for financial assurances.

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1 This year in the '08-09 general session, the
2 legislature revisited carbon sequestration again. They did
3 have interim committee -- interim joint judiciary committee
4 working on joint draft bills they brought forth.

5 House Bill 57 established that the mineral estate
6 is dominant over pore space. Essentially gives a mineral
7 owner an ability to actually become involved in negotiating
8 whether or not pore space that is being taken up with
9 minerals will be available for carbon sequestration, not
10 carbon sequestration in the subsurface.

11 House Bill 58 established that the injector, not
12 the pore space owner, owns and is liable for the injected
13 CO2.

14 Yes, a question?

15 BOARD MEMBER BEDESSEM: Yeah, in your
16 description of House Bill 57, can you explain a little more
17 what you mean by dominant? I mean, I know you just talked
18 about -- about -- it's just the terminology. I mean, that
19 the surface owner owns the pore space, but the mineral
20 estate, you know, has precedence with respect to whether
21 CO2 can be put in there. But how is it in relation to the
22 surface owner's commitment to the pore space? Can you
23 elaborate a little more?

24 MR. FREDERICK: Sure. Sure. If we looked,
25 for instance, at abandoned oil and gas reservoirs, just as

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1 an example, you would have pore space ownership within that
2 abandoned oil and gas reservoir by the surface owner. You
3 would also have mineral ownership by whoever held the
4 mineral estate. And I think, it's my understanding, that
5 legislation attempted to essentially establish that if
6 someone wanted to inject and sequester CO2 in that
7 abandoned oil and gas field, for instance, he would need to
8 get permission not only from the pore space owner, but also
9 from the mineral estate owner.

10 BOARD MEMBER BEDESSEM: But it's not that
11 the mineral estate owner has precedence over the surface
12 owner.

13 BOARD MEMBER APPELEGATE: Yeah, that -- I
14 can maybe help with that.

15 MR. FREDERICK: Go ahead.

16 BOARD MEMBER APPELEGATE: In Wyoming, the
17 mineral estate, you know, someone owns the surface, they
18 can't prevent the mineral estate owner from coming and
19 trying to extract the minerals. There's been case law
20 established over time that the mineral estate --

21 BOARD MEMBER BEDESSEM: I understand that
22 relationship.

23 BOARD MEMBER APPELEGATE: So the pore space
24 was assigned to surface owner. Then there's a question of
25 what if you severed -- there's a potential that you could

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1 have surface owner, pore space owner, you can sever the
2 pore space, the surface space, and mineral estate, so
3 ultimately, if there's a mineral-bearing zone, like you
4 said, the mineral estate owner still has first precedence,
5 I guess, over that zone. Someone couldn't come in and
6 develop a pore space project if someone else who owned the
7 mineral estate said, no, we're still recovering oil and gas
8 from that.

9 So dominant is just kind of a legal term that I
10 think is sometimes used in terms of how that relationship
11 existed.

12 BOARD MEMBER BEDESSEM: So basically
13 they're the first right?

14 BOARD MEMBER APPLGATE: Right.

15 MR. FREDERICK: I think that's a fair way
16 to look at it.

17 Conversely, I also think that in the event there
18 is a CO2 sequestration project, the existence of that
19 project cannot preclude the owner of mineral estate from
20 attempting to develop that mineral estate. I think that's
21 also implied in that regulation.

22 BOARD MEMBER BEDESSEM: And that's all
23 wrapped up in the term dominant, all those rights are
24 associated with that?

25 MR. FREDERICK: Sure. Yeah.

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1 CHAIRMAN WELLES: Kevin, were these bills
2 all passed or were these just proposed?

3 MR. FREDERICK: Yes, these three bills have
4 been passed, and I believe they've been all signed by the
5 governor.

6 CHAIRMAN WELLES: Okay.

7 MR. FREDERICK: House Bill 80 establishes
8 to unitization of sequestration sites, similar to the
9 unitization process that's applied now to oil and gas, for
10 instance. And the idea is to ensure that for sequestration
11 project that's going to occur over multiple landowners --
12 or pore space owners, for instance, that one landowner, for
13 example, does not have the ability to essentially hold up
14 the entire sequestration project. That, in fact, if you
15 have, I believe the bill says 75 percent of the pore space
16 ownership agreeing to participate in a CO2 sequestration
17 project, then they can essentially propose the Oil and Gas
18 Commission that the project be unitized. They all
19 participate, therefore, and they all participate equally,
20 based upon their percentage of ownership within the project
21 area. That was, I think, a critical piece of legislation
22 to help sequestration projects move ahead.

23 Talk a little bit about the approach we took in
24 developing the proposed regulation. We certainly had to
25 acknowledge and adhere to the Wyoming legislature

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1 requirements that talked about permitting through DEQ, laid
2 out essentially a fairly comprehensive laundry list of
3 items that needed to be included within an application to
4 DEQ for sequestration. We certainly had to recognize that
5 those were all part and parcel to the Wyoming statutes. It
6 did amend or append the Environmental Quality Act, which is
7 essentially those laws that the DEQ operates under and
8 develops its regulations for.

9 Also, in July of last year, EPA proposed a
10 geologic sequestration regulation. And we certainly
11 appreciated all the hard work and effort that went into

12 developing that regulation. And also recognized that EPA's
13 interest in moving ahead and having a regulation in place
14 essentially would compel Wyoming to develop a regulation
15 that would be -- that would have to be as stringent as the
16 EPA federal regulation, in the event we wanted to assume
17 primacy and implement the permitting regulatory program for
18 these new Class VI wells, similar to what we do for the
19 other UIC class of wells. So, again, with an eye towards
20 getting primacy in the future, we wanted to incorporate
21 EPA's proposed regulation to the extent practical.

22 There were also some rule review committees that
23 were underway and essentially working on reviewing EPA's
24 proposed regulation. And coming up with comments and
25 suggestions on how the rule might be improved by either

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1 adding language or deleting language or modifying language
2 in EPA's proposed regulation. I was part of one of those
3 committees with the Ground Water Protection Council, and
4 the GWPC is essentially an association of state regulatory
5 agencies, such as the one at Wyoming DEQ, as well as the
6 UIC regulatory group at the Oil & Gas Conservation
7 Commission on Class II produced water disposal wells. And
8 a committee was established amongst us that involved not
9 only state representatives, but also members from industry
10 and some environmental groups, and so forth. I've got
11 another slide I'll bring up that identifies those a little
12 more precisely for you. And also the National Ground Water
13 Association established a rule review committee and spent
14 quite a lot of time looking at the EPA proposed
15 regulations.

16 So recognizing that work was going on, we
17 certainly wanted to give some consideration to what these
18 experts were coming up with on how to modify or hopefully
19 to improve the EPA regulation. And then we also had to
20 recognize that we had existing DEQ UIC regulations for
21 Class I and Class V underground injection wells. And those
22 certainly had passed muster with EPA that allowed us to
23 obtain primacy. We could essentially look at the existing
24 regulations and find areas that had been addressed, that
25 are required to be in UIC regulations. So we essentially

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1 pulled those out and folded those into our proposed
2 regulation as well, recognizing that there probably is as
3 little, if anything, that would require certain sections of
4 those existing rules which apply to UIC wells in general,
5 and would certainly apply to the new class of wells. They
6 certainly probably wouldn't be changed and hadn't been
7 changed, as it turned out, in EPA's proposed regulation.

8 Some of the members of the GWPC rule review
9 committee, from the Environmental Defense Fund, American
10 Petroleum Institute, Schlumberger had a representative
11 there, New Mexico Oil & Gas Conservation Commission,
12 Chevron, the Ohio Department of Natural Resources had a
13 couple folks on the committee, ExxonMobil, a law firm out
14 of Washington, DC, Bryan Cave Associates. And also
15 representative from Argonne National Lab.

16 So there was, I think, a pretty vested and
17 interested set of eyes looking at the EPA proposed
18 regulations, and I think they did a very good job in coming
19 up with some ways in which to improve that relation, which
20 would certainly work for Wyoming.

21 BOARD MEMBER APPLGATE: Kevin, a quick
22 question on that.

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MR. FREDERICK: Yeah.

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BOARD MEMBER APPLGATE: So they submitted

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comments on the EPA draft regulation. Is that what we --

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the group did?

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MR. FREDERICK: This committee provided comments to the GWPC board of directors, who then approved them and submitted them to EPA.

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BOARD MEMBER APPLGATE: But EPA's rules are in a draft form, so whether or not they incorporate -- I mean, how they address those, or if they've addressed any of those, that's still kind of in the process.

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MR. FREDERICK: Remains to be seen, yes. That brings up a good point.

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The comment period on EPA's proposed regulation closed on December 24th of last year. Ground Water Protection Council submitted comments on proposed rule that was developed by this committee, National Ground Water Association submitted comments. Many organizations submitted comments. The comments that this group developed weren't necessarily unanimous, but I think it's fair to say that the comments were developed by consensus. In other words, some of these groups may have agreed with some of the recommendations that were being made, but not necessarily all of them. But, nonetheless, they were provided to EPA under the approval of the GWPC board of directors.

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The state of Wyoming also provided comments, DEQ. The Wyoming state geologist also provided comments. And I

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think that's -- that's all from the State organizations, State agencies.

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BOARD MEMBER APPLGATE: Kevin, one question related to that. In rules that you developed, did you -- when you inserted EPA -- I guess maybe the question is, does the output of that committee, is that reflected in how these rules were developed?

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MR. FREDERICK: Some of it, yes, but not all of it.

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BOARD MEMBER APPLGATE: And what was -- explain that difference to me, the meaning.

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MR. FREDERICK: There were some recommendations that this committee made that I felt probably would either be problematic, perhaps, for Wyoming, or didn't really believe -- meet what I felt to be the intent of the direction that I think we were given under the legislative House Bill 90, in particular.

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BOARD MEMBER APPLGATE: I just ask that to kind of understand how what we're looking at relates to both EPA rules, and I guess you were on this committee, but basically you're kind of -- what you believed in from the committee and --

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MR. FREDERICK: Right.
BOARD MEMBER APPLGATE: -- and incorporated that into the --

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MR. FREDERICK: Yes.
BOARD MEMBER BEDESSEM: Excuse me. Kevin, when you go through the rule, though, you have the opportunity to point out things that may be different between what you've done here and what your committee recommended.

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MR. FREDERICK: I can do that. I've -- I

8 have a -- essentially a matrix table that illustrates which
 9 of the recommendations I felt we should include in our
 10 proposed regulation, and which I disagreed with. I don't
 11 have it with me today. I wasn't going to get into that
 12 level of detail, but it's available. I can provide that.
 13 while we're on that topic, if you look at this
 14 handout here that I provided you, this was simply an
 15 exercise to try and identify the major/minor sources of the
 16 language that we used in developing the regulation.
 17 Capital X indicates it was a major source. Noncapitalized
 18 X indicates it was a minor source, but there was some
 19 contribution.

20 Let me just restate that one of the -- one of the
 21 versions of the regulation that we developed was an
 22 annotative version. And at the beginning it identifies how
 23 different colored text reflects whether the source of the
 24 language that we're proposing in the regulation is either
 25 from existing DEQ UIC regulations that would be in the blue

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1 text, from the EPA proposed regulation in the green text,
 2 included some revisions based upon the rule review
 3 committee in black text, and Wyoming statutory language in
 4 red text. And the purpose of that was to help you
 5 essentially get a feel for, okay, what's the existing DEQ
 6 UIC regulation language look like? And again, recognizing
 7 that it's passed muster with EPA approval for primacy begs
 8 the question is there really any need to change or modify
 9 it to any extent whatsoever. It's certainly applicable to
 10 the new class of Class VI wells, as much as it is in the
 11 Class I and Class III wells, regulations for Class V.

12 I guess one thing I wanted to point out on the
 13 handout is that we will see that we have got an
 14 incorporated EPA proposed regulatory language, and just
 15 about every section within the proposed rule, the DEQ
 16 proposed rule, either to a major extent or to a minor
 17 extent.

18 Similarly, the rule review committees were
 19 looking at that proposed language that EPA developed and
 20 had come up with some suggested modifications or revisions,
 21 or whatever the case may be. And in our regulation, then,
 22 reflects, to a large extent, some of the recommendations
 23 that the rule review committees came up with. The Wyoming
 24 statutory language, for instance, again, is something that,
 25 you know, we're kind of reluctant to play around or try to

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1 modify. We're very cautious in how we -- how we try to
 2 interpret it. And, quite frankly, most of it, if not all
 3 of it, stands pretty much on its own in regulation. So
 4 that said, I think -- I think the approach that we took in
 5 developing the regulation has been pretty thorough. It's
 6 had a lot of scrutiny, not only by our organization, our
 7 agency, but many others as well. Both from the regulatory
 8 side of the stakeholder group, but as well as industry, as
 9 well as environmental organizations, and I think we've done
 10 a pretty good job in trying to balance the majority of
 11 those interests into a regulation that we feel is going to
 12 work, work well for Wyoming.

13 CHAIRMAN WELLES: Kevin, as a minor point,
 14 can you explain the two question marks under the statutes?

15 MR. FREDERICK: Yes. We're anticipating
 16 that based upon the outcome of the efforts of the working
 17 group that's been established to look at the financial
 18 assurance aspect of carbon sequestration, that those

19 recommendations may include -- to the legislature, again --
 20 may include that some additional legislation may be -- may
 21 be recommended or considered, at least, to help clarify how
 22 long, for instance, the post injection site care period
 23 lasts before, for instance, the operator may be released
 24 from all liability. That's an issue that this working
 25 group is looking at. And whether or not in the section

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1 dealing with financial responsibility, for instance, there
 2 may be a long-term funding mechanism established to help
 3 again cover expenses that are going to be associated with
 4 periodic site visits, periodic monitoring, periodic
 5 reporting that's going to go on perhaps well into the
 6 future, well after injection is seized, and perhaps well
 7 beyond point in time when the operator is actually assumed
 8 to be liable for continuing the burden -- or carrying those
 9 costs, I should say.

10

CHAIRMAN WELLES: Thank you.

11

12 MR. FREDERICK: And that's why the question
 13 marks are there. There's some uncertainty. We do point
 14 that out in the regulation in this particular section. In
 15 the proposed regulation there's essentially a placeholder
 16 that does indicate that this group is doing some things
 17 that may have some effect on how this regulation is finally
 18 developed.

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1 injection pressure, but nonetheless there may not be any
 2 change in water quality. It's just a pressure difference.
 3 So you want to try to identify that entire area of

4 influence, then we need to go in and identify all the
5 artificial and existing penetrations. You need to look at
6 existing geologic faults, fractures, and so forth, features
7 like that, that may actually intersect that injection zone
8 or intersect that confining layer and allow some escape of
9 the carbon dioxide or fluid that you're injecting. So you
10 need to ensure that you've got integrity in that confining
11 system that's going to essentially be in place and hold
12 that CO2 plume beneath the surface.

13 Once you've identified all those features, you
14 can then establish whether or not there's some sort of
15 corrective action or corrective measure you can take to
16 essentially eliminate the risk that it might propose -- it
17 might pose. For instance, if there's an abandoned well
18 that can be plugged, and so forth. It's much harder to
19 deal with geologic features that, you know, either diminish
20 or destroy the integrity of the confining zone.

21 Nonetheless, during that site characterization
22 process, when you identify those potential areas, you can
23 then at least evaluate the practicality of either trying to
24 proceed with the project and some sort of corrective
25 action, or -- or abandon that particular site and look for

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1 something that's more suitable for sequestration.

2 Again, these are all major areas that we do have
3 specific sections in our proposed rule that speaks
4 specifically to the requirements. For instance, our
5 section on well construction talks about basic requirements
6 for casing and cement jobs. One of the major divergences
7 that the Wyoming regulation takes from the federal EPA
8 regulation is that the federal regulation required -- or
9 requires that the carbon dioxide injection only take place
10 beneath the deepest underground source of drinking water.
11 And that's problematic for us in Wyoming, and that was a
12 substantial comment that was presented by the state
13 geologist, as well as the Wyoming DEQ, on the proposed
14 regulation. And the reason is that in Wyoming, and
15 particularly in the Powder River Basin, where we have a lot
16 of coal development and we have major other coal plants,
17 coal-fired power plants, and so forth, we have very, very,
18 very deep underground sources of drinking water.
19 Potentially -- I should say potential underground sources
20 of drinking water.

21 For instance, in areas within -- in the deep
22 Powder River Basin, the Madison formation may exist, and
23 may actually meet the criteria that EPA has established in
24 defining what is and what isn't an underground source of
25 drinking water. And in the event that the Madison were

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1 considered the deepest underground source of drinking
2 water, we'd be limited to the ability of using carbon
3 sequestration in the Powder River Basin, because beneath
4 the Madison formation, there are very few, if any,
5 formations that really have the characteristics that would
6 make them good -- good formations for injection of CO2.

7 They're very -- they're very few and far between.
8 They're very tight. And also, we feel that we can -- we
9 can try and essentially meet the intent of EPA's
10 requirement, that is, to protect other underground sources
11 of drinking water, by making sure that we -- that our
12 regulation requires that -- that sites that are suitable do
13 have effective confining zones, that there is a modeling
14 process in place to essentially predict and try and

15 establish what the extent and what the effect of CO2
16 migration is going to be, that there is monitoring that
17 goes on, verification and so forth, to help ensure that
18 other underground sources of drinking water are protected.
19 we believe we can achieve those same objectives without
20 having to inject beneath the deepest USDW. And we think
21 it's critical here in Wyoming that we have that
22 opportunity, because, quite frankly, without it, the
23 ability to inject in certain parts of the state are
24 probably going to be severely restricted, if not eliminated
25 altogether. So we think that was a major, major point of

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1 divergence from the EPA regulation.

2 I can tell you firsthand that other states,
3 primarily western states, have the same issues and concerns
4 that I have pointed to as issues and concerns out to -- out
5 to EPA. And I can also assure you that the recommendations
6 that came from the Ground Water Protection Council to EPA
7 also proposed that injection be allowed above the deepest
8 USDW. I believe the National Ground Water Association
9 recommendations contain that same recommendation as well.

10 Well operation and monitoring. Basic
11 requirements here, injection may not fracture the confining
12 zone. There are requirements to monitor injection
13 pressures. There are requirements to establish what
14 fracture -- formation fracture pressures are for both the
15 injection zone and the confining layer. Continuous
16 monitoring of injection pressures, flow rates, and volumes,
17 monitoring the nature of the injected fluid, the contents,
18 the quality and so forth. Performing periodic mechanical
19 integrity tests on the well itself, to ensure that you have
20 good, sound casing without leaks, holes, and so forth, in
21 it, that you aren't getting any migration out of the well
22 bore into the annular space or from the annular space
23 around the well bore into the formation. So there are
24 requirements in place to ensure that there is no leakage.

25 well plugging and post-injection site care.

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1 Again, making sure that all wells are closed and plugged in
2 a manner that protects underground sources of drinking
3 water, requirements that the owner/operator demonstrate and
4 maintain financial assurance to close and abandon and
5 reclaim the injection operation, take care of all the
6 plugging and abandonment requirements. There would
7 probably be a period after the well closed at which the
8 operator has the responsibility to continue and
9 periodically go out and monitor and check and evaluate, see
10 that conditions aren't changing from what they projected
11 them to be.

12 Liability stays with the owner/operator until
13 some point in time. And again, the working group is
14 looking at what that point in time should be. Should it be
15 five years after injection ceases? Ten? EPA suggested,
16 for instance, that it should be as much as 50 years, but
17 did provide the director, meaning the director of EPA, some
18 discretion in reducing that period based upon the results
19 that monitoring demonstrated with respect to plume
20 stabilization, for instance, and conditions reaching close
21 to equilibrium again.

22 That was another point of departure that --
23 significant point of departure that we made from the EPA
24 regulation, and as did the Ground Water Protection Council,
25 I believe the National Ground Water Association, also, that

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1 the 50-year period for post-closure monitoring really
2 didn't seem to have a sound, substantial basis. It seemed
3 somewhat arbitrary. And rather than using the
4 recommended -- or the language that EPA proposed, our
5 approach is to simply leave that time frame determination
6 to the discretion of the director of DEQ. And I think it's
7 certainly going to be steered somewhat by the
8 recommendations that are going to come out of the working
9 group to the legislature. I think there may be an attempt
10 underway to try and craft some limited time frame that it
11 might need to.

12 Public participation we see as a very important
13 part of the permitting process. The public participation
14 process that we have included in that proposed regulation
15 is essentially the same one that's proposed in our class --
16 or included in our Class I UIC regulation, and Class V UIC
17 regulation at DEQ. It provides public notice of a pending
18 permit. It provides an opportunity for public input.
19 Essentially once the draft permit is noticed, it's
20 available for public review and comment. There's a public
21 review and comment period now at which time DEQ will take
22 comment on that draft permit.

23 It allows transfer information between permitting
24 authority and public to better inform public decision
25 making. As a part of that process, public hearings may be

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1 requested. We'd be certainly interested in participating
2 in, and I -- I expect that for the sequestration projects
3 that we'll be asked to permit, we certainly expect to see
4 public interest in that. We certainly anticipate public
5 hearings, public meetings, and so forth, to help answer
6 questions.

7 where we want to end up. Ultimately having
8 regulations in place to support geologic sequestration of
9 carbon dioxide in Wyoming, and to support obtaining primacy
10 to implement the federal program if/when federal
11 regulations are promulgated.

12 I think the EPA is currently evaluating comments
13 they received on the proposed rule. It's my understanding
14 that they intend to have a final rule in place by late 2010
15 or early 2011. I haven't heard any differently, but I
16 can't commit to that time frame. I think that was -- that
17 was based upon their expectation before the comments all
18 came in, and whether or not, based upon the comments that
19 they've received, they feel they need to extend the
20 deadline from the final regulation or not, I couldn't say.
21 But I would expect that it will not be any sooner than late
22 2010, early 2011.

23 If we continue to move along with our typical
24 rule development process, for instance, if we were to have
25 another meeting before the Advisory Board before moving out

0102

1 and taking the rule before the Environmental Quality
2 Council, I'm, you know, thinking that we would, perhaps
3 somewhat optimistically, be able to have a final Wyoming
4 regulation in place early to mid next year. That might be
5 a little optimistic. I'm not sure. But this is an
6 important undertaking for Wyoming DEQ, and it's something
7 that we're taking very seriously. We're moving ahead with
8 it at a reasonable pace. And the level of interest in what
9 we're doing is only going to continue to increase as we
10 move ahead, as the university moves ahead with pilot

11 projects and so forth.

12 I think that is my last slide. And the cartoon
13 says, "why don't the greenhouse gases escape through the
14 hole in the ozone layer?" And again, this is an EPA
15 cartoon, so...

16 BOARD MEMBER BEDESSEM: So, Kevin, if your
17 rules are promulgated, you operate under those and continue
18 to operate under those, even when EPA's rules come out and
19 you go through the process of applying for primacy?

20 MR. FREDERICK: That's correct.

21 BOARD MEMBER BEDESSEM: And then you
22 evaluate the State's rule versus EPA's rule, and if any
23 change needs to happen in order to be approved for primacy.

24 MR. FREDERICK: Exactly. We would
25 essentially do a side-by-side, line-by-line review of our

0103

1 regulation compared to the final EPA proposed -- or final
2 EPA regulation. And if there were areas that we weren't as
3 stringent as, then we would have to modify our regulation.
4 And there would be a couple ways we could do that. We
5 could certainly do an emergency rule. I think the intent
6 is that emergency regs are only in place for 90 days. That
7 would give us some breathing room. We would certainly then
8 come back and go through the whole development process
9 before the Board, Council, so forth, fix whatever we needed
10 to fix to satisfy EPA for primacy.

11 BOARD MEMBER BEDESSEM: So there could
12 conceivably be period of time where two sets of federal and
13 state regulations operate simultaneously?

14 MR. FREDERICK: Yes. Yes.

15 BOARD MEMBER BEDESSEM: Thank you.

16 MR. FREDERICK: Okay.

17 CHAIRMAN WELLES: Any other questions from
18 the Board?

19 BOARD MEMBER APPELLEGATE: well, I have a
20 couple detail questions on the rules, but I'm not sure this
21 is the best time. I think maybe we should we do those
22 after a break.

23 BOARD MEMBER CAHN: After public comment.
24 Did we want to have the Board -- have public comment and
25 then Board have discussion?

0104

1 CHAIRMAN WELLES: Okay. I'll ask for
2 public questions.

3 Yes.

4 MS. ANDERSON: Shannon Anderson with Powder
5 River Basin Resource Council. I actually have detailed
6 comments to give you all.

7 We weren't clear on whether this would be a
8 formal hearing on the rules or whether just the first
9 discussion, so we went ahead and did our comments.

10 BOARD MEMBER CAHN: Just assumed -- I
11 should look at the things that was -- it was public, wasn't
12 it? Public or not?

13 CHAIRMAN WELLES: Yes, I believe.

14 MS. ANDERSON: So in your packet there will
15 be comments from us and Wyoming Chapter of the Sierra Club
16 on the draft regulations. There's also a copy of
17 evaluation of state and regional resource needs to manage
18 carbon sequestration through injection, which details
19 responses from various state agencies, including the
20 Department of Environmental Quality about their capacity to
21 implement carbon sequestration programs, which is mentioned

22 in our comments.

23 You also have a copy of several sets of comments
24 that were submitted to EPA through their rulemaking
25 process. The first being from Sierra Club, their national

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1 group. The second being from a coalition of conservation
2 organizations, Clean Air Task Force, Clean Water Action,
3 Environmental Defense Fund, National Resources Defense
4 Council and Western Resource Advocates on their comments to
5 the federal regulations.

6 And then finally, additional comments from NRDC
7 on the EPA regulations. And I would like to specifically
8 highlight those, because they deal with the relationship
9 between permanent sequestration and enhanced oil recovery
10 operations. I mean, we're particularly concerned that that
11 relationship hasn't been fully vetted or discussed either
12 in the legislation or in the rulemaking to clarify when a
13 project would go from enhanced oil recovery to permanent
14 sequestration, and what site characterization requirements,
15 monitoring, and mitigation, all of those requirements that
16 are proposed under Class VI, when they officially start to
17 be triggered through the enhanced oil recovery process.

18 Obviously, we encourage you to have those
19 discussions amongst yourselves as the rulemaking process
20 goes forward, particularly I think Mr. Applegate on your
21 panel would be a good person for you to have those
22 conversations with, given his company's experience with
23 enhanced oil recovery.

24 CHAIRMAN WELLES: Shannon, could I
25 interrupt for a second?

0106

1 MS. ANDERSON: Sure.

2 CHAIRMAN WELLES: Looking at the clock, it
3 is noon. Can you give us an estimate how long you think
4 you may be?

5 MS. ANDERSON: Less than five minutes, I
6 would say. I mean, everything's in writing, so I encourage
7 you --

8 CHAIRMAN WELLES: I thought so. I kind of
9 wanted to clarify for the Board, because I know Lorie wants
10 to get on the road.

11 BOARD MEMBER CAHN: Yes.

12 MS. ANDERSON: I do as well.

13 CHAIRMAN WELLES: Do we break for lunch or
14 have lots more comments? What are we going to do? Just
15 trying to accommodate everyone.

16 MS. ANDERSON: Sure. Thank you,
17 Mr. Chairman. Everything is in writing, so I encourage you
18 to take your time, look at it. Seems like you won't be
19 making a decision today on those rules, so you do have that
20 time. I think, you know, our first section of the comments
21 basically deals with kind of all the uncertainties that are
22 out there with carbon sequestration. We urge you to take a
23 cautious approach, recognizing that the Safe Drinking Water
24 Act and the Underground Injection Control Program recognize
25 kind of precaution and prevention as the primary purpose of

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1 those programs. So preventing contamination and protecting
2 groundwater sources in this state. So recognizing
3 uncertainties are out there and taking a preventative and
4 precautionous (sic) approach.

5 We also had some other comments on some of the
6 specific proposals that were in the draft regulations.

7 Some of them are proposed by EPA as well, but, you know,
8 again the rulemaking process is ongoing, both at the
9 federal and state level, so we thought you'd like to know
10 our thoughts on those particular aspects of the Federal
11 Rules as well.

12 And then we do have some -- again, some comments
13 on the transition from enhanced oil recovery operations to
14 permanent sequestration, which we would encourage you to
15 think about and work with the Department to make sure that
16 relationship is very clear in the rules and regulations.

17 That's pretty much all I had, so.

18 CHAIRMAN WELLES: Okay. We appreciate it
19 very much. Thank you.

20 BOARD MEMBER CAHN: Thank you. And we
21 didn't -- I wasn't trying to hurry anybody, hurry you along
22 at all. We were just trying to figure out whether we need
23 to take a break now or later, so thank you very much.

24 CHAIRMAN WELLES: I don't think we need to
25 take a lunch break, I don't think.

0108

1 Do we have more comments?

2 MR. FREDERICK: Mr. Chairman.

3 BOARD MEMBER BEDESSEM: Because I think --

4 MR. FREDERICK: Perhaps we can survey the
5 audience just to see how many are here to provide public
6 comments before we did that. I was aware that Shannon
7 intended to.

8 Steve Jones is with Wyoming Outdoor Council.

9 MR. JONES: Thanks, Kevin.

10 I, you know, might want to have just a couple
11 comments, but it wouldn't take more than a minute or two.
12 And I didn't prepare any written comments. I do hope that
13 the Board would leave the record open for further comments
14 after today. I'm just beginning to sort of grasp, you
15 know, the breadth of this, and I'd like some more time at
16 least to be able to provide comments to the Board.

17 CHAIRMAN WELLES: I think that's -- this is
18 the first session.

19 MR. JONES: Okay.

20 CHAIRMAN WELLES: Hopefully doesn't go as
21 long as the ag use rule.

22 MR. JONES: Hopefully.

23 MR. FREDERICK: We're hopeful of that too.
24 Wendy Chung from EPA, I don't know if Wendy planned to --

25 MS. CHUNG: I'm here just to listen. Thank

0109

1 you.

2 CHAIRMAN WELLES: We appreciate you coming,
3 Wendy. Thank you.

4 MR. FREDERICK: Carol?

5 MS. FROST: No, likewise just interested.
6 Thank you very much.

7 BOARD MEMBER BEDESSEM: I think that's a
8 good assessment of time, so we'll work right through.

9 CHAIRMAN WELLES: So do we have any other
10 board discussion?

11 BOARD MEMBER CAHN: I think we should let
12 Steve go ahead and we'll have Board discussion.

13 CHAIRMAN WELLES: Okay.

14 MR. JONES: I just had a couple thoughts
15 just as I sat here today, and some of the reading I've done
16 with regard to closure. We would be concerned, I think,
17 that -- I mean, ultimately the goal, with regard to carbon

18 sequestration, is to keep the carbon underground forever,
19 and so this is sort of like a Yucca Mountain situation in
20 that, you know, we -- we have a need to make sure that
21 carbon stays where it was put. So the idea of closure
22 where everybody just walks away from it is a concern to us.

23 I don't know enough about it to say, you know,
24 should monitoring be once a year, once every five years,
25 once every 10 years. I'm not sure how stable this can be,

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1 but it doesn't seem to me like the idea just walking away
2 from the site is necessarily a good one. And, you know, I
3 think continual monitoring should be something that's at
4 least contemplated by this Board, as you contemplate, you
5 know, these regulations.

6 The other thing that strikes me is that -- and I
7 realize -- and may all come together with federal
8 regulations and so forth, but there really is no incentive
9 on the part of the injector, no financial incentive, to
10 make sure that the carbon -- the carbon dioxide stays where
11 it's put. And especially if at some point they're allowed
12 to just sort of walk away from it. You know, that's --
13 that's a concern. And one thing you might want to
14 consider, and I realize this would be sort of an integrated
15 thing to do, but maybe tying the sequestration to like an
16 air quality permit for the coal-fired power plant that it's
17 related to. And presumably there will be, for this
18 sequestration, you know, some coal-fired power plant that's
19 supplying that carbon.

20 That's sort of my assumption, but if you think
21 about all the infrastructure that might be required in
22 terms of pipelines, and so forth, to take that carbon very
23 far is probably not going to happen just because of the
24 costs involved. So I think that's something else the Board
25 should at least consider is is there a way to sort of

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1 integrate this with, you know, the source.

2 So there's sort of a comprehensive look at, you
3 know, how this carbon is generated and where is it going,
4 and what's -- what's the reason? You know, is there a way
5 we can provide incentive to keep the carbon where it's
6 supposed to be?

7 And those would be my only comments at this time.
8 And I do appreciate if the Board would keep the record
9 open, because we would probably like to provide written
10 comments at a later time.

11 CHAIRMAN WELLES: Thank you, Steve. Do we
12 have any other comments?

13 Hearing none, Board discussion.

14 BOARD MEMBER BEDESSEM: Questions of Kevin?

15 BOARD MEMBER APPLGATE: Yeah, I've got
16 just a couple of questions. Some are in detail, some just
17 general.

18 On definitions, Kevin, in trying to -- I'm on
19 page 24-1, for those that are interested in following the
20 reg -- actual reg.

21 Under Area of Review, the definition in three-
22 dimensional extent of the carbon dioxide stream plume,
23 associated pressure front, and displaced brine. My
24 question is displaced brine -- you don't need to answer
25 these, really just mainly for your consideration in

0112

1 comments. Displaced brine isn't defined, and I'm wondering
2 if that really implies just the groundwater that is part of

3 the area of review, or if there was somehow a special
4 understanding associated with using the term "displaced
5 brine."

6 MR. FREDERICK: Uh-huh.

7 BOARD MEMBER APPELATE: Actually, the use
8 of groundwater fluids and brine, to me, is kind of
9 interchanged in the regulations. I think you just kind of
10 check the usage of all of those, just to make sure that
11 there's clarity.

12 MR. FREDERICK: Groundwater fluids and
13 brine?

14 BOARD MEMBER APPELATE: Yeah, I think they
15 kind -- in some cases maybe they've been used intentionally
16 where they are. I'm just not sure.

17 BOARD MEMBER CAHN: That was confusing to
18 me too, whether it's always saline or groundwater.

19 MR. FREDERICK: Okay.

20 BOARD MEMBER APPELATE: Another definition
21 I wanted to bring to your attention was 24-4 (gg), pressure
22 front. Page 24-4. It says, "Pressure front means zone of
23 elevated pressure that is created by the injection of the
24 carbon dioxide stream into the subsurface..." That part of
25 it made sense to me.

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1 And the next part I guess I'd ask you to think a
2 little bit about. It says, "...where there is a pressure
3 differential sufficient to cause movement of carbon dioxide
4 stream or formation fluids from the injection zone into an
5 area or formation not covered under the permit." That, to
6 me, seems to be a condition that could occur with the
7 pressure front, but not necessarily part of the definition
8 of pressure front. I mean, hopefully pressure front would
9 not have that second case, I think.

10 MR. FREDERICK: Right.

11 BOARD MEMBER APPELATE: Another comment on
12 page 24-13. This has to do with data that's collected to
13 understand that carbon dioxide stream. It looks like it's
14 in green, the version I'm looking at, so probably EPA.
15 Very last sentence on the page. It says, "Any changes to
16 the physical, chemical and other relevant characteristics
17 of the carbon dioxide stream..." I guess I would ask you
18 to think about the use of language. There's several places
19 in here where it talks about monitoring data. And, you
20 know, my experience, whether it be groundwater or any sort
21 of monitoring stream, is there's some degree of
22 variability. So when we say "any change," I'm just saying
23 in the initial characterization there's going to be some
24 range of character, and in the evaporation there would be
25 some range of values.

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1 MR. FREDERICK: Okay.

2 BOARD MEMBER APPELATE: That, again, is in
3 here in a variety of places.

4 BOARD MEMBER CAHN: Maybe the word ended
5 could just be struck?

6 BOARD MEMBER APPELATE: Or any significant
7 change, or statistically significant change, or just, I
8 think, a parameter that would give operation of flexibility
9 to both the Department and the operator.

10 Page 24-28, Injection Well Operating
11 Requirements.

12 MR. FREDERICK: I'm still taking notes,
13 David.

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14 BOARD MEMBER APPELATE: Okay. By the way,
15 Kevin, I thought your presentation was excellent, and you
16 had some really great pictures. So I'm like Lorie, I want
17 to get those in electronic version, have them --

18 MR. FREDERICK: Sure.
19 BOARD MEMBER APPELATE: I'm in the first
20 paragraph.

21 MR. FREDERICK: This is what page?

22 BOARD MEMBER APPELATE: 24-28.

23 MR. FREDERICK: Okay.

24 BOARD MEMBER APPELATE: First paragraph
25 under section 11 talks about except during stimulation, the

0115 owner or operator must ensure that injection pressure does
1 not exceed 90 percent of fracture pressure of the injection
2 zone" --

3
4 BOARD MEMBER CAHN: Can you get that?

5 BOARD MEMBER APPELATE: -- "so as to
6 assure that the injection does not initiate new fractures
7 or propagate existing fractures in the injection zone."

8 And then the next paragraph, (i), says, "In no
9 case may injection pressure initiate fractures in the
10 confining zones or cause the movement of injection or
11 formation fluids that endangers a" -- I'm reading paragraph
12 (i) "or cause movement of injection or formation fluids
13 that endanger USDW."

14 So my comment's not on paragraph (i), which makes
15 sense to me, but I guess I'm asking for clarification on
16 paragraph (a). In your overview you mentioned the fact
17 that we didn't want to cause fractures in confining the
18 zone, but I can see where an operator may want to fracture,
19 which I think you're implying here with the stimulation
20 comment, fracture the injection zone to help aid in the
21 injection of the CO2 fluids.

22 So help me understand what your intent is here, I
23 guess, with these two paragraphs. Are you not wanting any
24 fractures within the injection zone?

25 MR. FREDERICK: No. No. The intent is to

0116 provide for recognition that well stimulation may include
1 fracture. And during, as you know, drilling of deep wells,
2 such as what many of these will likely be, due to the
3 buildup of mud cake, and so forth, wells need to be
4 stimulated in order to be able to force fluids into the
5 formation.

6
7 And so the intent is to recognize that practice
8 within the injection zone during stimulation practice only.

9 BOARD MEMBER APPELATE: Okay.

10 MR. FREDERICK: But thereafter to restrict
11 the injection pressure to no more than 90 percent of
12 formation fracture pressure.

13 BOARD MEMBER APPELATE: Okay. I'm
14 going -- I'm not an expert in this, so I'm going to have to
15 look into that. So the language, as written, conveys --

16 MR. FREDERICK: Yes, I think it does.

17 BOARD MEMBER APPELATE: Okay.

18 MR. FREDERICK: Yes.

19 BOARD MEMBER APPELATE: I have just a
20 couple more.

21 BOARD MEMBER BEDESSEM: Kevin, essentially
22 you're trying to say that allocated time period, where
23 you're doing stimulation, this is where you're going to go
24 doing this additional fracturing, but then your testing

25 results, you're going to use this as a base to know what's
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1 going to happen thereafter, and you're not going to have
2 additional fracturing thereafter.

3 MR. FREDERICK: Right. Right. Exactly,
4 yes.

5 Typically the process is that a step-rate
6 injectional test will be run that essentially establishes
7 where formation fracture pressure is. And the test in
8 itself doesn't cause, you know, significant formation
9 damage. And by understanding what your formation fracture
10 pressure is, then you can establish what your injection
11 rate should be, such that you're not injecting at a rate
12 that will cause that formation to fracture.

13 BOARD MEMBER APPELEGATE: Let me ask you, I
14 guess, a clarifying question on that. Aren't there cases
15 where you could cause continued fracturing within the
16 injection zone, but not cause a fracture in the confining
17 zone? And if, so would that -- why is that inherently
18 problematic?

19 MR. FREDERICK: I think the problem really
20 is related to the difficulty it becomes in trying to
21 establish what the area of influence is going to be in
22 fracture formation. As you know, trying to model, for
23 instance, fracture flow is much more complicated and
24 uncertain than trying to model, say, pore flow.

25 And, in fact, our proposed regulation

0118

1 specifically recognizes that in situations where injection
2 may be contemplated into, say, basalt, and understanding
3 that basalt is typically an impermeable rock, injection
4 into a type of rock such as basalt would require that it be
5 fractured. We specifically prohibit that under this
6 regulation. And that's been a fairly common comment that's
7 been made by many others as well. And it really gets to
8 the difficulty in trying to understand and predict where
9 that carbon dioxide is ultimately going to go if you're
10 injecting into fractured formations.

11 BOARD MEMBER APPELEGATE: Is the area of
12 review -- the area of review concept, as you drew it,
13 looked like it encompassed the entire field, meaning it
14 could be multiple wells. Is the concept, as you understand
15 it, a well by well or a multiple well overall -- I just
16 lost the term -- area of review?

17 I guess what I'm saying, if you had an area of
18 review that was quite large, you could perhaps fracture the
19 interior of that area of review and feel confident that
20 interior fractured wells would not necessarily cause
21 movement of fluid past wells on the exterior that were
22 still -- is that the concept? Does that make sense?

23 MR. FREDERICK: It's practical or feasible
24 at least, yeah.

25 BOARD MEMBER APPELEGATE: So area of review,
0119
1 as you understand it, is going to be a systemwide concept
2 or well-by-well concept?

3 MR. FREDERICK: It can be either.
4 Actually, the operator's going to have some flexibility
5 with respect to whether he wants an individual well permit
6 or whether or not it's going to be a system or series of
7 wells in which we can permit that project under what we
8 call an area permit.

9 BOARD MEMBER APPELEGATE: Okay. I've just

10 got a couple more, and they have to do with timing. Timing
11 basically in the document, this is on page 24-38. And the
12 verbiage is directly from the enabling legislation, so
13 maybe there's not an ability to modify or change this,
14 but --

15 MR. FREDERICK: That would be the red
16 language of the --

17 BOARD MEMBER APPELATE: Yes. It says,
18 "Provide immediate verbal notice to the department..."
19 When I first read that I thought, well, be nice to kind to
20 define immediate, 24 hours, 48 hours, because I think those
21 type of things make it --

22 MR. FREDERICK: We would probably go to
23 Webster's dictionary.

24 BOARD MEMBER APPELATE: Well, I say this,
25 you know, if someone were to be a permit holder, immediate

0120
1 would be a term that they would struggle with, because, you
2 know, there may be some information you have to gather. I
3 mean, 24 hours, 48 hours seems reasonable, and I think it
4 would perhaps not be too much of a change to the
5 legislation to somehow in the rules to specify a time
6 frame.

7 MR. FREDERICK: I'll look at Webster's.

8 BOARD MEMBER APPELATE: Okay. On page
9 24-41, paragraph (1), towards the bottom, permit
10 application, the director shall render a decision within 30
11 days -- if no hearing is requested. The hearing is held,
12 Director shall make decision on any department hearing as
13 soon as practical after receipt -- I guess I'm a little
14 unclear on that second sentence. Are you saying Director
15 shall make decision on the permit as soon as practicable?
16 What's meant by the second sentence there?

17 MR. FREDERICK: The distinction here really
18 is with respect to whether a public hearing is held or not.
19 And --

20 BOARD MEMBER APPELATE: So if a hearing's
21 not held, you have to act on the draft permit within 30
22 days, if I read that correct?

23 MR. FREDERICK: Right.

24 BOARD MEMBER APPELATE: If a hearing is
25 held, I'm not clear on what you're obligating yourself to.

0121
1 But I guess my suggestion would be that you would provide
2 some time frame in there as well. So it's not -- not bound
3 to obligation, I guess.

4 BOARD MEMBER CAHN: You typically make a
5 decision on something, and if you're making decision on any
6 department hearing, that's really not what you're intending
7 to say. You're trying to say to make a decision after the
8 department hearing, or based on what happened at that
9 department hearing.

10 BOARD MEMBER APPELATE: I think on the
11 permit is what I believe.

12 BOARD MEMBER CAHN: Yeah, yeah, yeah.

13 THE REPORTER: One at a time, please.

14 BOARD MEMBER APPELATE: Sorry. I think
15 that sentence needs to be revisited to address whether or
16 not it's a decision on the permit, rather than the hearing.
17 And if it's a decision on the permit, I think you should
18 consider putting a time frame in there so that permittee
19 knows the uncertainties that they're dealing with.

20 MR. FREDERICK: Okay.

21 BOARD MEMBER APPELATE: That's all the
22 questions/comments I have.
23 MR. FREDERICK: Thank you, Dave.
24 CHAIRMAN WELLES: Thank you. Good
25 comments.

0122

1 Anybody -- any other comments from the Board?
2 BOARD MEMBER CAHN: I have some questions
3 and comments. A few.

4 Lorie Cahn.
5 First I want to say I really appreciate this
6 blue, red, green, black. It was really helpful in the
7 review, so I appreciate knowing where the stuff came from.
8 That's a great idea.

9 MR. FREDERICK: Thank you.

10 BOARD MEMBER CAHN: And I appreciate the
11 graphics as well.

12 I was trying to figure out tubing and some of the
13 terms you used. And I was thinking, you know, there's
14 another part we're seeing where formations is used on page
15 24-5 in Applicability?

16 "These regulations shall apply to all Class VI
17 wells used to inject carbon" -- reading on Section 3(a) --
18 "used to inject carbon dioxide streams into saline
19 formations for the purpose of geologic sequestration." And
20 I had the same question as Dave, that only -- this only
21 applies to injecting the saline formation, so --

22 BOARD MEMBER APPELATE: Actually, let me
23 follow up on that a little bit. What about what would be
24 former oil and gas reservoirs? Those wouldn't --

25 MR. FREDERICK: Yes. And you're right,

0123

1 David, that is a concept I guess that we become a little
2 bit more aware of as a potential issue that may need some
3 clarification in here. And I think Shannon spoke to that
4 in her comment as well, only in a different form, with
5 respect to trying to bring some clarification as to when
6 this regulation does apply to injection into oil and gas
7 bearing formations.

8 BOARD MEMBER APPELATE: Okay.

9 MR. FREDERICK: And I think -- I think
10 we'll have to bring some clarity to the regulation in that
11 aspect, that would also involve addressing Lorie Cahn's
12 comment as well.

13 BOARD MEMBER CAHN: On page 24-6, (iv), I
14 just -- I was confused about why that was even in here, "A
15 separate permit to construct is not required under Chapter
16 3, Water Quality Rules and Regulations for any Class V
17 facility."

18 MR. FREDERICK: Yeah.

19 BOARD MEMBER CAHN: So I wasn't sure why
20 that was in there.

21 MR. FREDERICK: Good catch. Thank you.

22 CHAIRMAN WELLES: So you're saying that
23 should not be there at all?

24 MR. FREDERICK: Well, certainly we would
25 have a typo in Class V facility on line 10. And quite

0124

1 frankly, she's asking the need or the applicability for
2 that particular requirement, if at all. And I suspect it
3 probably doesn't -- doesn't present a need where I want
4 to -- want to revisit it.

5 BOARD MEMBER APPELATE: So the Class

6 III -- I'm sorry, Chapter 3 permit to construct, that's for
7 aboveground facilities, isn't it? Sometimes? What --
8 MR. FREDERICK: No. I suspect the artifact
9 here is as it relates to a Class V large capacity septic
10 system, that prior to the promulgation of a Class V
11 regulation required a Chapter 3 permit from us.
12 BOARD MEMBER APPLGATE: Okay.
13 BOARD MEMBER CAHN: You'll look into this
14 and get back to us on whether that was supposed to be VI or
15 whether it's V, and it will be struck?
16 MR. FREDERICK: Yes. I suspect it will be
17 struck.
18 BOARD MEMBER CAHN: I didn't have any red
19 stickies in the car.
20 BOARD MEMBER BEDESSEM: While you're
21 looking, Lorie, can I ask one?
22 BOARD MEMBER CAHN: Go ahead.
23 BOARD MEMBER BEDESSEM: Page 24-7, (iii) at
24 the top, where it says, "Re-submittal of information by an
25 applicant for an incomplete application will begin the
0125 process described in (f) of this section." Can you direct
1 me to where little F is, because from what I can tell, the
2 section ends at (e).
3 MR. FREDERICK: Yes. You're right, Marj,
4 that is a typo.
5 BOARD MEMBER BEDESSEM: Okay.
6 MR. FREDERICK: And without spending a
7 little time, I'll have to find which section it should be.
8 Thank you.
9 BOARD MEMBER BEDESSEM: Okay.
10 BOARD MEMBER CAHN: Okay. I have, on page
11 24-19, two totally minor typos. After the little x, 33 and
12 34 in the xxx version, you just need spaces before -- after
13 the first parens -- I'm sorry, second parens.
14 MR. FREDERICK: This is on line?
15 BOARD MEMBER CAHN: Page 24, yeah, line 28
16 and line 41, spaces after the second parens.
17 MR. FREDERICK: Okay.
18 BOARD MEMBER CAHN: On page 24-20, I know
19 you're taking -- I'm talking about (B) on line 10, and I
20 know you're taking this from the regs, the existing water
21 quality regs; however, we're talking about converting in --
22 to second quarter 1980 dollars. That seems really
23 excessive to me. Can we update that portion of the regs to
24 say in current 2008 or 2009 dollars, so we don't have to go
25 backwards in time to figure out what money was worth in
0126 1980?
1 MR. FREDERICK: Yeah. Thank you for that
2 comment.
3 BOARD MEMBER CAHN: On page 24-21, line 8,
4 (c), it again talking about Class V, and I don't think we
5 want to do septic tanks with geologic sequestrations, so --
6 MR. FREDERICK: Yes. Let me explain that.
7 BOARD MEMBER CAHN: And nonexperimental for
8 septics. I didn't get that.
9 MR. FREDERICK: Yes. Yes. And I meant to
10 cover this in my presentation. I apologize for not doing
11 so. EPA has provided guidance to state primacy programs
12 that they feel that in the absence of any federal
13 regulation, that the CO2 sequestration projects that are
14 presently being contemplated which are experimental
15
16

17 technology in scale and scope could be covered under a
18 Class V permit.

19 BOARD MEMBER CAHN: Really?

20 MR. FREDERICK: Yes. And there is actually
21 a category in Class V regulations, federal regulations,
22 that provide for permitting experimental technology wells
23 as Class V wells. And so, in essence, in recognition of
24 that guidance, the context in which we're addressing Class
25 V geologic sequestration wells here as nonexperimental

0127 would be appropriate.

1 BOARD MEMBER CAHN: Okay. Thanks for
2 clarifying that, because it baffled me. So that helps.
3 Okay. I'm not sure -- okay. I think it would be
4 helpful on the definition of corrective action on page
5 24-2, my -- on line 10, (k), my brain goes back to RCRA
6 corrective action type, when I hear corrective action. And
7 I think you're -- you're not necessarily talking post
8 closure here, so -- or -- so I think it might be helpful to
9 maybe get give some examples or something, just because --
10 I don't know. I mean, I know it's an EPA definition, but
11 maybe from the State we can provide a little more.

12 MR. FREDERICK: Sure. Perhaps --

13 BOARD MEMBER CAHN: Because when you get to
14 page 24-2, it says state what corrective action will be
15 performed prior to injection. And so that would be
16 helpful.

17 Just an editorial, throughout the document you've
18 used the term assured for assuring something happens,
19 A-S-S-U-R-E, and the proper use of that would be I-N or
20 E-N. You assure a person, but you ensure something
21 happens. So it's just correct -- you can just do a global
22 search. I think every A-S-S-U-R-E you have there should be
23 either E-N or I-N. Sorry for the minutia.

24 MR. FREDERICK: Thank you. I think that

0128 was actually an EPA oversight.

1 BOARD MEMBER BEDESSEM: Is that except with
2 respect to financial assurance, which is A-S-S?

3 BOARD MEMBER CAHN: Yeah, I think -- I
4 don't think --

5 BOARD MEMBER BEDESSEM: It's all like that.

6 BOARD MEMBER CAHN: I'm not sure on that
7 one, because it should be probably ensurance or insurance,
8 but pretty commonly used term, financial insurance.

9 Page 24-25, on line 20, (v), talked about the use
10 of centralizers in circulating cement, and I'm a little
11 bit -- I guess I would want to make sure the experts felt
12 that those centralizers wouldn't interfere with circulation
13 of the cement. So that would just be a question that --
14 you know, I've certainly seen where centralizers have
15 interfered, so I would just ask your experts if that's
16 necessary to have that in there about the centralizers.

17 MR. FREDERICK: Okay.

18 BOARD MEMBER CAHN: And I know it's EPA
19 language, but --

20 MR. FREDERICK: I can consult with comments
21 provided by the rule review committees, see what their
22 recommendation were, if any, and --

23 BOARD MEMBER CAHN: And -- sorry.

24 MR. FREDERICK: -- whether there were any

0129 1 that raised any issues.

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2 BOARD MEMBER CAHN: 24-26, line 30, (A),
3 you mentioned -- or it's mentioned in EPA language about
4 deviation checks during -- measured during the drilling.
5 And I just have a question as to whether or not it's also
6 okay to have deviation checks after drilling.

7 MR. FREDERICK: Okay.

8 BOARD MEMBER CAHN: Because I know that's
9 fairly standard stuff that I do, where we have deviation
10 logs after drillings.

11 MR. FREDERICK: Uh-huh.

12 BOARD MEMBER CAHN: Page 24-28, line 18,
13 (c), and line 21, (i), seem to start out exactly the same.
14 In fact, the first sentence is exactly the same. "The
15 owner or operator must fill the annulus between the tubing
16 and the long string of casing where corrosive inhibiting
17 fluid approved by the Administrator."

18 MR. FREDERICK: Yes.

19 BOARD MEMBER CAHN: And next sentence is
20 exactly the same.

21 MR. FREDERICK: Yes. Thank you.

22 BOARD MEMBER CAHN: On page 24-29, line 38,
23 I would just appreciate if the next time you come for
24 presentation, if you could just quickly tell us what --
25 give us some idea what oxygen-activation logging is.

0130
1 That's a new term to me, and I'm curious about it. So I
2 wouldn't mind hearing this quickly, unless you want to tell
3 me now what that is.

4 MR. FREDERICK: No.

5 BOARD MEMBER CAHN: And I have on page
6 24-30, I certainly have a global comment. The language
7 from EPA uses the term US EPA Administrator. Are we, as a
8 permittee, going to need to get permit both -- approval
9 both from EPA Administrator and DEQ Director?

10 MR. FREDERICK: That's the way it's
11 currently written.

12 BOARD MEMBER CAHN: Okay. So I would just
13 ask you to do two things. One is to add into the
14 definitions when you use administrator, you mean EPA; when
15 you use director, you mean DEQ, if that's the way it's
16 going to be, just to make that clear.

17 And just check each use of the term administrator
18 and director to make sure that you intend use Administrator
19 of EPA and use of director of DEQ.

20 BOARD MEMBER APPLGATE: So what -- can you
21 explain -- I hadn't really caught that. Can you explain
22 any rationale behind that?

23 MR. FREDERICK: It's my understanding
24 that -- that certainly with new technologies that are
25 developed to achieve the purposes, for instance, that we're

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1 talking about here with respect to testing integrity of the
2 well, EPA wants the ability to either agree and confirm
3 that it accepts that new approach as an acceptable method
4 for mechanical integrity testing, or not. And I suspect
5 the reason for that is that federal regulations, and I
6 believe our state regulations as well, you know, in all
7 likelihood they do, both specifically identify acceptable
8 testing methods or techniques. And I think the recognition
9 here is that if once you diverge from those, there's --
10 there's an option to do so; however, it does require the
11 concurrence of EPA.

12 BOARD MEMBER APPLGATE: Thank you.

13 BOARD MEMBER CAHN: I had more kind of a
14 global question about, you know, if -- to understand if the
15 State receives -- or has primacy and continues to have
16 primacy.

17 MR. FREDERICK: Sure.

18 BOARD MEMBER CAHN: why is EPA then
19 involved in this --

20 MR. FREDERICK: This would be a preprimacy
21 regulation.

22 BOARD MEMBER CAHN: Okay. So then after
23 primacy that would go away?

24 MR. FREDERICK: Yes.

25 BOARD MEMBER CAHN: Okay. On page 24-33,

0132

1 on line 38, and this is during -- Section 15 on the
2 injection well plugging. Can you explain to me what a
3 final external mechanical integrity test would be?

4 MR. FREDERICK: Yes. There are essentially
5 two types of mechanical integrity test, an internal and an
6 external. The external is essentially designed to see
7 whether or not there's been any movement of fluid from the
8 annular space into the formation. So you're -- you're
9 really looking to see whether on the exteriormost part of
10 the well, typically that would be like your surface casing,
11 for instance, you would -- you've developed any leakage
12 through there. On the other hand, internal mechanical
13 integrity testing looks for leakage between the internal
14 components that may be the production string and the
15 tubing, for instance. And also between the injection
16 interval and the packing that isolates it from the up hole
17 sections.

18 BOARD MEMBER CAHN: The internal
19 integrity -- I guess I'm not asking what's the purpose of
20 the test. I'm asking more how do you perform an external
21 mechanical integrity test. That's really what I'm asking.
22 I understand the purpose, but I'm not sure what tests test
23 for that, so --

24 MR. FREDERICK: Well, there are specific
25 sections within the Federal Rule that identify those. And

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1 I suspect it probably resides in a Class I regulations as
2 well. I'll check to see. A lot of the blue was taken from
3 our Class V regulation, which was our most recent one. And
4 I thought I checked -- crosschecked Chapter 5 with Chapter
5 13 -- excuse me, our Class V regulation with our Class I
6 regulation to make sure that I had gotten them all. I may
7 have missed that one. And I suspect that we identify in
8 our Class I regulations just exactly what those tests are.

9 BOARD MEMBER CAHN: Maybe a reference in
10 here to where somebody could find that information --

11 MR. FREDERICK: Yeah.

12 BOARD MEMBER CAHN: -- would be helpful.
13 And maybe in the definitions might be a place for
14 it.

15 MR. FREDERICK: what page again was that,
16 Lorie?

17 CHAIRMAN WELLES: 24-33.

18 BOARD MEMBER CAHN: Line 38.

19 MR. FREDERICK: Okay. Thank you.

20 BOARD MEMBER CAHN: And I think, likewise,
21 for internal -- I think you could just search for
22 integrity, mechanical integrity test. When you talk about
23 internal, also have a reference to where testing methods

24 can be found.

25 On page 24-37, starting up at the top in the EPA

0134

1 language, line 1 talks about the director. Line 8, then
2 line 13 talks about the regional administrator, and again,
3 regional office for EPA on line 30, and director on line 39
4 and 41. So I just -- so EPA is instructing that that
5 information, where they have used the term director, goes
6 to the State?

7 MR. FREDERICK: Uh-huh.

8 BOARD MEMBER CAHN: Is that -- I just
9 wanted clarification on that.

10 MR. FREDERICK: Yes.

11 BOARD MEMBER CAHN: On page 24-38, on line
12 20 and 21, you might want to capitalize Department of
13 Environmental Quality, just a total minor typo, in red
14 there.

15 MR. FREDERICK: There's a standard practice
16 that I believe it's Legislative Service Office or the
17 Secretary of State's Office has with respect to identifying
18 agencies in capital letters and so forth. I'll -- we'll
19 definitely make sure that we're consistent with whatever
20 style.

21 BOARD MEMBER CAHN: That's fine. I don't
22 care which way it is, just be consistent.

23 BOARD MEMBER APPELATE: Kevin, I have a
24 question on that page as well. On line 11 says, "If the
25 owner or operator obtains evidence that the injected carbon

0135

1 dioxide stream displace formation fluids or associated
2 pressure front endangers a USDW." Is the -- what's
3 endanger encompass there? Is that the movement of -- of
4 salts from -- is it movement of brine? Is it necessarily
5 CO2? Is CO2 itself considered an endangerment to the USDW
6 by -- or constituents within the CO2? I'm just curious how
7 EPA and you have thought about that.

8 MR. FREDERICK: Yeah, as I recall it's
9 clearly defined in the federal regulations. And I would
10 have to -- I would have to go back and check to see
11 specifically how it's used in the context of this sentence
12 that we have here. Endangerment normally implies that
13 there is a -- an imminent threat, I guess, that fluids will
14 be entering the USDW or they already have. And --

15 BOARD MEMBER APPELATE: But is that just a
16 mere movement of the fluids into them or -- I guess I'm
17 trying to -- I'm trying to make sure we recognize that CO2
18 in and of itself is not a hazardous waste.

19 MR. FREDERICK: Sure.

20 BOARD MEMBER APPELATE: And I'm trying to
21 understand, you know, the risk that we're associating with
22 constituents. I understand and appreciate the need to keep
23 it confined, but we're exposed to CO2, so I just think it's
24 useful for us to have an understanding of the risk that
25 we're assigning to that.

0136

1 MR. FREDERICK: Sure. And I appreciate
2 what you're saying. That's the same sort of approach we
3 like to take in developing this regulation. We need to be
4 at least aware that -- that in all likelihood our
5 regulations ultimately are going to have to be as stringent
6 as the federal regs. And I guess when I -- when I -- what
7 I suggest, David, let me study up on this a little bit
8 more --

BOARD MEMBER APPLGATE: Okay.

MR. FREDERICK: -- and see if we have some flexibility, either move towards a little more forgiveness or at least to try and craft some flexibility in here with respect to identifying when a violation occurs and when it doesn't. I think that's what you're asking.

BOARD MEMBER APPLGATE: Right. Thanks.

CHAIRMAN WELLES: Kevin, along those lines, a similar comment. And this goes back to your Statement of Principal Reasons on the second page, in the second -- end of the second paragraph, the Department is hopeful that its own proposed regulation, when final, will likely meet most, if not all, of the final federal rule requirements, and so on. It seems to me it should read will likely meet or exceed. I mean, why not go there?

MR. FREDERICK: That's a good comment.

Sure. I would agree with that. I would agree with that.

BOARD MEMBER APPLGATE: Can the state

requirements --

BOARD MEMBER CAHN: Can the state requirements be more stringent than federal?

MR. FREDERICK: I'm not sure if -- if it relates to all federal regulations or just some.

BOARD MEMBER CAHN: You might want to check that before you change the wording.

CHAIRMAN WELLES: Well, we can secede.

MR. FREDERICK: Yeah.

BOARD MEMBER CHESNUT: We're already a colony.

BOARD MEMBER BEDESSEM: I have a question on page 24-40. This has to do with the public notice, mailing a copy of the notice to the following persons. I mean, this is just a question as far as my understanding of -- it's all in blue writing here -- regarding soliciting persons for area list from participants in proceedings in that area. So if you have a draft permit in a particular area, and there hasn't been proceedings on that draft permit yet, would you be pulling your list of persons from the area lists of people who have gone to -- to this regulatory development? And does soliciting persons mean the Department automatically develops a list from the participants at these kinds of proceedings and hearings, or

what does it mean by soliciting? Are they then called and asked do they want to be on this list, or -- so it's just a question I have on how that's interpreted.

MR. FREDERICK: The DEQ has several different mailing lists that it uses, depending upon what particular program it's undertaking, either a public hearing or a public meeting or a draft permit. For instance the WYPDES, W-Y-P-D-E-S, programs has their mailing list. And the groundwater section has its mailing lists, because many of the folks that are interested in its activities and endeavors may not have expressed any interest in being kept informed of surface water discharging permit efforts.

BOARD MEMBER BEDESSEM: So you're regarding area as a topic area, as opposed to a location area?

MR. FREDERICK: Historically that's been the approach. The mailing list within groundwater section, for instance, encompasses I think 400 -- in excess of 400 individuals and organizations as pretty comprehensive. And

20 I would like to point out, too, that the legislature was --
21 was pretty clear in requiring that notification be provided
22 to landowners, surface owners. Turning to page 24-19 for
23 clarity.

24 BOARD MEMBER BEDESSEM: So a copy of the
25 notice is sent to all 400-something people in (i)?

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1 MR. FREDERICK: No, no, that's the mailing
2 list that we develop. And then I'm speaking to, you know,
3 how we -- how we obtain those names --

4 BOARD MEMBER BEDESSEM: Uh-huh.

5 MR. FREDERICK: -- does involve using sign-
6 in sheets for meetings like this, for instance.

7 BOARD MEMBER BEDESSEM: Uh-huh.

8 MR. FREDERICK: That, for instance, we can
9 take back and append to our mailing list. With respect to
10 notifying people within the area itself of the
11 sequestration project, I think the language in 24-19 helps
12 ensure that's going to happen.

13 BOARD MEMBER BEDESSEM: Okay.

14 MR. FREDERICK: With respect to a draft
15 permit, and so forth, we rely pretty heavily upon the
16 public notice published in the newspaper. Generally we --
17 we seem to find, too, that there's a pretty good level of
18 interest, I think, in understanding and knowledge about
19 what's going on in the local areas. And seems like people
20 that are interested in those sorts of things know they can
21 check our website periodically. We do post our public
22 notices and draft permits there, and that helps provide
23 another opportunity, I guess, to stay aware of the forum.

24 BOARD MEMBER BEDESSEM: So essentially (i)
25 is referring to the soliciting persons for area list is the

0140
1 location area list that's much more specific to the --

2 MR. FREDERICK: I think so.

3 BOARD MEMBER BEDESSEM: So it remains to be
4 seen it may or may not include people that are just
5 involved at the beginning of regulatory development stage,
6 don't know for sure?

7 MR. FREDERICK: Oh, absolutely.

8 BOARD MEMBER BEDESSEM: It does?

9 MR. FREDERICK: Absolutely, yes.

10 CHAIRMAN WELLES: Further questions.

11 BOARD MEMBER CAHN: I have just a few more.

12 Page 24-39, on line 27, in the stuff that our
13 statutes -- our regs, sorry, the administrator, there in
14 (b), is that referring to the EPA Administrator, our
15 administrator?

16 MR. FREDERICK: DEQ.

17 BOARD MEMBER CAHN: Okay. So we're going
18 to have to do something. I don't know if it's little A is
19 DEQ administrator and big A is EPA's administrator or what.

20 MR. FREDERICK: No. I have to be honest,
21 when I did a search and replace capitalized administrator
22 with noncapitalized administrator, in my word program it --
23 it wouldn't take it. It wouldn't make the change.

24 BOARD MEMBER CAHN: You have to do match
25 case.

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1 MR. FREDERICK: I did.

2 BOARD MEMBER CAHN: It wouldn't do it?

3 MR. FREDERICK: No.

4 BOARD MEMBER CAHN: Get another computer.

5 MR. FREDERICK: I'm still perplexed. But
6 there is an inconsistency we'll have to try to clear up.

7 BOARD MEMBER CAHN: Again, on the same
8 thing on page 24-40, line 21 in blue is little
9 administrator -- little A administrator and big A
10 Administrator.

11 MR. FREDERICK: We've got them both going
12 on there.

13 BOARD MEMBER CAHN: Again on 24-41, lines
14 23, 25, and 26, and 31, we have little A administrator in
15 blue.

16 I had a question about line -- page 24-41, line
17 31, where the little A administrator may also extend the
18 comment period by so stating at the public hearing. And
19 I'm wondering if they would have other means. That seems
20 kind of restrictive, that's the only way they extend the
21 public hearing? Could we -- could it also be done -- I
22 mean, there's other ways of extending comment -- excuse me,
23 comment periods. You get a request to extend comment
24 period in writing and administrator can say, you know, that
25 makes sense, I think we need another 30 days, and give the

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1 public notice of that without waiting for the hearing to
2 say we're going to do another. So I don't -- anyways, I
3 just was wondering if that was kind of restrictive or if
4 the administrator had other ways of extending public
5 comment period besides only at a hearing.

6 You know, it may be the only way we're allowed
7 to, but it seems like there's got to be other ways.

8 MR. FREDERICK: I would suspect -- let
9 me -- let me look a little bit more closely at section 4,
10 in which also contains permit processing language, to see
11 whether or not there are also other options for extending
12 the permit comment period. I suspect there are, but let me
13 confirm that.

14 BOARD MEMBER CAHN: On page 24-42, line 2.

15 MR. FREDERICK: Excuse me, just one second,
16 Lorie.

17 BOARD MEMBER CAHN: Okay. Sorry.

18 (Off-the-record discussion.)

19 BOARD MEMBER CAHN: On page 24-42, line 2,
20 in responding to public comments, the response shall --

21 "Briefly describe and respond to all comments voicing
22 legitimate regulatory concern that is within the authority
23 of the department to regulate." And to me that seems
24 restrictive if somebody voices a legitimate technical
25 concern or something that's nonregulatory, are they out --

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1 you ought to respond to those concerns, so --

2 MR. FREDERICK: Okay.

3 BOARD MEMBER CAHN: And that's all I have.

4 MR. FREDERICK: Thank you.

5 BOARD MEMBER BEDESSEM: I assume on page
6 24-39, you know, when Dave asked earlier about defining the
7 word "immediate," you'll have in here at the earliest
8 opportunity, which I'm sure is just the Department's way of
9 encouraging people to come forth as early as possible, but
10 not anything that you can put a timeline on, because there
11 is no way to enforce that. They'll come and talk to you
12 about that when they come and talk to you about that, but
13 it's just a way of encouraging that. Is that the correct
14 interpretation?

15 MR. FREDERICK: Which line, Marj?

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16 BOARD MEMBER BEDESSEM: It's line 13,
17 24-39. Because you can't give them a -- 30 days -- I mean,
18 I don't see that's possible. So I'm assuming this is just
19 a means for the Department to encourage that exchange.

20 MR. FREDERICK: Yes. I would want to go
21 back and revisit with the original EPA proposed rule
22 suggested for that.

23 BOARD MEMBER BEDESSEM: Okay.

24 MR. FREDERICK: But if I understand you
25 right, your interest would be to try to clarify that?

0144 1 BOARD MEMBER BEDESSEM: Yeah. I'm not sure
2 you can, but --

3 MR. FREDERICK: Yeah. Okay. Let me check
4 on that.

5 CHAIRMAN WELLES: Further questions? From
6 the audience one last chance?

7 We have -- yes, ma'am.

8 MS. MYERS: Deb Myers from the University
9 of Wyoming. M-Y-E-R-S.

10 Perhaps I've lost track here of the difference
11 between the administrator big A, little A, but I've heard
12 some discussion here between the big A and little A. I
13 also see director mentioned in the rules. Perhaps you can
14 simplify it, if you're going to differentiate between
15 little A and big A, administrator and director, and just
16 say administrator A, whether it be big A administrator
17 you're referring to DEQ or EPA, and just say director
18 refers to DEQ director, and leave it at that.

19 MR. FREDERICK: Yes, our approach is to, in
20 use of the term administrator and director, is to always
21 use it in reference to the DEQ official. If it's in
22 reference to an EPA official, then we'll specifically
23 identify it as US EPA official. So again the issue on cap,
24 noncap administrator or director is really one of how we
25 want to consistently refer to the administrator as either a

0145 1 capitalized pronoun or noncapitalized.

2 BOARD MEMBER CAHN: Go ahead.

3 BOARD MEMBER BEDESSEM: We talked about
4 earlier about having definitions, but with respect to
5 administrator, it would be easier if it just said US EPA
6 administrator when you meant that, as opposed to having
7 looked back seeing definitions referred to that.

8 BOARD MEMBER CAHN: Would it be reasonable
9 to have one point of contact as DEQ, so not both
10 administrator -- I don't know, both administrator and the
11 director need to be involved in different aspects?

12 MR. FREDERICK: It's not unusual for the
13 responsibilities to be parsed out between director and the
14 administrator. And I think we are consistent with the
15 existing regulatory approach.

16 CHAIRMAN WELLES: I'll ask again, final
17 questions?

18 Hearing none, is there any further business that
19 needs to come before this Board?

20 BOARD MEMBER CAHN: I have a few things.
21 Just one, I want to thank our two public commenters for
22 coming and commenting, because I think that will be very
23 useful in terms of getting us some more -- this is pretty
24 new to me, and I know it will be useful to have this stuff
25 to look through, so thank you.

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1 Could you guys at the back hear all the time in
2 this discussion? Okay. I think we should always --

3 BOARD MEMBER CHESNUT: I think we should
4 thank the people that didn't make comments too.

5 BOARD MEMBER CAHN: We're getting hungry.

6 CHAIRMAN WELLES: I'd also like to thank
7 Kathy, and perhaps at the next meeting we might move. I'm
8 louder and you're not as loud, so we'll make sure that --
9 yes.

10 MR. FREDERICK: Mr. Chairman, would we want
11 to establish a date by which we would like to receive
12 comments on the proposed regulation?

13 CHAIRMAN WELLES: Yes. I think we need to
14 do that, but, I mean, is that a function of the Board or is
15 that a function of DEQ?

16 MR. FREDERICK: We'll prepare the
17 recommended comment period open for another 30 days, with
18 the idea, Mr. Chairman, that we would likely need some time
19 to develop a response to those comments, but we would like
20 to do so in anticipating of being back before the Board at
21 a -- at an Advisory Board hearing again in the third
22 quarter.

23 CHAIRMAN WELLES: Any Board comments on
24 that? Thirty days sound --

25 BOARD MEMBER CAHN: Yeah.

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1 CHAIRMAN WELLES: -- okay?

2 BOARD MEMBER CHESNUT: Fine.

3 CHAIRMAN WELLES: So we would -- do we need
4 to vote on that? I don't think we do. It's in the
5 minutes, so -- and, Steve, does that sound okay to you
6 too --

7 MR. JONES: Yeah.

8 CHAIRMAN WELLES: -- 30 days?

9 MR. JONES: Yes, Mr. Chairman. Thank you.
10 That will keep me busy, but thank you.

11 MS. THINGELSTAD: Rebecca Thingelstad,
12 Anadarko. We have already submitted comments to the DEQ
13 regarding these rules. Will those comments be available to
14 the Board, or should I submit -- I just know several people
15 are going to submit to you comments. Would you like our
16 comments as well, or -- okay.

17 MR. FREDERICK: Mr. Chairman.

18 BOARD MEMBER CAHN: I guess when did you
19 receive her comments -- their comments?

20 MR. FREDERICK: I received --

21 MS. THINGELSTAD: It was Wednesday, or
22 should have been.

23 MR. FREDERICK: Wednesday.

24 BOARD MEMBER CAHN: Typically what happens
25 is if comments -- usually DEQ brings for us to the board

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1 meetings all comments they've received for a public
2 hearing, so I guess I'd like to just reemphasize again to
3 DEQ that we would appreciate getting those comments just as
4 quickly as you get them. If you get them by e-mail, e-mail
5 the Board right away, and bring hard copies to the meeting
6 as well. That would be --

7 MS. THINGELSTAD: These were last minute.
8 It was --

9 MR. FREDERICK: I do have one hard copy
10 with me, if -- well, why don't I --

11 BOARD MEMBER BEDESSEM: Just e-mail.

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MR. FREDERICK: Yeah.

MS. THINGELSTAD: And I can give them to you electronically as well.

BOARD MEMBER CAHN: Did you receive any other comments in writing?

MR. FREDERICK: I received comments that Shannon Anderson provided to you all today. I know there are others that are working on comments, but those are all that I've received written.

BOARD MEMBER CAHN: Thank you. Okay.

CHAIRMAN WELLES: Okay.

BOARD MEMBER CAHN: And just procedurally, I would like to again request that our meetings be held somewhere where there's an option for video conferencing.

CHAIRMAN WELLES: Okay. Any other comments?

BOARD MEMBER BEDESSEM: Do we want to discuss if we are going to have next quarter meeting, because you may be ready with proposed regulations from water quality, where we might want to locate the next meeting, where we had been rotating.

CHAIRMAN WELLES: Well, as far as rotation, why don't we look at a date? I mean, 30 days of comments and we have more --

BOARD MEMBER BEDESSEM: This is -- this is not for this round, because you're talking about a third quarter meeting.

CHAIRMAN WELLES: Right.

BOARD MEMBER BEDESSEM: This is for Diane's regulations --

CHAIRMAN WELLES: Okay.

BOARD MEMBER BEDESSEM: -- regarding operator certification. So for the operator certification, they're thinking they're going to be second quarter. So we can talk about whether we'll have a June meeting, and we can discuss amongst ourselves via e-mail where that location would be. I think June would be appropriate.

CHAIRMAN WELLES: Okay.

MS. WALKER-TOMPKINS: If I may. This is Diane from DEQ.

The rules that I will be presenting are much shorter than these rules. They're probably not even going to be 10 pages, I don't foresee. So they'll be much easier for you to review. So it may be easier for you to do a videoconference with the 10-page rule, because I plan on sending you all a packet with everything, the federal regs, the state regs, all the things that are involved in that rulemaking process.

BOARD MEMBER CAHN: If we're getting -- it's really hard for me to hear you. Can you repeat that?

MS. WALKER-TOMPKINS: I said the rule I will be presenting probably won't be more than 10 -- less than 15 pages. It won't be as extensive as this rule. And while it's almost a total rewrite of an existing rule, it's going to be less time for you to review.

And you'll get the federal regs that go with that. And I see you all have statute books, but I can direct you where in statute, where you guys are directed to promulgate rules. And you'll have all the -- any comments that I reviewed up to that point, because we plan on posting it on our web page before the next meeting, which

23 is why I was kind of curious when your meeting would be so
24 I would know what kind of time frame I had to post those
25 rules, so that I would have as many comments as possible to

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1 get to you before the meeting so that you can read all that
2 beforehand.

3 So I don't know if that helps you or not decide
4 what kind of meeting you want to have.

5 BOARD MEMBER BEDESSEM: Let's look at
6 June time frame and we can discuss later where it's
7 located.

8 CHAIRMAN WELLES: Do we need to do that
9 now?

10 BOARD MEMBER BEDESSEM: We can discuss
11 later, via e-mail, once we know what you have to present.

12 BOARD MEMBER CAHN: I don't think so. I
13 think a lot of us won't know what's going to happen with
14 June until we get a little closer, unless somebody knows
15 for sure some time that they're not available.

16 CHAIRMAN WELLES: I do. I will not
17 be available the weekend, probably a long weekend
18 somewhere, the 13th, 14th, 15th, I think. And I'm not
19 sure -- I may be gone a whole week there, but it's over
20 that weekend.

21 BOARD MEMBER CHESNUT: Just e-mail that.

22 BOARD MEMBER BEDESSEM: Okay.

23 CHAIRMAN WELLES: Hearing no further
24 discussion, and thank you all for giving up your lunch
25 hour. This helps Lorie in particular to get home. And I

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1 think it probably saves everybody a little bit of time and
2 effort. So we will now adjourn this meeting for lunch, we
3 hope.

4 (WWAB meeting proceedings concluded
5 1:10 p.m., March 13, 2009.)
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C E R T I F I C A T E

1 I, KATHY J. KENDRICK, a Registered Professional
2 Reporter, do hereby certify that I reported by machine
3 shorthand the foregoing proceedings contained herein
4 constituting a full, true and correct transcript.
5 Dated this 31st day of March, 2009.

6
7 Page 63

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KATHY J. KENDRICK
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