

1
2 IN THE MATTER OF THE
3 NADC WASTE DISPOSAL EVALUATION
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6
7 TRANSCRIPT
8 OF
9 TELEPHONE CONFERENCE CALL
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11
12 November 3, 2006
13 8:00 a.m.
14

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17 PANEL MEMBERS: ALWYNELLE (Nell) S. AHL, Ph.D., D.V.M.
18 ERMIAS BELAY, M.D.
19 LINDA A. DETWILER, D.V.M.
20 ROBERT P. ELLIS, Ph.D.
21 FRAN KREMER, Ph.D.
22 KATHERINE (TRINA) McMAHON, Ph.D.
23 ROBERT G. ROHWER, Ph.D.

24 CO-COORDINATORS: THOMAS W. NEUMANN, City of Ames
25 STEVEN R. SHAFER, Ph.D., USDA ARS, MWA

ALSO PRESENT: JOHN R. DUNN, City of Ames
DIANA WHIPPLE, USDA ARS, NADC

TRANSCRIBED BY: Suzanne M. E. Sogard, CSR, RPR

1 DR. SHAFER: This is Steve Shafer. I'm with the
2 U.S. Department of Agriculture, and I'm the USDA's . . .
3 review panel. I'd like to begin by taking roll call and
4 making sure everybody is here that I think is here. And
5 I'll start and do this alphabetically. Nell Ahl, the
6 panel chair.

7 DR. AHL: I'm here.

8 DR. SHAFER: Ermias Belay.

9 DR. BELAY: Yes, I'm here.

10 DR. SHAFER: James Colbert.

11 DR. COLBERT: Yes.

12 DR. SHAFER: Linda Detwiler. Linda Detwiler. I
13 thought she was --

14 DR. DETWILER: Yes, I'm here.

15 DR. SHAFER: Bob Ellis.

16 DR. ELLIS: Yes.

17 DR. SHAFER: Fran Kremer.

18 DR. KREMER: Here.

19 DR. SHAFER: Trina McMahan.

20 DR. McMAHON: Yes, I'm here.

21 DR. SHAFER: Bob Rohwer.

22 DR. ROHWER: Here.

23 DR. SHAFER: That accounts for all the panel.

24 Now, let's see, let me go through some others here. Tom
25 Neumann, the co-coordinator for the City of Ames, is not

1 here; is that correct?

2 MR. DUNN: That's correct, he's not here.

3 DR. SHAFER: John Dunn, the technical rep. for
4 the City of Ames.

5 MR. DUNN: Here.

6 DR. SHAFER: Sherri Buxton, my assistant in
7 Peoria.

8 MS. BUXTON: Here.

9 DR. SHAFER: Diana Whipple, the technical rep.
10 for NADC.

11 MS. WHIPPLE: Here.

12 DR. SHAFER: Bryan Rippke, the observer for USDA
13 APHIS.

14 MR. DUNN: He's present here in the council
15 chambers.

16 DR. SHAFER: I assume we have a public monitor
17 there in Ames City Hall.

18 MR. DUNN: Correct.

19 DR. SHAFER: Let me just make a couple comments
20 before we get started. This is another one of these
21 deliberatory sessions, which means that the panel will be
22 discussing its preliminary draft of the report and some of
23 its early sense of conclusions.

24 I'd like to remind everyone who might be
25 listening in that's not part of the panel, no final

1 conclusions yet one way or the other. This is all
2 preliminary discussion. And so those of you who are
3 listening in to public address at Ames City Hall, please
4 take this into consideration that things might change by
5 the time the final report comes out.

6 In this session we'll be accepting no verbal
7 input from the public or the press except written comments
8 until close of business one week from today, November
9 10th. Those will be accepted in writing. That includes
10 by U.S. Mail, by e-mail or by fax and to me. And Mr. Dunn
11 there in the City Hall will have the information on how to
12 send comments to me. But they must be received by close
13 of business one week from today, November 10th.

14 This call is being recorded for transcript
15 purposes, so as Suzanne pointed out, she'd like us all to
16 talk loud. Try to remember to say your name when you jump
17 into the discussion. That will help. The other thing
18 that will help is if we try to talk one at a time. That
19 helps her quite a bit.

20 We have these lines until 11 a.m. Central. If
21 we're done before that, we can certainly finish up. If
22 we're still in progress at about 9:30 Central time, I'll
23 call a ten-minute break, we'll keep the lines up, just
24 give everybody an opportunity for a ten-minute break and
25 we'll come back.

1 Under our panel charter rules, we do need a
2 quorum of five. Fortunately this morning we're all here,
3 all eight of the panel members. If any of the panel
4 members needs to leave the call before the call is
5 finished, please break into the conversation and tell us
6 that you're leaving. Since we do have a quorum of five,
7 if we drop below five, that's when the call will end,
8 right then.

9 I have no other comments at this point. Oh, just
10 a couple of things, one more thing. The panel -- get this
11 out of the way now. The panel will next have its meeting
12 in Ames to finish this up. That's scheduled and in the
13 Federal Register for November 16th and 17th. We'll begin
14 at 8 a.m. there in the City Council chambers on Thursday,
15 November 16th there at City Hall.

16 Please make your travel arrangements to arrive on
17 Wednesday the 15th. We'll be staying in Ankeny, Iowa,
18 this time. There's something going on in Ames, and all
19 the hotels are full. So Ankeny is down between Des Moines
20 and Ames. It will take us about twenty, twenty-five
21 minutes to drive up. We'll have to get a little bit
22 earlier start in the day.

23 But Sherri I think has already sent out
24 information about that hotel. Please . . . on your travel
25 arrangements. And we'll send out more about logistics as

1 that day gets closer. That's all I have. Nell, the
2 meeting is yours.

3 DR. AHL: Okay. Thank you very much. Ermias, I
4 guess your piece is first, the preamble. And I've got to
5 make an apology to you. When I sent this out, I didn't
6 make it clear what the preamble was. We had talked about
7 it at our last meeting, but then I didn't reiterate what
8 it would be.

9 That was the situation where we wanted as a team,
10 as a group, to congratulate NADC on their good research.
11 And since you are a researcher in that realm, I had hoped
12 that you, Bob or Linda would be the one to write that.

13 Having said that, what you have written is a very
14 good start to the summary of the whole thing. So I'm
15 simply going to label that summary, and I thought that we
16 would then take up the piece that you submitted, Ermias,
17 and put it at the end of our discussion and that would be
18 a very good beginning for that.

19 So we still need somebody to write up the piece
20 that Rohwer, Bob Rohwer and you, Ermias, had so elegantly
21 spoken at the last meeting about the good research that
22 was done at NADC and that we didn't want in any way the
23 panel report to take away from that. So anybody want to
24 take up the charge of writing that piece?

25 DR. ROHWER: Ermias, it's up to you or me.

1 DR. BELAY: Right.

2 DR. ROHWER: I'll take that on. Unless, Ermias,
3 do you still want that job?

4 DR. BELAY: No, that's good, Bob, you can do it.

5 DR. ROHWER: Okay.

6 DR. AHL: Okay. If I can re-create what you had
7 said -- and I took notes thinking that I could keep up
8 with you and then just write down what you had said, but I
9 didn't do a good enough job, so I couldn't do that. But
10 it doesn't need to be but a short paragraph.

11 DR. ROHWER: Sure.

12 DR. AHL: Thank you very much. And, Ermias,
13 you've already put us a long way towards finishing our
14 summary once we have identified our conclusions and that
15 sort of thing.

16 DR. BELAY: That was not clear to me. I thought
17 that would probably go into the introduction.

18 DR. AHL: Yeah, you're absolutely right it wasn't
19 clear, and I apologize for that. That was my failing in
20 explaining what that would be. And I had thought simply
21 to set it as sort of a bracketed aside from the actual
22 panel report, which is why I put it where I did. And, in
23 fact, we may as a group decide there's a better way to do
24 that. But I thought it was a very good idea to do. Okay.

25 DR. ROHWER: Nell, this is Bob. It seems to me

1 like the preamble that Ermias has supplied is in the right
2 place because it's -- isn't it more or less a statement
3 framing the charge to the committee?

4 DR. BELAY: That's -- that was also my thinking.
5 I thought we would introduce NADC and the activities and
6 the good research that was done as part of the
7 introduction, leading in to the report, and that the
8 preamble should probably summarize the general charge and
9 what the report eventually is going to say. But that's my
10 feeling. Is that where you were going, Bob?

11 DR. ROHWER: Yeah, I mean, if anything, I would
12 just add like two or three sentences at the very beginning
13 of this to say, you know, the committee recognizes the
14 unique research responsibilities at the NADC and the
15 unique facilities that exist here and that our intent
16 is -- I don't know exactly where to position it. I'll
17 compose it and try to stick it in there somewhere, I guess
18 that would be the thing to do.

19 So anyway, to communicate the message that we
20 strongly support and endorse the research program that's
21 going on at NADC, and our intentions are merely to improve
22 the environment, not to in any way hinder that program or
23 criticize that part of the program.

24 DR. AHL: Okay. I'm writing. And I think that's
25 good.

1 DR. ROHWER: Actually we have a transcript, don't
2 we, of that last meeting?

3 MS. WHIPPLE: It's in the process of being
4 developed. But actually I'm just looking through that to
5 see if I can find that section in the transcript from the
6 last meeting.

7 DR. ELLIS: The conference call meeting?

8 DR. AHL: Yes, I haven't seen anything but notes,
9 my handwritten notes.

10 MS. WHIPPLE: Yes, we're still in the process of
11 getting that transcribed, and we'll make that available
12 when it's completed.

13 DR. AHL: Okay. That will be a great help.

14 DR. ELLIS: This is Bob Ellis. Let me interject
15 something right here. Bob Rohwer did send me the report,
16 draft report from his and my visit to NADC on October
17 19th. And I've worked on that. I have it almost ready.
18 But, Bob, would you rather see that before I send it out
19 to the whole committee, or should I -- when I've got some
20 things added such as where the shower drains go, the mouse
21 house, all of its drains, that kind of thing, should I
22 just send it to the committee or -- I thought you'd
23 probably rather see it first.

24 DR. ROHWER: Well, either way. I think since
25 we're having this meeting today, it probably doesn't -- it

1 won't hurt to delay that for another couple days so I
2 could take a look at it. But I also -- that report, when
3 I didn't hear from you, Bob, I sent to Nell. So Nell has
4 seen it as well, the draft version that I supplied to you.

5 But I think -- yeah, I don't think we should
6 burden the rest of the committee with an incomplete -- you
7 know, until the thing is complete.

8 DR. ELLIS: That's what I thought too. Okay.
9 That's how we'll do it.

10 DR. AHL: Okay. Well, when you all get that
11 finished, please get that to me so we can get it to
12 everybody else as soon as possible.

13 DR. ELLIS: Sure. We'll do it.

14 DR. AHL: All right. Well --

15 DR. ROHWER: In that regard, in case people
16 didn't hear earlier, my own contributions to this draft I
17 did not finish until early this morning, and they came to
18 you in an e-mail very early this morning. So if you don't
19 have that in front of you, if you check your e-mail, it's
20 in there.

21 DR. AHL: All right. Well, we can change the
22 headings, but I think Roman numeral I is probably the
23 first part of the introduction now; is that correct?

24 DR. ROHWER: I actually think it's fine the way
25 it is.

1 DR. AHL: And just leave it as the preamble?

2 DR. ROHWER: Yeah.

3 DR. DETWILER: I agree.

4 DR. AHL: All right. Very good. Then moving
5 right along, No. 2, the introduction, A, the background,
6 any comments there? Any redundancies, now that we have
7 the first paragraph, that we want to remove?

8 DR. ROHWER: This is Bob. The only comment I
9 have on this is -- well, I have two comments. One, that
10 first paragraph, I think we discussed before that we
11 shouldn't limit NADC to any particular TSE disease. I
12 would generalize this.

13 DR. DETWILER: Bob, the other way to do it maybe
14 is put "for example" and then put then other TSEs. So
15 highlight the big three and then -- right?

16 DR. ROHWER: Yeah, that would be good.

17 DR. ELLIS: I agree with that too.

18 DR. AHL: Okay. Well, "is responsible for basic
19 research on livestock diseases, including such as scrapie"
20 etc. "caused by prions." Is that where we want to add
21 "and other TSE diseases"?

22 DR. DETWILER: Yeah, other prion diseases.

23 MR. ROHWER: Or even do it the opposite way
24 around and say, you know, they're responsible for studying
25 TSE diseases in animals which include the big three at the

1 moment. And actually there's quite a bit of work going
2 on at -- there's quite a bit of work going on at NADC with
3 TME as well, or at least there's some going on with TME.

4 DR. AHL: Okay, I didn't know that. I knew that
5 they had at one time, but I didn't know it continued.

6 DR. DETWILER: Well, maybe you could put it
7 includes but not limited to scrapie, chronic wasting
8 disease and TSE, something like that.

9 DR. AHL: Okay. Let me see if I've got this now.
10 The ARS is responsible for basic research on TSE diseases
11 in animals including those such as scrapie in sheep,
12 chronic wasting disease in deer and elk, and eventually
13 bovine spongiform encephalopathy in cattle.

14 DR. ELLIS: And then the transmissible mink
15 encephalopathy ought to be in there somewhere too.

16 DR. AHL: Okay. I'll put it in just before
17 bovine. Got you. Okay. Other changes? You had another
18 comment, Bob.

19 DR. ROHWER: I mean, the other thing that this
20 doesn't really communicate is the fact that a very
21 important part of their investigation is looking at the
22 host range of these diseases. So they're putting these
23 things into all kinds of other species, trying to find out
24 whether they're carriers or possible vectors or others
25 susceptible out there that could be a problem for us.

1 And --

2 DR. AHL: Shall we add a sentence, then, after
3 BSE in cattle?

4 DR. ROHWER: Well, I don't know if you want to
5 get very specific on that. I would just -- all I'm doing
6 is giving you my rationale for why we want this very
7 general, you know, that they're -- we recognize that
8 they're working on these diseases without any other
9 restrictions. Right now the only restriction is BSE, and
10 that hopefully will be gone before long.

11 DR. ELLIS: And I thought the last sentence on
12 that first paragraph where it says three prion-associated
13 conditions, I think that should be changed to prion-caused
14 diseases. That's I thought pretty well defined. Others,
15 Bob, Linda, if you've got other word changes on that or if
16 it's good the way it is.

17 DR. BELAY: Or just prion diseases.

18 DR. ELLIS: That's fine with me.

19 DR. KREMER: Probably in light of Bob's comments,
20 you could take out the "three" and just make it a general
21 statement.

22 DR. ROHWER: I don't see where you're talking
23 about here.

24 DR. ELLIS: Where it says background, that first
25 paragraph.

1 DR. AHL: The last sentence of the first
2 paragraph, Bob.

3 DR. ELLIS: It says "including these three prion-
4 associated conditions." Just change that to "these prion
5 diseases."

6 DR. AHL: Period. We haven't focused -- we've
7 got to add scrapie, CWD and BSE because we've changed the
8 sentence before it.

9 DR. ELLIS: Right. So change that accordingly.

10 DR. AHL: Okay. Got you.

11 DR. ELLIS: Then the next sentence on the next
12 paragraph where it says NADC, that the methods for
13 managing potentially prion-infected waste, it should be
14 prion-contaminated, not prion-infected.

15 DR. AHL: I'm sorry. Okay.

16 DR. ROHWER: Or even -- Yeah, I guess that's
17 okay. There's another distinction we could be making,
18 Bob, and that is between prion contaminated and prion
19 exposed.

20 DR. ELLIS: Yes, that's true.

21 DR. ROHWER: Because I think a lot of the waste
22 stream here, you know, it has the potential for being --
23 for containing TSE infectivity, but it probably doesn't,
24 most of it.

25 DR. KREMER: It covers it already in potentially

1 prion-contaminated waste.

2 DR. AHL: I don't think the emphasis hurts,
3 though. Okay. That's changed to say "for managing
4 potentially prion-contaminated or prion-exposed waste."

5 DR. ROHWER: On this paragraph, I think there's
6 an error. You have here that the NADC wastewater is
7 disposed of through the City of Ames wastewater plant.
8 And APHIS water is not disposed of this way. It's
9 actually the opposite. The NADC wastewater is pretreated
10 before it goes to Ames and the -- and I thought that the
11 point was that the water on the other side, some of it
12 goes to the wastewater treatment plant, but most of it
13 does not. Am I correct on that or not?

14 DR. AHL: Linda, do you remember?

15 DR. DETWILER: Well, most of the NVSL goes right
16 into -- directly into there, but they plugged those
17 drains, though, I thought. They don't have the lab part
18 going down the drain, period.

19 DR. ROHWER: Well, then you have to make the
20 distinction, the careful distinction that you're only
21 talking about those flows which come from TSE-exposed
22 sites.

23 DR. ELLIS: Right.

24 DR. KREMER: But I think in this paragraph,
25 though, it looks like we're trying to get to the genesis

1 of the issue, and I thought the issue was in terms of the
2 animal care and the bedding issue, whether it's dry or
3 wet, and focus on that issue and keep the wastewater
4 discussion distinct from that.

5 DR. ELLIS: But this implies that APHIS
6 wastewater doesn't go to the City of Ames wastewater
7 treatment plant.

8 DR. AHL: I thought they had a different way to
9 dispose of it.

10 DR. DETWILER: They do, they do dry things. But
11 their wastewater goes -- why don't we take that out? Why
12 is that necessary in there?

13 DR. KREMER: Yeah, that's what I was saying.

14 DR. ELLIS: Yeah, it all ends up at the City of
15 Ames wastewater treatment plant one way or the other.

16 DR. DETWILER: Yeah, I think that made more
17 confusion. Or we have to go into a more detailed
18 experience about the APHIS facility, right?

19 DR. ROHWER: Yeah, I think what's needed here is
20 actually more detail, you know, to explain exactly -- to
21 separate this between -- where it's necessary, separate
22 between discharges from TSE-exposed sites. And in the
23 case on the NADC side, all of that, except for one
24 exception that we'll discuss in a minute, goes to the
25 pretreatment plant. And on the NVSL side, none of it

1 does. But it's operated -- but they operate, the way they
2 handle it, is that they work -- they operate dry barns so
3 there is no wastewater.

4 DR. DETWILER: From the TSE site, right.

5 DR. ROHWER: From the TSE sites. But their
6 general discharge goes directly to the NVSL sewers. Now,
7 one thing we didn't -- that I'm not sure about, though I
8 think we were briefed on this, is where the wastewater
9 goes from the -- from that new NVSL research laboratory,
10 which is conducting diagnostic assays on TSEs.

11 DR. DETWILER: He told us that, and I thought
12 they captured the liquid material from there and did some
13 kind of incineration or digestion.

14 DR. BELAY: That's also my understanding. I
15 thought they collected the liquid from that BSL-3
16 facility.

17 MS. WHIPPLE: This is Diana. I would need to
18 confirm what happens with that. My understanding is the
19 BSL-3 from the new APHIS building would go to their
20 wastewater pretreatment plant on the NVSL campus.

21 DR. DETWILER: Diana, also ask, if you could, ask
22 him like the -- my understanding of things like from the
23 immunohisto chemistry is they captured that and that
24 didn't go as far as the wastewater. They did something
25 else with that.

1 MS. WHIPPLE: And I'll have to check on that.

2 DR. DETWILER: Okay.

3 DR. AHL: Let me ask a question right here. Is
4 this the place to go into detail, or do we need to just
5 change this here to just say that there was a difference
6 and that that's what we're going to explore and that was
7 the cause of some of the problems?

8 DR. ROHWER: I think you want to be general here
9 because there's going to be a detailed accounting --

10 DR. AHL: That's what I thought.

11 DR. ROHWER: -- later in Section 3, but I wonder
12 now if section 3 should also -- we should also be saying
13 something about the NVSL side as well.

14 DR. AHL: I think you're probably right about
15 that.

16 DR. DETWILER: I agree with Bob. I don't think
17 it should be here. If anything, it's Section 3 is right
18 where we should add it.

19 DR. AHL: Okay. So here, what are we going to
20 say here?

21 DR. ROHWER: Well, here, but I would just expand
22 this enough so that you get the broad outlines of what the
23 issues are, you know, that it's been broken down in this
24 way and we're going to discuss that in more detail, in
25 great detail in Section 3.

1 DR. AHL: Okay. So can we just say NADC and
2 APHIS dispose of their wastewater in different ways and
3 that will be discussed further in Section 3?

4 DR. KREMER: But we're not going to get into the
5 NVSL aspect. I mean, the focus in 3 is on the NADC
6 process, so I think that kind of leaves people hanging
7 there.

8 DR. DETWILER: But why couldn't we at least on
9 Route in 3 just give an overview of NVSL? We could do
10 that. That wouldn't be hard.

11 DR. KREMER: . . . the way it stands right now,
12 we're not doing that. That's all that's addressing.

13 DR. DETWILER: No, I can do that, I can add that
14 to Section 3 if Diana could kind of clarify a couple of
15 those questions and then just the two different routes and
16 then leave it at that.

17 MS. WHIPPLE: This is Diana. Does your question
18 pertain specifically, then, to the labs?

19 DR. DETWILER: Well, yeah, because I think if
20 everybody -- right, the barns are dry barns so that's
21 there. It's really the lab, where's the liquid waste from
22 the lab go.

23 DR. BELAY: Linda, this is Ermias. I would even
24 specify saying there's general waste from the BSL-3
25 facility, and there could be liquid waste that potentially

1 might be contaminated with the agents.

2 DR. DETWILER: Okay, all right.

3 DR. AHL: If we're going to talk about it
4 further, then we can just remove this sentence. We've
5 already said that the NADC differs from those used in
6 APHIS; concern for the significance of these differences
7 is what was part of the problem, right?

8 DR. DETWILER: Right, and you could say it will
9 be explained further in more detail in Section 3 or
10 something like that.

11 DR. AHL: So we can just remove this and say
12 further details are provided in Section 3. Will that
13 work?

14 DR. KREMER: The other thing we may want to
15 mention here is, again, in terms of general issues and
16 background and the difference between the wet and the dry
17 methods of managing the animals.

18 DR. BELAY: It's very difficult to hear what you
19 say.

20 DR. ELLIS: Yeah, I couldn't hear that.

21 DR. KREMER: Try this again. The only thing I
22 was suggesting here, because of this background, we may
23 want to add a sentence or two discussing the differences
24 between managing animals in the wet and the dry methods
25 between the two facilities.

1 DR. ROHWER: Yeah, that would be my preference as
2 well, would be just a two-sentence or a three-sentence
3 summary of what the situation is, you know, that there's
4 liquid waste at NADC where a very large proportion of it
5 goes to the pretreatment plant and virtually all of it
6 from the TSE-exposed areas. And at NVSL they don't send
7 their -- they don't send their TSE-exposed waste to the
8 NADC facility but they get around that by operating dry
9 barns.

10 DR. AHL: Yeah, but see, we're going to talk
11 about that in Section 3, and this is just a brief kind of
12 introductory background, and we're just saying it's
13 different and it was concern for the significance of those
14 differences that caused the problem.

15 DR. KREMER: But we don't address the animal care
16 back in Section 3 in terms of general comments. That
17 would -- I think the reader would clarify, well, what's
18 the distinction between the two and why is one not doing
19 the pretreatment versus the other, and that's really the
20 crux of the issue.

21 DR. ROHWER: And it's also the crux of the
22 dispute. You know, I mean, this is how it came -- this is
23 how this whole thing started because that difference was
24 not understood by the animal caretakers. And we are --
25 there is -- I don't remember which section that's in, but

1 there is something about that as well in here somewhere.

2 DR. DETWILER: Well, decide where you -- I'll
3 write it up in 3 if you want. But I think we're not going
4 to get into explain . . . we're going to explain it one
5 way or the other, right? I mean, it shouldn't have to be
6 in more detail in both, right?

7 DR. ROHWER: No, no, no.

8 DR. KREMER: No, just to clarify.

9 DR. AHL: Now, let's leave this right now,
10 removing the one sentence that is incorrect and saying
11 further details will be discussed in Section 3. I will
12 bracket that in some way so that if we want to add the
13 greater detail later, we can. Otherwise it reads pretty
14 smoothly, and it tells you that there's a difference in
15 the way the two facilities handle their waste and it was
16 concern for the significance of those differences that
17 caused the problem. Then we're going to talk about it in
18 detail, although we can add more detail here if we really
19 decide we want to on that Thursday in Ames. Will that
20 work for everybody?

21 DR. ROHWER: Sure.

22 DR. ELLIS: Yeah.

23 DR. AHL: All right. Let me bracket that so
24 that -- with a question about more detail. All right.
25 Moving right along.

1 DR. COLBERT: Nell, Jim Colbert. The section
2 that describes the panel.

3 DR. AHL: That's the next page, okay.

4 DR. COLBERT: I'm not sure if we're ready to move
5 to that. We're still in A?

6 DR. AHL: If no one has anything before that,
7 we'll move there.

8 DR. COLBERT: We're still in A, the background
9 section?

10 DR. AHL: Yes.

11 DR. ELLIS: Right. On that second paragraph I do
12 have a couple other comments. Next to the bottom of the
13 page where it says "the concern was that animals
14 challenged with prions," I think we should say "the
15 concern was that waste from animals challenged with prions
16 was not properly treated."

17 DR. AHL: Concern that --

18 DR. ELLIS: Waste.

19 DR. AHL: Waste. That's very good.

20 DR. ELLIS: Because it's the waste that we're
21 dealing with.

22 DR. AHL: Right, waste from animals challenged.

23 DR. ROHWER: I'd just like to know where you are.
24 Where are you?

25 DR. ELLIS: It's the second paragraph under

1 introduction, under A, background.

2 DR. ROHWER: Oh, still on the first page.

3 DR. ELLIS: Yes. Second line from the bottom of
4 the first page, if yours printed like mine.

5 DR. BELAY: Bob, it's not necessarily waste from
6 the animals. It's waste from the laboratory where these
7 animals were held. In other words, it implies that the
8 waste from those animals were the ones that we worried
9 about.

10 DR. ELLIS: It really was the waste from the
11 animals that raised the whole issue.

12 DR. BELAY: I see. Not, for example, waste from
13 the necropsy facility?

14 DR. AHL: Well, that's waste as well from
15 animals.

16 DR. BELAY: Not from the animals. Waste from the
17 animals, I see it as urine and their feces. It's the
18 waste from the laboratory as such.

19 DR. DETWILER: Well, I think both. They said
20 both, from cleaning the barn, right?

21 DR. BELAY: But it should describe -- you should
22 use some general phraseology that would describe.

23 DR. KREMER: Well, we could put "and associated
24 waste materials."

25 DR. ELLIS: That could work.

1 DR. AHL: Okay, how are we going to say this?

2 DR. KREMER: Waste from the animals and
3 associated waste materials.

4 DR. BELAY: Fran, it's very difficult to hear
5 you. I don't know why.

6 DR. ROHWER: It's because you're very faint,
7 Fran.

8 DR. AHL: I would take offense at that, Fran.

9 DR. ROHWER: No, it's your phone. It's not you.

10 DR. ELLIS: It's way in the background or
11 something.

12 DR. AHL: The concern was that waste from animals
13 and associated waste materials -- waste from animals
14 challenged with prions and --

15 DR. KREMER: -- associated waste materials.

16 DR. AHL: -- associated waste materials were not
17 properly treated prior to discharge. Okay.

18 DR. ELLIS: "To the wastewater treatment plant"
19 better be in there.

20 DR. AHL: Okay. Got you.

21 DR. ELLIS: Is it okay if we establish somewhere
22 in here WWTP that we can use for wastewater treatment
23 plant all the way through?

24 DR. DETWILER: Yeah, I put it in my section, and
25 I bracketed it right after the first time I used it. So

1 if it can go further up, that would be good.

2 DR. AHL: That would be good, yeah, otherwise
3 we're going to be tripping our tongue over this all the
4 time. I'm going to put it here. We want to say WWTP?

5 DR. ELLIS: Yep.

6 MR. DUNN: Nell, this is John Dunn. Another
7 option might be just to refer to it as the Ames Water
8 Pollution Control plant, or WPC. That's the nomenclature
9 we use.

10 DR. AHL: Okay. City of Ames --

11 DR. DUNN: -- water pollution control, or WPC
12 plant.

13 DR. KREMER: The other thing is we may want to
14 keep it general, again, for the readership of this. Most
15 people are familiar with the term WWTP.

16 DR. ROHWER: And also at NADC I thought they were
17 referring to it as the wastewater pretreatment plant.

18 DR. ELLIS: Well, that's on the campus but not --
19 what this one refers to is the --

20 DR. AHL: It's City of Ames.

21 DR. ELLIS: City of Ames.

22 DR. ROHWER: Oh, I see. So WPC is for --

23 DR. AHL: Yeah, we'll use WPC for Ames and we'll
24 use WWPTP for the NADC. How's that? Invent some new
25 acronyms here. All right. Anything else before we move

1 on to the third paragraph in 1A?

2 DR. ROHWER: We're now officially bureaucratic.
3 We invented two acronyms.

4 DR. ELLIS: Yeah, we've got to have it to where
5 we can construct paragraphs with nothing but "the" and
6 then a whole bunch of acronyms, period.

7 DR. AHL: A few adjectives thrown in. All right.
8 May 8th, how about that paragraph, top of the next page.

9 DR. KREMER: I would probably -- instead of
10 convening a panel to review information about the
11 activation of prions, I would just keep it broad with
12 respect to really the general title with regard to
13 reviewing the effectiveness of the --

14 DR. AHL: Okay. How would -- Tell us how you
15 would -- That's the second sentence. Tell us what you
16 would say.

17 DR. KREMER: Well, just looking at the overall
18 title what we have here, wastewater disposal evaluation,
19 and whatever title we're going to take here for the
20 overall charge, and put that there rather than the
21 de-activation of prions.

22 DR. AHL: Okay. So give me some words to write.

23 DR. KREMER: Well, wastewater disposal
24 evaluation.

25 DR. AHL: Okay. Is that okay with everybody

1 else?

2 DR. BELAY: Yeah, but that paragraph also repeats
3 what's included under B, what is the charge of the expert
4 committee.

5 DR. AHL: You're right. So let's just get rid of
6 that paragraph, how does that sound?

7 DR. BELAY: Yeah, but at the same time I would
8 say USDA and the City of Ames agree to convene an expert
9 panel to review scientific information to evaluate these
10 concerns, the concern that was raised in the previous
11 sentences, and then I would leave it at that.

12 DR. AHL: Oh, okay. That's good. So we add --
13 Let's see. On May 8th, representatives from the City of
14 Ames, USDA, ARS -- say it again. Tell me.

15 DR. BELAY: You keep that sentence as it is, and
16 then the second sentence which starts with the USDA, the
17 USDA and the City of Ames agree to convene an expert panel
18 to review scientific information to evaluate these
19 concerns, period.

20 DR. AHL: Okay, I like that. And then toss out
21 the rest of that --

22 DR. BELAY: Right, because they are addressed in
23 more detail under B.

24 DR. AHL: Right. Sounds good to me. Everybody
25 else agree?

1 DR. KREMER: Yeah, that's fine.

2 DR. ELLIS: For now. It's hard to keep up with
3 this on the phone and jotting and noting, so probably the
4 next draft round we'll still have a few comments. But
5 this is getting it weeded down.

6 DR. AHL: Oh, absolutely. But at least we'll
7 have something a little bit more substantial to work with
8 that Thursday. That's going to be a long day. But moving
9 right along, the next paragraph, who was it, Jim or Bob
10 had a comment about this?

11 DR. COLBERT: It was Jim. Jim would like to ask
12 this his name be changed back to his actual name.

13 DR. AHL: Man, you are demanding.

14 DR. COLBERT: I know. And I'm not quite sure
15 that I'm comfortable with the description of myself. I'm
16 not truly an ecologist. I suppose it would be fair to say
17 I'm an environmentalist. So I guess it might say -- you
18 know, I'm trying to look at what the rest of these are,
19 but it probably ought to say environmentalist/associate
20 professor of biology at Iowa State University.

21 DR. AHL: We're not saying associate professor of
22 what.

23 DR. COLBERT: Okay, that's fine. Associate
24 professor is fine.

25 DR. AHL: If that's all right. So we'll just say

1 environmentalist/associate professor.

2 DR. COLBERT: Yeah.

3 DR. AHL: All right. Anybody else?

4 DR. ELLIS: Fran, her city is not in there.

5 DR. KREMER: Yeah, and the title senior science
6 advisor.

7 DR. AHL: Senior science advisor.

8 DR. KREMER: Yeah, should probably say U.S.

9 DR. AHL: Just a minute. A-d-v-i-s-e-r or o-r?

10 DR. KREMER: o-r.

11 DR. AHL: Okay.

12 DR. BELAY: I'd also change my title. I would
13 say --

14 DR. AHL: Wait, wait, wait. Environmental
15 Protection Agency. Is it important to put Cincinnati
16 there?

17 DR. KREMER: Well, for consistency, we have the
18 other cities, so one way or the other.

19 DR. ELLIS: I think so.

20 DR. AHL: All right. Now, Ermias.

21 DR. BELAY: I would -- for my title I would just
22 say medical epidemiologist, epidemiology, human prion
23 diseases.

24 DR. AHL: Medical epidemi-o-l-o-g-i-s-t.

25 DR. BELAY: Center for Disease Control and

1 Prevention. Currently I have another title, but I don't
2 think it belongs in there. Just makes it longer. Medical
3 epidemiologist, Centers for Disease Control and
4 Prevention.

5 DR. AHL: Okay. And then we better say Atlanta
6 to be consistent.

7 DR. BELAY: You don't have the city for me.

8 DR. AHL: Right, that's what I said. So to be
9 consistent we need to put Atlanta.

10 DR. BELAY: Now I'm happy.

11 DR. AHL: All right. Very good. Linda.

12 DR. DETWILER: Don't put my city. It will
13 confuse things more so --

14 DR. AHL: Don't put your city there?

15 DR. ROHWER: Can't we put Princeton down there?

16 DR. DETWILER: Well, University of Maryland and
17 then have a New Jersey city, let's make it even more
18 confusing.

19 DR. AHL: I mean, look, did I put East Lansing
20 for me? No, because I live in Lyle, but I'm an adjunct
21 professor at Michigan State in Lansing. Should I put that
22 there?

23 DR. BELAY: You should.

24 DR. AHL: All right, Linda, we're going to put
25 College Park for you.

1 DR. DETWILER: That's fine. Actually I have an
2 even more permanent title, but just leave the adjunct
3 professor because that's a different job.

4 DR. AHL: Well, we all have -- I have different
5 titles too.

6 DR. DETWILER: But, I mean, at the University of
7 Maryland, I'm the assistant director so -- but leave this.
8 It's better.

9 DR. AHL: Well, I can change it.

10 DR. DETWILER: No, it's with the Center of Public
11 and Corporate Veterinary Medicine. It's not worth
12 changing. No, it's fine.

13 DR. AHL: Because I didn't put College of
14 Veterinary Medicine either for Michigan State or for
15 University of Maryland.

16 DR. DETWILER: Yeah, that's fine. Mine's fine.

17 DR. AHL: All right. Anybody else? Moving right
18 along. B, 1B.

19 DR. McMAHON: This is Trina. I would -- for
20 section B, item No. 3, where it says determination of the
21 risk posed to humans and the environment, I would say
22 estimation of the risk.

23 DR. AHL: Okay. Now, I was using the words
24 precisely as they were put on that panel, and "estimation"
25 suggests --

1 DR. ROHWER: Quantitation.

2 DR. AHL: -- quantitation, and we said we weren't
3 going to do that.

4 DR. McMAHON: Yeah, to me determination implies
5 more quantitation.

6 DR. AHL: Well, yeah, it could. But I used
7 exactly the words that were given to us in the charge to
8 the panel. So that was my -- that was my reasoning for
9 doing that.

10 DR. ROHWER: Nell, I had a question about 3 too.
11 I'd also circled it. 3 is being treated in what section
12 of this draft? Is that part D?

13 DR. McMAHON: It's the part that I didn't write
14 yet. And this is Trina. Because -- I'm sorry, I have an
15 outline of it, but I haven't finished it yet.

16 DR. AHL: That's 4B in the outline.

17 DR. ROHWER: 4B in the outline.

18 DR. AHL: Right.

19 DR. McMAHON: I do make the point in that section
20 that it's not -- that we cannot do a quantitative risk
21 assessment, so I make the point there. So I guess it's
22 whether the panel feels comfortable with the word
23 "determination," because based on discussions last call,
24 we all agreed that quantitation wasn't possible.

25 DR. AHL: That's absolutely correct. And the

1 only reason for using that word "determination" -- and I'm
2 going to argue for leaving it there -- is because that was
3 our charge.

4 DR. ROHWER: Yeah, that's our charge. And,
5 Trina, I think you maybe in that section should deal with
6 the fact and will be dealing with the fact that we decided
7 quantitative was not an option. So we're actually not
8 meeting the rigorous requests of the charge in that sense,
9 if you interpret it that way.

10 DR. AHL: If you interpret "determination" to
11 mean quantitative.

12 DR. BELAY: You could say in that section that we
13 assessed the risk. I don't know if that would take care
14 of it.

15 DR. AHL: Well, I'm going to go back to the fact
16 that it was in the written charge.

17 DR. BELAY: No, no, not in this section. In the
18 section that Katherine is working on.

19 DR. AHL: Oh, okay. Take notes, Trina.

20 DR. McMAHON: Yep, it's there.

21 DR. AHL: Okay. Since that was almost a direct
22 transcription from our charge. Anything else there before
23 we move to the second paragraph?

24 DR. BELAY: What was the need for the second
25 paragraph?

1 DR. AHL: I wanted to remind our readers and
2 ourselves that this is not a scientific journal paper. It
3 is not something for scientists, but rather it is
4 something for the public.

5 DR. ELLIS: I think that's good.

6 DR. ROHWER: Is that part of our charge?

7 DR. AHL: Yes. Oh, yeah. In that first meeting
8 in Ames, it was reiterated rather strongly by Steve. I'm
9 not sure it's in the written part or not. I can't
10 remember. I haven't looked at it until -- for that. But
11 I know that that was a very strong -- a very strong part,
12 that this is not for other scientists.

13 DR. BELAY: So how do you see this coming out in
14 the final report in terms of the sentences of the report?
15 We have the background, and so you'd still be maintaining
16 the question format and the --

17 DR. AHL: I do indeed.

18 DR. BELAY: So this is the final format in a
19 sense, the content that the format --

20 DR. AHL: I'm seeing it that way. Now, remember
21 we're a panel, and I'm only the chair trying to guide
22 this. But I think that by asking the questions, these are
23 questions from a public standpoint. If we put -- if we
24 try to use a scientific format, even a review format as
25 you might find in a review article in a journal, I think

1 that's inappropriate. I think the question format brings
2 it to a public reader so they can just look at the outline
3 and say, "Well, I want to know what the risks are to the
4 humans and the environment. I don't care about the rest
5 of it." But it's -- I tried to structure it in a way --

6 DR. BELAY: You could do the same by saying --
7 for example, rather than saying "what is the charge of the
8 expert committee," you could say the "charge to the
9 committee."

10 DR. AHL: Well, we can leave that expert out if
11 you want to.

12 DR. BELAY: No, no, no, not leaving out the
13 expert. Just it looks like a question and answer fact
14 sheet. I'm used to seeing, you know, Q and A's for the
15 public.

16 DR. AHL: In a sense that's what it was meant to
17 be. I mean, that's a format familiar to the public, and
18 it's -- I think we can fit this in that and I think it
19 will be more readable. That's my opinion. I'm certainly
20 willing to entertain others.

21 DR. ROHWER: Well, maybe we don't have to resolve
22 this at this point. But I think we can be accessible and
23 readable without pandering too much to the general public,
24 you know.

25 DR. AHL: I don't think making things clear is

1 pandering. That's -- If we can make it clearer to the
2 public, I would -- I'd go for that.

3 DR. ROHWER: I guess my other concern, though, is
4 that we want something that sounds authoritative as well
5 and --

6 DR. AHL: It will. I'm not worried about that,
7 because we're going to have references on this.

8 DR. ROHWER: But getting to Ermias' point, it's
9 just a matter of tone, and you know, and it's a matter of
10 whether these things are framed as questions or headings.
11 And --

12 DR. AHL: I think questions are friendlier and
13 that's -- that's my main reason. I think we can take that
14 up on Thursday when we finish the whole thing and look at
15 it, if that's okay with everybody. And then we can think
16 about how we want to frame it. Okay. Moving right along.
17 C.

18 DR. ROHWER: This is Bob. I would have discussed
19 the structure and etiology of prions with more caution
20 than is given here, or at least I would have qualified it
21 by saying, you know, that -- or some statement that, you
22 know, these are general impressions.

23 DR. AHL: Okay. How should we do that?

24 DR. ROHWER: Well, let me just put it this way.
25 I guess I'd like to offer some heading to this. It will

1 take me some moments to do that.

2 DR. DETWILER: Bob, are you -- before I comment,
3 are you going to make it less definitive on the prions,
4 the protein, solely protein?

5 DR. ROHWER: Yeah, that's what I would like to
6 do.

7 DR. DETWILER: I think that's only fair, Nell.
8 There's still a lot of discussion about is it really only
9 protein, is there something else. There are -- I mean, if
10 you go to the real scientific meetings, there's still a
11 lot of debate. I mean, I was at the one in London, and
12 there's a lot of debate still.

13 DR. AHL: Right, I understand that. And I just
14 need to know how we need to change this.

15 DR. BELAY: I think it needs editing, Bob. I
16 agree with you. Even if you believe in the prion theory,
17 that first sentence is not accurate, "Prions are
18 infectious agents that are composed entirely of protein."
19 They are not just protein. They have glucose. They have
20 phospholipids. It needs some editing, is what I'm saying.
21 Prions are not purely protein.

22 DR. ROHWER: And even the mechanism of
23 replication is, you know -- I mean, this is a popular
24 view, but it's also debatable. Why don't we do this,
25 Nell. If we could pass this around a little bit between

1 the prions -- the prionologists in the group here and give
2 this some editing and see if we can come up with something
3 that we're more comfortable with.

4 DR. AHL: Okay. Now, I gave this to somebody who
5 wasn't a prion biologist because this -- This has got to
6 be something that is clear to the public. There cannot be
7 so many ifs, ands, buts, maybes, perhaps that we
8 completely lose a general reader.

9 DR. DETWILER: Yeah, but you can't make it
10 inaccurate too, Nell.

11 DR. AHL: No, no, no. We have to have modifiers,
12 "we think," "this is what we believe." But let's not --

13 DR. DETWILER: But some of us don't believe it.
14 But some of us don't believe it.

15 DR. KREMER: It also needs to clarify the
16 uncertainties in the science. And I think, you know, it
17 could be done in a way that for the general readership
18 that they understand, you know, it's not a black and white
19 issue.

20 DR. AHL: That's very well said, Fran. It needs
21 to be clear that we're not real sure. The uncertainties
22 need to be listed. But we don't want to make this so
23 difficult that someone who has no idea about what a prion
24 is leaves going, duh, I know less than I thought I knew.

25 DR. ROHWER: Well, why don't --

1 DR. BELAY: . . . fact sheet, Q and A is intended
2 for the public. Sometimes there are terminology you can't
3 avoid just because of the science. But I agree, the
4 description should be written at a certain grade level so
5 that a lot of people would understand it.

6 DR. DETWILER: And, Nell, there's a way to do
7 that. I . . . at the USDA --

8 DR. AHL: Good. Bob, Linda, Ermias, you're
9 supposed to do it.

10 DR. KREMER: Actually we had put together a draft
11 fact sheet on prions and wastewater impacts. We've not
12 released it, but let me go back to that and take a look at
13 it and see if there's some plain language in there we may
14 be able to conclude. And certainly Linda and Bob can --

15 DR. DETWILER: Yeah, USDA, we did -- I mean, we
16 have fact sheets that talk about the theory. So I mean,
17 that's --

18 DR. ROHWER: The other thing is from my
19 perspective, anyway, it's much better to start with
20 something that's accurate and complete and then water it
21 down than the other way around, you know. You're liable
22 to get something that's closer to being a representation
23 of the actual diversity of opinion in the field that way.

24 DR. AHL: All right. Fran has a piece from EPA.
25 Linda, you've got a piece from APHIS. Ermias, you've got

1 something from CDC. And, Bob, you've undoubtedly got
2 something so --

3 DR. BELAY: Some takes the lead and we can
4 circulate it around.

5 DR. AHL: Please. Circulate it around, and when
6 you four come up with something, give it to Steve and let
7 him send it to the rest of us.

8 DR. ROHWER: And I'm just saying that, Jim, it
9 looks like you wrote this --

10 DR. COLBERT: Yes.

11 DR. ROHWER: Don't --

12 DR. COLBERT: No, no, actually I'm delighted to
13 hear you guys talk about this. This was my concern with
14 writing it, you know, that my level of understanding being
15 closer to the level of the public's would miss detail and
16 be inaccurate. So no, I think it's good for you guys to
17 take a look at it.

18 DR. ROHWER: Well, there is a heavily promoted
19 view of these agents, which is not very representative of
20 the diversity of opinion that actually exists in the
21 field.

22 DR. BELAY: So with that in mind, Bob, would you
23 change even the title, rather than saying what are prions,
24 focusing just on --

25 DR. ROHWER: Well, you know, if I had my

1 preference, we would be talking about TSE diseases, not
2 prions.

3 DR. BELAY: Right. So you say what are prion
4 diseases, and then use that to get into the agent and
5 describe the agent or the opinions about what the agent
6 looks like.

7 DR. AHL: Okay. So you're suggesting that we --

8 DR. BELAY: I would change the title to "What are
9 prion diseases?" Focuses on the diseases rather than the
10 agent, but you describe the diseases and then get into the
11 agent and describe the various scientific opinions about
12 the agent's potential mechanism of spread or propagation.

13 DR. AHL: So C would become "What are prion
14 diseases?" And then D would be --

15 DR. ROHWER: You know, the other thing that we
16 could finish up with here too in this paragraph is to say,
17 you know, we recognize that there's a lot of controversy
18 over what these agents are; it's more or less irrelevant
19 to this topic, because basically what we're worried about
20 is the infectivity. It's an operational thing. We know
21 that there is infectivity, and what we're dealing with is
22 getting rid of that, whatever it is.

23 DR. DETWILER: And, Nell, that's exactly how
24 APHIS always took the approach. If we could detect it and
25 inactivate it, it didn't matter what people were debating

1 it was called.

2 DR. AHL: So we're going to change C to "What are
3 prion diseases?"

4 DR. ROHWER: And, in fact, that's an approach
5 actually, Linda, that I think would be really good here.
6 I mean, basically all we say is there's a lot of
7 controversy over what the actual structure, mode of
8 replication, et cetera, of these agents are. But that's
9 not what's at issue here.

10 DR. DETWILER: Right. And, Bob, that's how we
11 always --

12 DR. ROHWER: Then we don't have to get into all
13 that.

14 DR. AHL: So how are we going to do C? How are
15 we going to title it?

16 DR. DETWILER: But if you had "What are prion
17 diseases," we could write around that. That's not a --

18 DR. ROHWER: Let's write around this issue and
19 think of a title later.

20 DR. DETWILER: There you go. That's a good --

21 DR. AHL: All right. I've got to put something
22 in here as a place holder, and I've got it. All right.
23 And then what does D become?

24 DR. ROHWER: And the basic outline would be there
25 is a lot of controversy, it's irrelevant to this issue,

1 we're dealing with infectivity and its removal.

2 DR. ELLIS: Yeah, that's exactly right, because
3 if we spend a lot of this report dealing with the
4 controversies and everything, that's not going to put a
5 whole lot of confidence in the public's eye that what we
6 tell them is really the fact of the matter.

7 DR. DETWILER: It's irrelevant, to be honest, I
8 think so --

9 DR. ELLIS: What's irrelevant?

10 DR. DETWILER: The real nature, the basic nature.
11 For our purpose, I don't think we have to do that in this
12 report.

13 DR. ELLIS: I agree. Yeah, I agree with that,
14 Linda.

15 DR. AHL: I think there's some sense that the
16 basic nature and the methods of de-activation, there needs
17 to be some relationship there explained, because most
18 people think about boiling or autoclaving as killing --

19 DR. ROHWER: They do.

20 DR. AHL: -- any biological material, and this
21 seems to be a biological thing, and autoclaving doesn't
22 necessarily do it.

23 DR. ROHWER: Well, but I deal with that in some
24 detail in the destroying prions section.

25 DR. AHL: Okay, good.

1 DR. ROHWER: And again, in terms of the bulk
2 behavior of these agents, they're not so different from
3 the more robust conventional agent, including things like
4 spores.

5 DR. AHL: Oh, okay, spores, all right. I don't
6 think about the spores very often. But you're right, they
7 are very hard to destroy. Okay. So we're going to work
8 on C with a little bit of change of focus. Let me put
9 notes here. How about D?

10 DR. ELLIS: I've got a couple comments on that.
11 Make sure that the numbers are correct on variant CJD
12 cases that have been reported. And they may be exactly
13 right. I'm not sure. I haven't gone back and looked
14 lately.

15 DR. BELAY: It's over 195. Probably about 197
16 right now.

17 DR. ELLIS: Okay, good. Then next to the bottom
18 line on that first paragraph where it says "and may have
19 partially protected humans from acquiring chronic wasting
20 disease from deer and elk and scrapie from sheep," do we
21 need "partially" in there? Could we just take it out?

22 DR. BELAY: I personally do not mind.

23 DR. ROHWER: Yeah, it doesn't mean it's been
24 completely protected.

25 DR. ELLIS: Exactly.

1 DR. BELAY: Because it says "may have."

2 DR. AHL: Yeah, the "may" is the modifier. Okay,
3 all right.

4 DR. ELLIS: And the next sentence at the top of
5 the next paragraph, "BSE outbreak which has affected most
6 of Western Europe, North America, Japan," again, "most" is
7 the operative word there, and it looks like it's affecting
8 most of North America, most of Japan, most of Israel, as
9 well as most of Western Europe.

10 DR. DETWILER: And I said I'd go further because
11 it's in many of the Eastern European nations. I'd take
12 out "Western."

13 DR. ELLIS: Uh-huh. But I don't think we want
14 to say most of North America.

15 DR. DETWILER: Well, two countries out of three.
16 That's most.

17 DR. ELLIS: But that's a huge geographic area
18 too. In Western and Eastern Europe, the countries are the
19 size of a lot of our states so --

20 DR. KREMER: Well, it depends how you would
21 define outbreak. And I think what Europe has experienced
22 versus us is obviously a major difference.

23 DR. ELLIS: It is. And that's --

24 DR. DETWILER: Well, for the U.S., but not Canada
25 now. Their levels are equivalent to a number of the

1 European countries.

2 DR. ELLIS: In parts of Canada. One --

3 DR. DETWILER: I'd argue our surveillance is not
4 going to find the levels so -- I'd argue the U.S.
5 surveillance now definitely will not find levels even if
6 it is there.

7 DR. ROHWER: Not only that, if you look at the
8 hits per level of surveillance and compare that to Western
9 Europe, we have the same rate. You know, if you look at
10 the number of cases they have per number of cattle
11 surveyed and look at that rate and compare it to the North
12 American rate, it's the same.

13 DR. DETWILER: You've got to look at the
14 denominator, because like Canada, five cases out of 37,000
15 tests. Europe is testing millions of animals. There's a
16 big difference there. You're looking at the denominators
17 so --

18 DR. ROHWER: But to make this more palatable, why
19 not just have it read the BSE outbreak which has affected
20 Europe, North America, Japan --

21 DR. BELAY: How about even modifying that "which
22 has affected many European countries, North America, Japan
23 and Israel.

24 DR. ELLIS: That's fine.

25 DR. BELAY: Has affected many European countries,

1 North America, Japan and Israel.

2 DR. ROHWER: Are there any European countries it
3 hasn't affected?

4 DR. DETWILER: Yeah, there's a few of the smaller
5 of the Eastern European, but again, those -- those are the
6 ones you got to question their surveillance.

7 DR. BELAY: Right, but we can't speculate. If we
8 speculate, then we say Asia and then other countries and
9 Latin America. We're basing on facts or reports or
10 identification of cases based on their surveillance. In
11 other words, I think we have to base it on something, and
12 that should be surveillance or reporting, not speculation.

13 DR. ROHWER: Well, you could say BSE outbreak
14 which is known to have affected. Then that leaves it --

15 DR. BELAY: Leaves the possibility of it.

16 DR. ROHWER: Leaves the possibility there may be
17 many, many more.

18 DR. AHL: But I'm very sure it has gone to
19 Africa, because they imported meat and bone meal by the
20 ton from Britain even while the outbreak was raging. But
21 they don't do any surveillance or testing. So, of course,
22 they don't have any -- well, they don't know it

23 DR. BELAY: I think Bob's suggestion would take
24 care of that.

25 DR. AHL: Yeah, yeah, I like that. Okay.

1 DR. COLBERT: Nell, this is Jim Colbert. I have
2 to leave at this point. I have to go teach teaching
3 assistants how to teach their laboratories next week.

4 DR. AHL: Hey, Jim, do it. Go for it.

5 DR. COLBERT: So continue with the good work.

6 DR. AHL: You bet. Thanks. Thanks for being
7 here.

8 (At this time, Jim Colbert left the telephone
9 conference.)

10 DR. AHL: Okay. We're still looking at the
11 second paragraph under D.

12 DR. BELAY: Just a general question, Nell, for
13 that section. I feel funny about the question in the
14 sense of the title. But the problem is I don't have any
15 other alternative, other than potentially combining it
16 with the previous one.

17 DR. ROHWER: Good point, I think.

18 DR. AHL: So shall we just remove the D and just
19 have this all part of --

20 DR. ROHWER: Prions.

21 DR. ELLIS: Sounds fine to me.

22 DR. AHL: Okay. Sounds good to me too. So I
23 will simply take that out. And then E becomes D.

24 DR. ELLIS: Yep.

25 DR. AHL: All right. Any more comments on that

1 last paragraph of C?

2 DR. ROHWER: Yeah, Ermias, "Prions are not
3 completely inactivated by conventional decontamination
4 methods." That's too complete. I mean, they can be
5 completely inactivated.

6 DR. BELAY: I guess modifying what conventional
7 decontamination means.

8 DR. ROHWER: Well, that's -- Yeah. I see.

9 DR. BELAY: We need to clarify what conventional
10 decontamination is. I mean, it's not inactivated by or
11 completely inactivated by the chemical disinfectants, for
12 example, other than sodium hydroxide and bleach.

13 DR. ROHWER: Yeah, I see what you're getting at.

14 DR. AHL: But conventional decontamination
15 methods is not going to have very much meaning to people
16 who don't talk about decontamination all the time.

17 DR. BELAY: Right, but we have to say it in some
18 way somehow.

19 DR. ROHWER: Would you be comfortable with
20 "prions are not necessarily completely inactivated."

21 DR. BELAY: That would be good.

22 DR. AHL: Or may not be.

23 DR. ROHWER: Or may not be.

24 DR. BELAY: May not be completely inactivated by
25 conventional decontamination methods.

1 DR. ROHWER: Are not always.

2 DR. BELAY: Right.

3 DR. ROHWER: Of course, there's -- for some
4 inactivants, they're always not completely.

5 DR. KREMER: No, I know. So that's the other end
6 of the spectrum.

7 DR. ROHWER: So that's not exactly right either.
8 Anyway, I suggest we work on that.

9 DR. AHL: Okay, should we leave it "may not
10 be" --

11 DR. ROHWER: Bracket that and let's give that
12 some more thought.

13 DR. ELLIS: I think that's a good idea.

14 DR. AHL: So I'll just leave it "may not be."
15 Should I underline it for us to come back to?

16 DR. ROHWER: Definitely.

17 DR. ELLIS: I don't know if we can get back to it
18 today but --

19 DR. AHL: No, no, but I'm talking about --

20 DR. ROHWER: No, but we've got a couple weeks
21 here to think about it.

22 DR. AHL: Right, yea. But I'm going to produce a
23 draft that incorporates what I think are our changes today
24 and get it back to us so we have something -- something a
25 little bit more easy to work with on that Thursday. All

1 right. I'll try to highlight that in some way. Okay.

2 Moving right along.

3 DR. ROHWER: This next section is one that I
4 contributed. And I don't know whether everybody's got it
5 yet or not.

6 DR. ELLIS: It did come in. I saw that. But I
7 haven't looked at it. Do you want us to open it and look
8 at it now, Nell?

9 DR. AHL: Actually I --

10 DR. ROHWER: Do you want me to read it out loud?

11 DR. AHL: I can't open it because I have my
12 phone and my -- my computer's on phone modem, and I've
13 only got one line, so I can't take it off now.

14 DR. BELAY: You want to table it for --

15 DR. KREMER: Do you have a fax, Nell? Somebody
16 can fax it to you.

17 DR. AHL: That's also on the phone line. We're
18 very primitive out here. I'm sorry. You know what we
19 might do is read his -- read Bob's, make comments to him
20 by e-mail, and then you do as you wish in making changes
21 based on suggestions, Bob, and then get that back to Steve
22 to get out to us. How's that?

23 DR. KREMER: I think there might be some overlap
24 between the previous section that we just went through. I
25 think the discussion we were looking at about "accepted

1 chemical disinfectants" Bob deals with here in a more
2 explicit manner.

3 DR. AHL: I'm sure there will be, and that's --
4 if it's overlap, redundancy can be taken care of by
5 removing it when we meet in Ames, if there's too much
6 redundancy.

7 DR. BELAY: So what do you want us to do?
8 Comment on it and send --

9 DR. AHL: Everybody look at Bob Rohwer's piece.

10 DR. BELAY: And send it to whom?

11 DR. AHL: Send your comments to Bob, let him make
12 changes as he thinks are appropriate, then send that back
13 to Steve to send to everybody.

14 DR. ROHWER: Nell, since you're the only one that
15 doesn't have this in front of you, though, could we get
16 some comments online if people have them at the moment?

17 DR. AHL: Sure, knowing that I will not be able
18 to make comments on the script, so go right ahead.

19 DR. BELAY: I didn't get a chance to read it in
20 detail because it just came in this morning. I don't know
21 if others have had a chance to comment on it.

22 DR. ELLIS: No, I'm just now opening it. So no,
23 I haven't read it.

24 DR. AHL: Okay. You know, it may be more
25 efficient, Bob, if we just do it the other way.

1 DR. ROHWER: Yeah, okay.

2 DR. AHL: So Bob's going to collect e-mail
3 comments, take those comments into account, and provide a
4 revised draft to Steve, and he will get that to us long
5 enough before that we can read it. Okay. And then we'll
6 take out redundancies, we'll try to deal with those when
7 we meet in Ames.

8 DR. ROHWER: Let me -- I want to read the last
9 paragraph, though, because it helps frame the rest of the
10 discussion. So the conclusion of my discussion on
11 inactivation is that "For the task at hand, it would be
12 reasonable to presume that if there is any residual
13 survival of TSE infectivity from the wastewater
14 pretreatment steam sterilization plant at the NADC, it
15 would likely be associated with particulates in the
16 wastewater stream or be localized to material dried onto
17 the head space in the wastewater autoclaves."

18 DR. DETWILER: That was what we had agreed on at
19 the last call too, right?

20 DR. AHL: Yes.

21 DR. BELAY: Makes sense.

22 DR. ELLIS: Yeah, I don't see a problem with
23 that.

24 DR. AHL: I don't either.

25 DR. ROHWER: And everything that precedes that is

1 just to explain why that might happen.

2 DR. AHL: Okay. Sounds good to me. I mean, it
3 makes sense from what we've talked about and from what
4 we've learned.

5 DR. ROHWER: And the preceding paragraphs also
6 make the point that that infectivity, if it exists, would
7 also be at very, very low levels. It's likely to be at
8 very, very low levels.

9 DR. AHL: And you're considering that that's the
10 way things are now?

11 DR. ROHWER: Yes.

12 DR. AHL: Without any changes affected?

13 DR. ROHWER: You mean the way the plant operates
14 now?

15 DR. AHL: Right.

16 DR. ROHWER: Yeah, I'm talking about the current
17 practices.

18 DR. AHL: Okay. I'll be looking for the emphasis
19 that that's a conclusion based on current practice, then.

20 DR. KREMER: We may want to think about moving
21 those comments actually back to a wastewater section,
22 because I think we're jumping into the pretreatment
23 process without the explanation of what's involved in
24 this. And so I think your comments are good, but I think
25 it might leave the reader puzzled, well, what is the

1 treatment?

2 DR. DETWILER: Fran, you're right, because
3 you're -- that section . . . general inactivation, and
4 we're jumping right ahead . . . yeah, I think that's
5 correct.

6 DR. BELAY: Better to describe the problem before
7 you make conclusions, is what you're saying.

8 DR. DETWILER: Right.

9 DR. ROHWER: So it may not be placed in the right
10 place.

11 DR. AHL: We may want to move 2D down to 4.

12 DR. DETWILER: Well, no, no --

13 DR. ROHWER: No, no, just this part of it.

14 DR. DETWILER: Just that paragraph, right?

15 DR. ROHWER: Yeah, yeah.

16 MS. WHIPPLE: Excuse me. Linda, could you repeat
17 what you said? You were breaking up, and we didn't get it
18 on the transcribed --

19 DR. DETWILER: Oh, just the fact that that last
20 paragraph that comes to a conclusion should probably come
21 after the treatment because it's right, we don't even
22 describe the treatment and we're making somewhat of a
23 conclusion so --

24 DR. ROHWER: Well, you're going to see that
25 that's a problem for the whole thing because I am

1 discussing inactivation in terms of the equipment at hand.

2 And --

3 DR. DETWILER: Well, then maybe we should move
4 the whole section down.

5 DR. ELLIS: Well, let's just deal with that when
6 we have the whole document and look at the things that Bob
7 has written in context with everything else. Then I think
8 we can move and really make a good transition here on
9 whatever we're talking about.

10 DR. KREMER: But, Bob, I think what you have
11 before that is general methods for inactivation, and it
12 does -- you're right, it does apply here, but it applies
13 in general in terms of giving people an understanding of
14 what's out there, what can we use.

15 DR. ROHWER: That's true.

16 DR. ELLIS: But it's still all really good
17 information.

18 DR. AHL: Yeah. Okay. Well, when we get this
19 all together, we're going to have somebody to be moving
20 text around and making changes as we discuss. So I think
21 we can appropriately place that when we've got it all
22 together. Okay. Moving on to 3, and Linda?

23 DR. DETWILER: I have some questions maybe Diana
24 Whipple can help me out with where I didn't remember. I
25 mean, I had the diagram. But in those slide

1 presentations, it said primary facility, and I just want
2 to make sure I captured that. Are they 2, 3 and 4, the
3 buildings what you guys consider primary?

4 MS. WHIPPLE: Gosh, I'm not -- which slide set
5 are you referring to?

6 DR. DETWILER: The one we got on the first day
7 that said there are 36 laboratories within the primary
8 facility of NADC.

9 MS. WHIPPLE: Okay, got ya. That would be what
10 we refer to as Building 2.

11 DR. DETWILER: Oh, only 2, okay.

12 MS. WHIPPLE: That's correct.

13 DR. DETWILER: Then what are 3 and 4, then?

14 MS. WHIPPLE: Those are animal containment
15 buildings.

16 DR. DETWILER: Okay. Are they different than
17 the -- what you'd consider blanch [phonetic], or maybe I
18 should just make it more general?

19 MS. WHIPPLE: We would consider the barns and the
20 3 and 4 all animal buildings.

21 DR. DETWILER: Containment.

22 MS. WHIPPLE: Yes, the buildings on First and
23 Second Street and buildings 3 and 4 would all be
24 considered animal containment.

25 DR. DETWILER: Got ya, okay.

1 MS. WHIPPLE: There's one building on First
2 Street that is different, but all the buildings where TSE
3 animals are housed would be considered containment
4 buildings.

5 DR. DETWILER: Okay. And then --

6 DR. AHL: Are we going to have this figure in our
7 paper?

8 DR. DETWILER: Yeah, I put "see attached." I put
9 the "see attached diagram."

10 MS. WHIPPLE: And what diagram is it that you're
11 needing?

12 DR. DETWILER: Well, we don't have it. It's the
13 one that has the blue and the red lines on it, which I
14 thought was a really good descriptive thing of how the
15 waste goes. The one we got in the original package, the
16 blue lines are the ones that go to the sanitary sewer, you
17 know, from your administrative. And the red ones are the
18 ones that go through the pretreatment.

19 MS. WHIPPLE: Yes.

20 DR. DETWILER: That diagram.

21 MS. WHIPPLE: On that particular diagram, there's
22 a red line that needs to be added, and there's a building
23 that's not shown. It's building 6. That's the mouse
24 house. That also is tied in to the wastewater
25 pretreatment plant.

1 DR. DETWILER: Do you have this on computer? Can
2 we modify that to do that?

3 MS. WHIPPLE: Yes, we can. That would be fairly
4 easy to do. So I can edit that. And do I need to get
5 that to all of you?

6 DR. ROHWER: Yeah, I would like a copy of it.

7 MS. WHIPPLE: Okay, we can do that.

8 DR. ROHWER: And, Linda, when I read this, I
9 thought the smart thing to do would be for this section --
10 well, both of these sections, these next two sections
11 should be proofread and vetted through Diana just so that
12 we know for sure that it's accurate.

13 DR. DETWILER: Yeah, yeah, that's why I put all
14 the red and the question marks because that's exactly
15 right. That's exactly why I put those, because I took
16 notes on this, but there were still some things that I
17 either didn't take note on or -- So, Diana, if you could
18 take a look at this and make sure that it is accurate.

19 MS. WHIPPLE: Yes, and I've got places where
20 there are some questions, I've got some of those answers
21 now. Would that be easiest just to respond via e-mail to
22 those answers?

23 DR. DETWILER: Yeah, that would be great, and
24 then I can just modify that.

25 MS. WHIPPLE: Okay.

1 DR. DETWILER: And the one question I really had,
2 this is in the City of Ames letter before the last call,
3 and it says, "Will the BSL-2 facilities bypass the
4 treatment once the new pretreatment is put on line?" Is
5 that -- What is the answer to that?

6 MS. WHIPPLE: The animal --

7 DR. ROHWER: What's the question again?

8 DR. DETWILER: Okay. In the Ames letter to us
9 the last time, they had a question at the very end, and it
10 said that they thought they heard in one of the
11 presentations that BSL-2 facilities would bypass the
12 pretreatment when the new treatment facility in NADC is
13 put on line.

14 MS. WHIPPLE: There's some confusion about that.
15 The animal facilities, those -- that will still tie into
16 the wastewater pretreatment plant. Where there's some
17 confusion is the laboratory facilities, similar to other
18 laboratories throughout the world actually, the BSL-2 and
19 under, that effluent does not need to go through the
20 wastewater pretreatment plant.

21 However, the liquid waste, like culture fluid and
22 those kind of things, would be autoclaved prior to any
23 disposal. So the material that I think is of concern is
24 autoclaved prior to discharge. And that's similar to
25 what's done for labs around the world at that level.

1 DR. DETWILER: Okay. So but I have a question
2 then. So like the immunohisto chemistry, the liquid waste
3 coming off of that, would that then go where?

4 MS. WHIPPLE: Well, the ones generated from TSE
5 projects would be handled differently than other projects.
6 We have a dedicated unit for TSE work. And that would be
7 handled differently. There would be pretreatment of that
8 material.

9 DR. ROHWER: This is in the new facility or this
10 is in the existing?

11 MS. WHIPPLE: Well, we already have it separated
12 in the existing, but the plan is to continue having those
13 separated in the new facility.

14 DR. DETWILER: I just -- We really need probably
15 to get a better understanding on when the new facility
16 comes on line, then. I mean, is there a way for you to --
17 because that will be, I think, important for us, you know.

18 MS. WHIPPLE: Which aspect?

19 DR. DETWILER: Well, to really distinguish
20 between the types of waste for the BSL-2 facilities and
21 what's going to go where, what's going to go through
22 pretreatment and what's not going to go through
23 pretreatment.

24 MS. WHIPPLE: Okay.

25 DR. ROHWER: But just to get at this directly,

1 even though scrapie is considered a BL-2 agent, does that
2 mean that scrapie waste would also be bypassing the
3 pretreatment plant?

4 MS. WHIPPLE: Are you talking about the
5 laboratory?

6 DR. ROHWER: Yes.

7 DR. DETWILER: Yes.

8 MS. WHIPPLE: Because TSEs would still -- they're
9 handled separately from other BSL-2s. So, for example, if
10 we're doing immunohisto on scrapie tissues, that waste
11 would be treated prior to discharge.

12 DR. ROHWER: Treated by?

13 MS. WHIPPLE: I'd have to check with the
14 scientists in the labs to know that. I couldn't tell you
15 off the top of my head, but I certainly could get that
16 information.

17 DR. ROHWER: So, in effect, there's really three
18 classifications at work there.

19 MS. WHIPPLE: At least.

20 DR. ROHWER: There's BSL-2, there's BSL-2 TSE,
21 and there's BSL-3, because there's three levels -- there
22 are three distinct forms of treatment of infectious waste
23 segregated on that basis, if I understand what you just
24 said.

25 MS. WHIPPLE: And I can provide you information

1 on the plan for how each of those waste streams will be
2 handled.

3 DR. ROHWER: Yeah. This is a digression, but if
4 you'll indulge me for just a minute. This is why I've
5 been arguing for years that there should be a separate
6 designation for TSEs. They're not really BL-3 agents but
7 they're not BL-2 agents either. You know, they really
8 need their own rules. And trying to fit them into one or
9 the other is a mistake, in my opinion. That's a message
10 to the USDA, especially to APHIS.

11 DR. BELAY: What would you put them in, Bob?

12 DR. ROHWER: No, I would consider them as unique
13 pathogens that require special needs. They do not present
14 an aerosol risk. It's ridiculous for us to have to Hepa
15 filter all our air. But they do persist in the
16 environment forever, and so you have -- so really the main
17 issues in their use is control of that environmental
18 contamination, environment meaning the laboratory
19 environment as well as the environment in general.

20 DR. AHL: So there ought to be a BSL-TSE
21 containment.

22 DR. ROHWER: Yeah, exactly, that's what I'm
23 arguing for.

24 DR. BELAY: Yeah, but at the same time you have
25 to communicate with laboratorians with language that they

1 understand. So you could say BSL-2 facility and then put
2 in this additional description of how they can contain the
3 infectivity in the environment in a sense. And if they
4 could do BSL-3, fine.

5 DR. ROHWER: Well, the thing is there are so many
6 things that are -- yeah, it's -- This is probably not the
7 place to describe it. But it's something that I would
8 love to see CDC convene a meeting on. Okay.

9 DR. AHL: Lobby it.

10 DR. ROHWER: And APHIS as well, for those of us
11 who are affected by this, so we can sort this out once and
12 for all and have a consistent set of rules that are --
13 that more directly apply to these particular agents.

14 DR. BELAY: Right. The truth is that BSL concept
15 in human laboratories, and in the large animal facilities,
16 different concept. Anyway, I'm adding complication to it,
17 but this may not be the forum.

18 DR. AHL: Okay. But, Diana, you're going to help
19 Linda answer these questions and accurately describe what
20 goes and what's going to go.

21 MS. WHIPPLE: That's correct. In the categories
22 that I have for the questions about the new facility is
23 BSL-2 lab, BSL-3 lab, TSE lab, and then BSL-2 and 3
24 animal.

25 DR. DETWILER: However you -- I don't want to put

1 words in your mouth. You tell us for the new facility how
2 you're going to divide it and what's going to happen to
3 it. I think that's probably the most important thing.

4 MS. WHIPPLE: Okay.

5 DR. ROHWER: But while you're at it, if you could
6 make it perfectly clear what the situation is in building
7 2 and the research labs as well, that will be good.

8 MS. WHIPPLE: Okay.

9 DR. AHL: From my point of view, we need to know
10 what is currently the way things are, because that was
11 what we were specifically charged with addressing, and
12 then what's going to be going on in the future, we need to
13 have that separately.

14 MS. WHIPPLE: Understood.

15 DR. DETWILER: But yeah, I think it is important
16 to have the future because if we say this is okay in the
17 future, they're going to change it --

18 DR. AHL: Oh, no, I quite agree, Linda. But we
19 were asked to review present and past, current and past.
20 And so we don't want to not do that in a very clear way.
21 But then since changes are under way, I think it is
22 important to mention the future, although that isn't
23 strictly speaking part of the charge. But we've got to
24 assess the current and past methods.

25 DR. DETWILER: I have another question, Diana.

1 Administrative offices, is there anything else that goes
2 directly into the sanitary sewer, or is it just pretty
3 much the offices right now?

4 MS. WHIPPLE: From NADC it's --

5 DR. DETWILER: From NADC, right.

6 MS. WHIPPLE: Yes, it's the administrative
7 offices, and that's what we refer to as building 1.

8 DR. AHL: And that's the only ones that go
9 directly into the sanitary sewer?

10 MS. WHIPPLE: Yes, our laboratories and animal
11 containment buildings are all hooked up to the wastewater
12 pretreatment waste line.

13 DR. AHL: Okay. So we're going to get that all
14 clarified. Okay. When that's clarified and written up,
15 Linda, you want to make sure it gets to Steve?

16 DR. DETWILER: Yep.

17 DR. AHL: So he can get it all back to us?

18 DR. DETWILER: Yep.

19 DR. AHL: Okay. Thanks. That will be good.

20 Okay. Composition of the waste.

21 DR. SHAFER: Dr. Ahl, this is Steve. By my
22 watch, I've got 9:37 Central. We could take a ten-minute
23 break.

24 DR. AHL: All right. How does that sound to
25 everybody?

1 DR. SHAFER: All right. We'll convene at 9:47 by
2 my watch, and I'll give you a two-minute warning. Keep
3 the lines open. Nobody hang up.

4 (At this time, a short recess was taken.)

5 DR. SHAFER: Nell, let's proceed.

6 DR. AHL: Let's see, I believe we had come down
7 to the composition of the waste. I just have one comment.
8 It's a grammatical thing. "The waste from the barns would
9 consist of," I would just simply say "the waste from the
10 barns consists of," et cetera. And that's true for all
11 those statements instead of -- I guess that's putting it
12 in a direct fashion.

13 DR. DETWILER: Right, no problem. And, Diana,
14 again, just check that to make sure that's accurate.

15 MS. WHIPPLE: Okay.

16 DR. BELAY: Did we say where the waste from the
17 barns would actually go?

18 DR. DETWILER: Yeah, up above -- or no, routing,
19 actually it's down below.

20 DR. ROHWER: Where are we? Are we on the
21 composition of the waste?

22 DR. DETWILER: Yeah.

23 DR. ROHWER: There is one other -- you've got hay
24 but not straw in here. And there's actually the
25 potential, at least, for quite a bit of straw.

1 DR. DETWILER: In NADC?

2 DR. ROHWER: Yeah.

3 DR. DETWILER: Oh, okay.

4 DR. ROHWER: That's from our site visit.

5 DR. AHL: Was that from NADC labs or from APHIS

6 labs?

7 DR. ROHWER: That's NADC.

8 DR. AHL: NADC labs, okay.

9 DR. DETWILER: Thanks, Bob. Because I didn't

10 understand that, but that's good to know.

11 DR. ELLIS: Where is that, Bob?

12 DR. ROHWER: Remember that's where they were

13 hosing the --

14 DR. ELLIS: Oh, I know where the straw is. I

15 just meant on the paper.

16 DR. DETWILER: Be under the barn, would be under

17 the composition of the waste in the barn.

18 DR. ELLIS: Okay, hay, right. Got it.

19 DR. DETWILER: I added it. I added it.

20 DR. ROHWER: And I thought that -- I don't know

21 whether this is the place to put it, but the significance

22 of these waste streams varies tremendously. And any

23 waste, any tissue waste from the necropsy buildings is

24 likely to exceed by orders of magnitude the amount of

25 exposure that the system gets compared to barns.

1 That might also be true for laboratories except
2 that all the waste from laboratories should be pretreated
3 by autoclave or something before it goes in the system.
4 So hopefully that's not true for them. But the necropsy
5 site, the large animal barn, that's a different situation.
6 And I think it would be good to point that out here.

7 DR. DETWILER: Would it be here or would it be --

8 DR. ROHWER: Or later in the discussion.

9 DR. DETWILER: Yeah.

10 DR. ROHWER: But at some point, yeah.

11 DR. DETWILER: Yeah, I think you're right. Nell,
12 I think that's okay. Diana is just going to double check.
13 I have some questions about the lab, but I think that can
14 be double checked by her. And again, when I send this
15 back out, we'll make sure it's all accurate.

16 DR. AHL: Okay, Linda, very good. Thank you.

17 And, now, you've got the reports from Bob and --

18 DR. DETWILER: Well, we will. We will have the
19 reports from Bob. And then I'll just double check to make
20 sure nothing was left out here.

21 DR. AHL: Right, okay. Very good. All right.
22 Route -- oh, wait, I had a question on the paragraph just
23 above. "NADC research projects utilize several of the TSE
24 agents for diagnostic development." Does that mean
25 development of diagnostic tests?

1 DR. DETWILER: Yes. I'll put it better. I'll
2 say development of diagnostic tests. I'll just change
3 the structure.

4 DR. AHL: All right. Now down to route.
5 Administrative offices is building 1, right?

6 DR. DETWILER: Right.

7 MS. WHIPPLE: Yeah.

8 DR. DETWILER: And I wasn't sure, I had two
9 different addresses. And you guys, I'm sorry, I don't
10 know Ames enough to know the -- which of the streets is
11 actually the one that was way out? What address was that?

12 MR. DUNN: The address for the wastewater plant
13 is the one that's on 280th.

14 DR. DETWILER: Okay, good, that's all I need to
15 know, because I had both addresses. Thank you.

16 DR. AHL: Any comments? Any other --

17 DR. ROHWER: Well, I'm trying to figure out the
18 organization here. This paragraph that starts out "At the
19 City of Ames WWTP," doesn't that belong -- does that
20 belong here or under B? I guess this is where it
21 ultimately goes from NADC, is that the idea? Yeah.

22 DR. DETWILER: Yeah, so I just -- Right, I wanted
23 to take it out to the -- And again, I had the same
24 question, would it go here or below? I actually put that
25 question. So I just took it as the route, Bob, all the

1 way to the end. But even I wasn't sure so --

2 DR. BELAY: Even going back to the first
3 paragraph, Linda, where it says "Wastewater at NADC is
4 pumped from the barns or laboratories where it is
5 generated into holding tanks." Now, it implies that all
6 the waste described earlier under composition of waste,
7 and if you focus on barns, the waste from the barns
8 including the feed pellets and the hay and everything else
9 is pumped into the tanks.

10 DR. DETWILER: Well, that's what I wanted to be
11 clear. I can tell you just by -- I just know, they might
12 remove most of the solids, but you're still going to get
13 in there some composition of pellets, hay, and I imagine
14 we could put some composition of straw. There's no way
15 you can pick up every single piece unless they vacuum it.

16 DR. BELAY: If particles are not removed, then
17 that's an important point that should be noted.

18 DR. ROHWER: And that will be noted in the space
19 in the report that Bob Ellis and I are putting together
20 from our site visit, because there are some of those --
21 the operations in those barns vary considerably. In some
22 places the bedding is scraped up and removed as manure,
23 you know, and solid waste. But in others it's just hosed
24 down the drain along with the feces.

25 DR. BELAY: I think those descriptions are

1 important then.

2 DR. ROHWER: Yeah. So that will all be in this
3 report from us. And I wonder at some point, Nell, I
4 wonder if we should just -- since that's going to be a
5 ways off, I'm suggesting that maybe -- it's two paragraphs
6 here, short ones, and I was wondering if we should just
7 read that to the committee so they know what's going to be
8 in this report.

9 DR. DETWILER: Yeah, because then I can modify
10 this section with something like that.

11 DR. ROHWER: Is that okay with you, Nell?

12 DR. AHL: Sure, go right ahead.

13 DR. ROHWER: Okay. Summary: Almost all of the
14 fluid waste generated by the husbandry spaces for
15 TSE-infected animals at NADC Ames is either collected as
16 dry waste and incinerated or is sent to the NADC
17 wastewater pretreatment plant for steam sterilization
18 before discharge to the sanitary sewer system of Ames.
19 The exceptions are the little used drains in buildings 230
20 and 231 which house sheep infected with North American
21 strains of scrapie, a disease that is not known to cause
22 infections in humans, and the shower in building 6
23 necropsy laboratory at NVSL. We did not determine whether
24 or not any of the showers at NADC campus go directly to
25 the sanitary sewer. Bob has now done that and apparently

1 all but one do.

2 DR. ELLIS: I think, yeah.

3 DR. AHL: Where is that one?

4 DR. ELLIS: That would still be that necropsy
5 shower, right, Diana?

6 MS. WHIPPLE: No. On NADC.

7 DR. ROHWER: On NADC side.

8 MS. WHIPPLE: On NADC all of those go to the
9 wastewater pretreatment plant.

10 DR. ELLIS: They do on the NADC side?

11 MS. WHIPPLE: Yeah.

12 DR. ROHWER: So we recommend that regardless of
13 whether or not sheep scrapie poses any risk to humans, the
14 drains in building 230, 231 should be redirected to the
15 wastewater pretreatment facility or be eliminated. We
16 also recommend that since the rationale for showering out
17 of TSE-exposed areas is to remove any residual
18 contamination from the worker and that if this strategy is
19 successful to remove the infectivity or go down the drain,
20 the water from those showers should also be sent to the
21 waste pretreatment plant. Well, that's solved.

22 DR. ELLIS: It is.

23 DR. ROHWER: Finally we noted several
24 opportunities for reducing the level of solid waste that
25 is sent to the pretreatment plant. We note that TSE

1 infectivity is more refractory to thermal and other
2 inactivation when incorporated into solid material.
3 Therefore it would be highly desirable and it would seem
4 highly feasible to separate most of the solid waste that
5 is now being washed down the drains from the liquid waste
6 stream and dispose of it by more effective methods such as
7 incineration.

8 If these measures were to be implemented, it
9 would ensure that all wastewater exposed to TSE
10 infectivity -- and I should have included here from
11 husbandry efforts -- will have passed through the NADC
12 wastewater pretreatment plant before discharged to the
13 sanitary sewer systems of Ames.

14 So the one vulnerability we saw is that the sheep
15 barns, the TSE sheep barns have two drains that are --
16 they're there. We were told they're seldom used. But
17 they do not go to the wastewater treatment plant.

18 And the -- and the rest of the -- and those barns
19 open out onto open kennels really for the sheep. That's
20 exposed to the rain. That all just gets washed off into
21 the grass surrounding those facilities. So it's
22 essentially, you know, not that different from sheep on
23 pasture. And the solid waste from those operations is
24 spread on a dedicated field for that purpose. So that's
25 the way that's dealt with.

1 And it seemed to me anyway that there's -- you
2 know, considering that that is the only exposure, that
3 exposure should be eliminated and then there is no
4 questions. You know, there's no residual exposure to the
5 NADC -- from NADC to the wastewater -- to the sanitary
6 sewers of Ames that does not get pretreated at the
7 wastewater pretreatment plant. And then we can focus all
8 of our attention just on the wastewater pretreatment plant
9 and whether it does its job. And I do that in the
10 recommendations at the end here.

11 DR. AHL: And that's in the trip report.

12 DR. ELLIS: Right.

13 DR. ROHWER: Well, talking about the wastewater
14 plant is not in the trip report. The discussion of the
15 wastewater plant and whether it's doing its job is in the
16 recommendations that I appended to this -- you know, my
17 last section in this draft report here.

18 DR. AHL: Okay, all right. So for the -- for
19 this section on Route, it's going to be modified based on
20 the Ellis-Rohwer report; is that correct?

21 DR. ELLIS: Yes.

22 DR. DETWILER: And, Bob, you have a section there
23 that talks about the differentiation of the barns where
24 some -- is that in your report, right?

25 DR. ROHWER: Yeah, it's pretty complete. And

1 maybe, Bob Ellis, maybe we should send a copy of this to
2 Linda just to help her with her section, and we can give
3 you the updated version; once we have the final version,
4 we'll send that along to you as well once we have that.

5 DR. ELLIS: Let me get the edits done and I'll
6 fire that off to Linda and you both, Bob.

7 DR. ROHWER: Okay.

8 DR. ELLIS: That shouldn't take me very long.
9 I'll get it done over the weekend or have it out, if not
10 over the weekend, by Monday.

11 DR. AHL: Okay. All right. There was only one
12 comment I had. It may not be important. After
13 treatment -- this is the NADC wastewater treatment -- it's
14 cooled. And I just had suggested that we add that it was
15 cooled before being pumped into the sanitary sewer system.
16 I don't know whether that's important or not.

17 DR. ROHWER: That it was what?

18 DR. AHL: Cooled.

19 DR. ROHWER: Oh, cooled.

20 DR. ELLIS: Yeah, to whatever the specs. are
21 before it's released. And that's important from the
22 standpoint that it is complying with the wastewater -- I
23 don't know if they're regulations or not, but it does
24 comply with the release of the -- the release of that
25 water does comply. It's not released hot just as soon as

1 it's done with the treatment.

2 DR. DETWILER: I'll edit that so --

3 DR. ROHWER: My question is your question here,
4 around 6 percent of the total solids are land applied, and
5 then you have a question: What happens to the rest?

6 DR. McMAHON: I can weigh in on that. This is
7 Trina. They are basically destroyed by microbial
8 activity, and so when we say solid destruction in
9 wastewater treatment, we're talking about actually turning
10 it into carbon dioxide and water eventually.

11 DR. ROHWER: But if 50 percent of it is mineral,
12 as indicated by the next sentence then, you're still
13 missing a lot, right? Do those minerals then become
14 soluble or something?

15 DR. McMAHON: Well, some of them could, but I
16 guess I'm not sure what you mean.

17 DR. ROHWER: Well, the next section says around
18 half of these solids by mass -- and I don't know whether
19 that means half of the 6 percent or half of the 100
20 percent -- are not volatile, meaning that they do not
21 combust at 550.

22 DR. McMAHON: Right.

23 DR. ROHWER: And implying that they're minerals.
24 So you would still think there would be a lot more solid
25 waste if it's mineral unless it's carbonates or something

1 like that that are soluble.

2 DR. McMAHON: Well, I mean, maybe it would help
3 if I put it this way, that the minerals are left over
4 simply because they can't be turned into carbon dioxide
5 and water. And so when you get all the bacterial activity
6 breaking down the organic matter, what you're left with is
7 6 percent of the total solids that you -- that entered the
8 treatment plant. A lot of it are -- a lot of those solids
9 are minerals that they can't be broken down by bacteria or
10 released to the atmosphere by bacteria. So --

11 DR. ROHWER: Okay. Well, let me rephrase that.
12 So what you're saying is that that 6 percent of residual
13 solids is the mineral waste from the fermentation?

14 DR. McMAHON: Yeah, and recalcitrant, organic
15 compounds that just can't be degraded by bacteria. But
16 yeah, I mean, the mineral content is high simply because
17 that's what's left over after all the degradation.

18 DR. DETWILER: All right. I'm going to ask even
19 a more basic question. Is there any other byproduct
20 that's anything else done with it other than land applied?

21 DR. McMAHON: With the solid material?

22 DR. DETWILER: Yeah.

23 DR. McMAHON: I think we'd have to confirm with
24 John Dunn, but I think that the -- there's probably some
25 grit material, like rocks that are removed during really

1 early stages of wastewater treatment. In most treatment
2 plants, those are landfilled. But I'm -- I don't have in
3 front of me the information that he sent. I'd have to dig
4 it out. I'm pretty sure that I didn't think to ask about
5 grit removal and where that eventually goes, because that
6 tends to be inorganic and it tends to not go into the
7 anaerobic digesters.

8 DR. DETWILER: Gentlemen, do you have an answer
9 for us on that?

10 MR. DUNN: Yeah, this is John. All of the grit
11 and screen -- well, the screenings from the plant, which
12 is the very first treatment process, those are ground up
13 and returned back into the liquid waste stream. So we
14 have no screenings that many facilities would have and
15 would landfill. All of the grit that comes out of our
16 grit removal units is stabilized with lime, and it is land
17 applied. It is not landfilled

18 DR. McMAHON: Oh, okay. Thanks.

19 DR. DETWILER: So the screenings are ground and
20 returned to the liquid, right?

21 MR. DUNN: That's correct.

22 DR. DETWILER: And then you said the grit that's
23 remaining is mixed with lime?

24 MR. DUNN: Yeah, it's mixed with lime to elevate
25 the pH. It's allowed to sit for a few days, usually

1 longer than that, but then it's land applied onto a farm
2 field.

3 DR. ROHWER: All right. I'm curious as to why
4 the screenings are reintegrated with the water. It seems
5 to me like that's an opportunity to remove them, so why
6 wouldn't you just remove them at that point?

7 MR. DUNN: Most treatment facilities remove them.
8 And quite honestly, at most treatment facilities that's
9 one of the main sources of odors and vector attractions
10 for rodents and things like that. So we are atypical in
11 the way we handle that. But those screenings are removed
12 for the purpose of preventing damage to downstream
13 equipment, but they're ground up into fine particles and
14 then returned into the waste stream, and then they would
15 later settle out with the rest of the solids in the waste
16 stream.

17 DR. ROHWER: I see. So they go through the
18 fermentation process before they are removed, basically?

19 MR. DUNN: Yes, typically they would settle out
20 then in the primary clarifiers, and they would move over
21 to our digesters and be handled that way.

22 DR. ROHWER: Okay. I see. That makes sense.

23 DR. KREMER: And in terms of partitioning, it
24 wouldn't be likely that the prions would partition to that
25 type of material anyway.

1 DR. McMAHON: Yeah, I wouldn't expect them to be
2 associated with the grit as much as the organic matter
3 that is in the primary effluent -- or primary sludge and
4 primary effluent.

5 DR. ROHWER: Well, I'm not sure I would agree
6 with that because of the work by Jed Eichen [phonetic] and
7 these folks who say that TSE infectivity absorbs very,
8 very strongly to montmorillonite clays, which is probably
9 the most frequent grit you've got.

10 DR. McMAHON: Clay is typically a suspended solid
11 in wastewater, so I think the grit that we're talking
12 about is mainly rocks and gravel.

13 DR. KREMER: Yeah, it would be more similar to
14 sand.

15 DR. McMAHON: Yeah, which Jed and Joe Peterson
16 have also shown that it combines with sand, but it
17 definitely sticks more tightly to the clay, and really
18 strongly to the organic matter, which I'm working on with
19 Joe also. But, I mean, it is interesting that it's land
20 applied. Is it land applied in the same way where it's
21 injected under the soil?

22 MR. DUNN: No, it would just be surface applied.

23 DR. McMAHON: Surface applied, okay.

24 DR. DETWILER: Okay. Is that for -- that's for
25 the grit or -- that's not for the other, correct?

1 DR. McMAHON: Yeah, it's the grit, that that's
2 supposed to be treated with lime. Do you know the pH?
3 What pH does it generally reach when you treat it with
4 lime?

5 MR. DUNN: The lime that we stabilize it with is
6 actually lime softening sludge that comes from the Ames
7 water plant. It's going to hit a pH of probably about
8 10 1/2 or 11.

9 DR. AHL: Okay. Are we all here?

10 DR. ROHWER: Linda, will you rework this to
11 reflect some of this --

12 DR. DETWILER: Oh, yes, absolutely. That's why I
13 was asking for the details.

14 DR. AHL: I can see now that the routing question
15 and the treating question probably could have been
16 combined in maybe a more elegant way to do this. Any
17 thoughts on that?

18 DR. DETWILER: Well, Fran -- because I don't
19 understand enough of the treatment -- could she maybe take
20 my section and then just -- maybe it's already in there,
21 but work it in there, Fran; is that okay or --

22 DR. KREMER: Yeah, we could do that.

23 DR. AHL: I mean, I may be wrong. I was just
24 raising that as a question about putting them together. I
25 don't want to cause extra work here but --

1 DR. BELAY: I would actually even go further than
2 that. I would include the composition of the waste,
3 routing and treatment as one topic and combine them. It
4 looks like it's fragmented. But they all go together, I
5 think.

6 DR. ROHWER: They go together, but I think you
7 can break out the composition because that's --

8 DR. BELAY: That's the short part.

9 DR. ROHWER: The feed and the rest of it is, you
10 know, where did it go and what happens to it. And I think
11 that would benefit from being more better integrated.

12 DR. AHL: Fran, were you going to integrate
13 Linda's, or, Linda, were you going to integrate Fran's? I
14 can't remember how it was said.

15 DR. DETWILER: Well, again, we can go either way.
16 But, I mean, I can take and at least work with Diana to
17 sort out all the stuff at NADC. Okay. And then maybe
18 pass it off to Fran for the wastewater treatment facility.

19 DR. KREMER: That would be fine.

20 DR. AHL: Will that work then, Fran?

21 DR. KREMER: That would be fine.

22 DR. AHL: Okay. And let's see, Fran, you were
23 doing 3B; is that correct? Okay. I think that's fair
24 enough because, Linda, you've got a whole lot of stuff to
25 sort out there with the new trip report and then some more

1 information from Diana. So, Fran, we'll look to you to
2 take Linda's piece and integrate the treatment into the
3 routing. Okay. Any comments on Fran's part B?

4 DR. KREMER: Actually I have some questions --

5 DR. AHL: We can't hear.

6 DR. KREMER: Let me pick up another phone. I had
7 some questions we needed to resolve, and I think probably
8 with Tom on the line and Diana, we might be able to do
9 that. One with -- In my notes I had that there were three
10 storage tanks; is that correct? And I wanted to verify
11 that.

12 MS. WHIPPLE: Are you talking about the NADC
13 campus?

14 DR. KREMER: That's correct.

15 MS. WHIPPLE: Yes, we've got three storage tanks.

16 DR. KREMER: Okay. And then I know when we were
17 there, there was a comment of the storage tanks, the
18 actual holding capacity might be less just because of the
19 accumulation of the solids. And so do you have an
20 estimate of, you know, what that capacity would be given
21 the residuals in the tanks?

22 MS. WHIPPLE: The tanks are 50,000 gallon tanks.
23 There's 3 of them. And functionally we use -- we can
24 store about 35,000 gallons per tank. My understanding,
25 though, that's not all because of the solids. That's just

1 wanting to allow head space and that kind of thing. So I
2 can check with our engineering staff, but I was not under
3 the impression that the 15,000 difference between the
4 capacity and the actual is due to the particulates, but
5 I'll check on that.

6 DR. KREMER: Okay. That would be helpful. And
7 so we need to correct that, then. I had a 25,000 gallon
8 storage tank, and that needs to be 50.

9 DR. ROHWER: As I recall from our visit, there's
10 standpipes on the outside of those that you can actually
11 see what's in them to some extent, and the idea was that
12 there are particulates in those tanks, but they don't
13 represent much of the volume in the tank.

14 MS. WHIPPLE: That's correct.

15 DR. KREMER: And then because of the concern of
16 the prions being associated with these particles, I think
17 we probably ought to address the issue of what's going to
18 happen with those solids in the tanks over time.

19 MS. WHIPPLE: Yes, and I can get you some
20 information on that. It may be easier to reduce that to
21 an e-mail rather than trying to explain it over the phone.

22 DR. KREMER: Okay. And similarly, too, I didn't
23 have in my notes where the temperature probes are in these
24 tanks. This is for the heat treatment and how many are in
25 there.

1 MS. WHIPPLE: The probes are at the bottom of the
2 tank, towards the front. And I think there's one probe
3 per tank.

4 DR. ROHWER: But, Diana, correct me if I'm wrong,
5 as I recall, the tanks are also agitated, right?

6 MS. WHIPPLE: Yeah, with steam injection, steam
7 injection and air, there's agitation.

8 DR. KREMER: And air. Okay. That's what I
9 thought, but I wasn't positive. All right. So that
10 answers that. And then --

11 DR. ROHWER: Is air actually injected in the
12 tank?

13 MS. WHIPPLE: During some of the -- when there's
14 intentional agitation to get the solids suspended and all
15 that, there's air in there.

16 DR. KREMER: Which is good.

17 MS. WHIPPLE: That's what I was told this morning
18 by one of the engineering staff members.

19 DR. ROHWER: The only thing is that air displaces
20 steam, which means that that creates a problem for the dry
21 spaces inside the tank.

22 MS. WHIPPLE: Yeah, that's when there's
23 intentional agitation of the tanks, and my understanding
24 is that's when we -- the way to deal with the solids is to
25 intentionally inject air and the steam to agitate the

1 solids that are in there. I'll confirm that with our
2 engineering staff and reduce that to writing to make sure
3 I've got the facts straight on that.

4 DR. KREMER: That may be helpful.

5 DR. ROHWER: Yeah, because it's a little hard to
6 imagine because you're operating under 1 atmosphere of
7 pressure, and any injected air would also have to be at
8 least at 1 atmosphere --

9 DR. KREMER: It would have to offset that.

10 DR. ROHWER: -- and somehow you'd either have to
11 exhaust some of that air or -- yeah, it doesn't add up.

12 MS. WHIPPLE: My understanding is during normal
13 operation when the tanks are being cooked, it's steam
14 injection. My understanding is when there's -- to kind of
15 clean out and deal with the solids to get the --
16 everything suspended, that's when the air -- it's to
17 create that agitation, I think. And that's why I need to
18 check with our engineering staff. But I think during a
19 normal run, it's the steam injection. But I need to check
20 that.

21 DR. ROHWER: Okay.

22 DR. KREMER: You know what may be helpful to
23 clarify this in a public sense is, you know, a schematic
24 of this too with specific operating conditions.

25 DR. ROHWER: I would expect, Diana, that those

1 are two completely separate operations.

2 MS. WHIPPLE: Yes, I think they are.

3 DR. ROHWER: That air injection doesn't come
4 until after the thing has been sterilized.

5 MS. WHIPPLE: I think you're right, and it's to
6 deal with the solids, the residual solids, is my
7 understanding.

8 DR. ROHWER: The solids, yeah.

9 MS. WHIPPLE: But I'll confirm that.

10 DR. KREMER: But if you would have anything too
11 that would lend towards the degree of mixing achieved with
12 the steam injection, I think that's really the crux of the
13 issue here.

14 MS. WHIPPLE: I'll do my best to get the
15 information that will answer that question.

16 DR. ROHWER: And I think, I'm almost sure I asked
17 this question when I was there, but I don't remember the
18 answer, and that is where the steam is sparged in, from
19 the bottom or top of the tank?

20 DR. ELLIS: I'm pretty sure you did ask that
21 question, or somebody did, and seemed to me like it was
22 from the bottom. I just remember thinking it should be
23 pretty efficient.

24 MS. WHIPPLE: Yeah, the steam comes in from the
25 top, and my understanding is there's a pipe that goes down

1 into the liquid where it's injected into it part way down.
2 And I think there's a standpipe in there that's got
3 holes or -- I've not seen it personally, but it comes in
4 from the top with a pipe that goes down into the liquid
5 when the steam is shot in so that there's agitation.

6 DR. ROHWER: You know, it would be real helpful
7 to just have a diagram of those tanks and what they look
8 like.

9 MS. WHIPPLE: Yes, I think we should be able to
10 provide essentially a cut-away of it so we can see where
11 the standpipes are, the probes are, that type of thing.

12 DR. KREMER: Okay. Thank you. And then actually
13 going back up to the first paragraph, one thing I wanted
14 to clarify, John, you'd sent Steve early last month some
15 spreadsheets looking at the metering coming from NADC.
16 And it was not clear to me if those data points were
17 inclusive of the sanitary as well as what's coming from
18 the pretreatment plant or just the pretreatment plant.

19 MR. DUNN: It would be the total flow, the
20 outflow from the NADC campus.

21 DR. KREMER: Okay. And then do we have any data
22 looking at influent volumes coming to the pretreatment
23 facility on a daily and monthly average basis.

24 MS. WHIPPLE: From the campus, we have a water
25 tower. And so our supply water comes into a water tower

1 that services the entire campus and not exclusively the
2 wastewater pretreatment.

3 DR. KREMER: Because I thought I looked at the
4 permit and the permit required flow data. And maybe I
5 misread that but --

6 DR. ROHWER: Fran, what you're asking for is the
7 actual flow into the pretreatment plant, right?

8 DR. KREMER: Well, I'm looking at daily numbers
9 and monthly numbers and making sure we're not going over
10 the capacity for the treatment of the system, number one.
11 And number two, if there are process problems, to ensure
12 we have enough engineering there to be able to control and
13 treat the flow.

14 DR. ROHWER: But you're talking specifically
15 about the pretreatment plant?

16 DR. KREMER: Yes, just specific to the
17 pretreatment facility, that's correct.

18 DR. ROHWER: Where the water tower would be the
19 whole --

20 DR. KREMER: Yeah, it would be the whole
21 facility. I wouldn't be interested in that.

22 MS. WHIPPLE: So, Fran, is there information that
23 you need from us? I'm still not clear what the question
24 is.

25 DR. KREMER: I wanted to see if you had data on

1 just influent volume coming to the pretreatment facility
2 alone. And the data that Tom had sent is inclusive of the
3 sanitary flow itself. So, you know, that's not of
4 interest to us. What we're trying to hone in on is the
5 actual flows coming into the pretreatment facility itself.

6 DR. AHL: We know what the monthly wastewater
7 discharges are from the pretreatment, don't we?

8 DR. McMAHON: Yes.

9 DR. KREMER: They provided some averages on a
10 monthly basis. It was a pretty broad range.

11 MS. WHIPPLE: But we have -- if you need it, we
12 have, I believe, daily logs of what's discharged from the
13 wastewater pretreatment plant.

14 DR. KREMER: That's perfect.

15 MS. WHIPPLE: So do you want a sampling of those?

16 DR. KREMER: Yeah, that would be fine, couple
17 months.

18 MS. WHIPPLE: Okay.

19 DR. KREMER: And then I think with regard to the
20 new wastewater treatment operations, some of the similar
21 questions in looking at flow volumes. And then just, I
22 think, again, if we had some schematics of the system
23 itself too, I think that would be beneficial just to
24 explain the issue.

25 MS. WHIPPLE: We can certainly provide those.

1 And if I understood an earlier question right, you needed
2 the legend for the diagram that was provided in I believe
3 it was August?

4 DR. KREMER: Yeah, that's correct.

5 MS. WHIPPLE: We'll get that to you.

6 DR. KREMER: Thank you.

7 DR. AHL: Are we ready to move on to C? Any more
8 comments on B? Okay, then we're ready to move on to C.

9 DR. KREMER: I didn't have any other questions on
10 that for myself.

11 DR. AHL: Okay. Anyone else?

12 DR. BELAY: I think this should also be reviewed
13 by people at NADC, make sure that's accurate.

14 DR. AHL: Diana?

15 MS. WHIPPLE: Yes. And you're talking about the
16 section entitled "New NADC Wastewater Treatment
17 Operations."

18 DR. AHL: Yes.

19 DR. BELAY: That's correct.

20 MS. WHIPPLE: We will review that and provide
21 comment.

22 DR. AHL: Okay. Very good. Let's see, who wrote
23 that piece?

24 DR. KREMER: I did B and C.

25 DR. AHL: All right. If there are no more

1 comments on C, let's move to Section 4.

2 DR. BELAY: Basically has nothing except for C.

3 DR. ELLIS: That's exactly right, because mine
4 isn't in there yet. So that is coming up very soon.

5 DR. ROHWER: And mine was sent this morning. So
6 I could summarize it if you want me to do that.

7 DR. AHL: Okay. And Trina's is being sent.

8 DR. McMAHON: Yeah, I have about a page and a
9 half, and I can send it later today.

10 DR. AHL: All right. Bob Rohwer, go ahead and
11 review for us.

12 DR. ROHWER: Okay. People will notice that the
13 first sentence is not a sentence. I apologize for that.
14 I'm just proofing it myself. I separated this into two
15 sections in terms of remediation. One, there are two
16 paths by which TSE infectivity might enter the sewer
17 system. One is by direct discharge and the other is from
18 the wastewater pretreatment plant.

19 I refer to the site visit that Bob and I did to
20 point out that there are some -- there are still some gaps
21 that could be plugged in terms of direct discharges to the
22 wastewater treatment plant -- I mean, to the sanitary
23 sewer. They're not -- there's not a lot of risk
24 associated with those, but nevertheless, it seems to me
25 that it would be smart for the NADC to eliminate those,

1 just so that there's no -- there is no possible point of
2 contention left with Ames.

3 And as part of that, though, I also proposed that
4 some sort of formal relationship and auditing be set up
5 between NADC and Ames so that on -- say on an annual basis
6 they can review this discharge problem and make sure
7 they're on top of it in the future at all times.

8 The second path is the wastewater treatment plant
9 itself. And I'm just going to read this because I think
10 it's fairly short -- well, maybe it's not so short. So
11 maybe I won't read it. But mainly the -- the main
12 vulnerabilities being the insoluble particulates that are
13 in that water, and also the head space that's in the
14 tanks.

15 And so I discuss those two things, point out that
16 the risk from the head space in the tanks is probably
17 minimal because it's immobilized there. And it does get
18 exposed over and over and over again, and over time I'm --
19 although we don't have any direct data to support this,
20 but my intuition at least is that it would be slowly but
21 surely inactivated. So you might end up with some sort of
22 steady state, constant level of low grade exposure from
23 that, but it's not going to go anywhere and it's not going
24 to be discharged.

25 More important I think is the particulate waste.

1 And my expectation is that the risks from that waste are
2 probably very small because it has also been exposed to
3 121 degrees for thirty minutes, so the infectivity levels
4 are going to be knocked down to a very low level, but
5 there is the potential there for a refractory element or a
6 subpopulation that isn't getting inactivated. And as a
7 consequence, if there is -- and it should be proposed as
8 an if -- if there is any residual risk from this process,
9 it would come from that particulate fraction.

10 So the recommendation would be that NADC consider
11 that risk and consider removing that particulate fraction
12 before the water is discharged to Ames. And that removal
13 could come either before the sterilization --

14 DR. AHL: Hello? Hello? Bob?

15 DR. ELLIS: We just lost him, I think.

16 DR. AHL: Hello?

17 MS. WHIPPLE: We're still here.

18 DR. ELLIS: Yeah, but Bob's not.

19 DR. BELAY: He'll probably call back. Until he
20 comes, I can give you my general comments, if that's okay.

21 DR. ELLIS: He's out there talking to himself.

22 DR. BELAY: Yeah, I hope not.

23 DR. AHL: I wonder if he knows that he
24 disconnected.

25 DR. ELLIS: Well, I think I can follow up a

1 little bit because I have seen what he wrote and what I
2 agree with on that draft, and that is that the
3 minimization of any solids going down the drains would add
4 one more assurance that the prion-contaminated material
5 wouldn't be in the waste stream.

6 DR. AHL: You mean from the necropsy?

7 DR. ELLIS: Necropsy -- not necropsy as much
8 actually because in necropsy that's really well contained
9 and everything is placed on a cart and incinerated and --

10 DR. DETWILER: That's not true.

11 DR. BELAY: I'm not sure about that, Bob.

12 DR. DETWILER: Yeah, I think necropsy is the
13 highest risk material because it's only the smaller
14 species that are on the table. It's not the larger
15 species.

16 DR. ELLIS: But still that doesn't go down the
17 drains, is what they told Bob and I when we were just
18 there.

19 DR. DETWILER: They don't plug the drain. They
20 don't plug . . .

21 DR. BELAY: . . . in the past.

22 MS. WHIPPLE: That was at NVSL where we visited
23 the necropsy room. That was NVSL where they do the sheep
24 on the table and it's a dry environment. NADC right now
25 does not plug the drain in the necropsy.

1 DR. ELLIS: There were two different necropsy
2 rooms.

3 MS. WHIPPLE: That's correct.

4 DR. ELLIS: That's the confusion here.

5 DR. AHL: Yeah, and we're only talking about NADC
6 right now.

7 DR. ELLIS: Okay, so we'll going back to that.
8 So let's go back to the solids then. In the animal rooms,
9 there are screens over the drains, but still using water.
10 A lot of the fecal material, some of the feed material
11 could be washed and is washed through those drains so that
12 it can be handled by the pretreatment plant. And if that
13 were to be -- if that was contaminated, then that would be
14 a mechanism of introducing some contamination as a solid
15 to the wastewater treatment plant.

16 And what Bob has indicated in his report is that
17 if efforts were taken to eliminate that solid
18 introduction, that would be one more step in overall
19 elimination of any contamination into the wastewater
20 stream.

21 DR. BELAY: This is Ermias. I agree with
22 everything that Bob say, Bob Ellis. But my general
23 comment would be I would see this as a recommendation
24 section. The title says corrective actions. Somehow I
25 don't like that phrase. I would say, you know,

1 recommendations from the committee. And Bob Rohwer
2 discussed, discusses all the issues, and the
3 recommendations are basically included in some of the
4 paragraphs.

5 My recommendation would be to take out those
6 specific recommendations and put them in a bullet format
7 so that it will be clear, concise, and listed and probably
8 even segregated by the various sources of potential
9 contamination, like, for example, the necropsy facility,
10 recommendations dealing with the necropsy facility, and
11 then recommendations that may be dealing with the barns,
12 what's going on in the barns and probably other areas.

13 DR. AHL: I like that plan, Ermias.

14 DR. BELAY: But I would definitely put it into a
15 bullet form so it would be clear and concise.

16 DR. AHL: What I don't agree with is the wording
17 of the remediation, corrective action. The reason is that
18 that is direct quote from the charge to our panel.

19 DR. BELAY: Right, right. But we don't have to
20 say corrective action. We can say this is the committee's
21 recommendation.

22 DR. AHL: Right, yeah. But it's just that the
23 title of that, I wanted to tie back to our charge so that
24 people who read the charge can say yeah, they did answer
25 that.

1 DR. DETWILER: Well, we can do recommendations
2 for remediation.

3 DR. BELAY: Right, but somehow corrective
4 action is, you know -- it comes from the criminal justice
5 system.

6 DR. DETWILER: Remember the last time we talked
7 about not being so specific but just giving some broad
8 base on how they get -- you know, to prevent the material
9 from going down there to begin with. Right?

10 DR. ELLIS: Right.

11 DR. AHL: Right.

12 DR. ELLIS: Bob, are you back?

13 DR. ROHWER: Yeah, I'm back. We had a massive
14 power outage here.

15 DR. ELLIS: I tried to fill in for you from where
16 you left off, but if you want to go back to that spot to
17 make sure I covered it pretty well.

18 DR. ROHWER: Well, I think I had gotten to the
19 end. The main point was just that that removal could
20 come -- the removal of those particulates could come
21 either before or after the sterilization, and there may be
22 other problems involved with removing them before
23 sterilization than afterwards. It would be more effective
24 and the sterilization step would be more effective if that
25 occurred before sterilization, before the water was

1 delivered to the plant.

2 But that may not be practical. I don't know.
3 Anyway -- Because I don't know what other pathogens are in
4 that water, you know. It could be that other things are
5 being discharged as well that are far more virulent than
6 these agents but far more susceptible to inactivation as
7 well.

8 DR. AHL: Yeah, like E-coli.

9 DR. ROHWER: Yeah. So the thing is, you know,
10 that would be a judgment call from the -- by the NADC.
11 But it did seem to me that if there was a recommendation
12 that I would make, it would be that the particulates be
13 removed and either incinerated or disposed of or managed
14 by NADC themselves instead of being passed on to Ames.

15 And in that regard, though, it would also behoove
16 the NADC to look very carefully at their particulate
17 discharges to the wastewater stream and minimize those as
18 much as possible. And I believe that's the gist of my
19 comments.

20 DR. BELAY: I was commenting, Bob, when you were
21 off the line, all the discussions in the three paragraphs
22 are very nice. But specific recommendations, I would pick
23 them out, put them in a bullet format so they would be
24 clear and concise.

25 DR. ROHWER: Yeah.

1 DR. BELAY: And probably, you know, I was telling
2 the group that they could also be segregated by the
3 various potential sources of contamination including like,
4 for example, the necropsy facility and recommendations
5 related to the necropsy facility in one area, and then --
6 I'm not suggesting subtitles but just segregating them
7 into bullets that could be very clear and concise.

8 DR. ELLIS: It seems to me like somebody reading
9 this, then, that would make it a lot easier for them to
10 read and follow what the recommendations are. If they
11 have something, like you said, I think, Ermias, something
12 specifically they wanted to look at, they could go right
13 to that area.

14 DR. BELAY: Right.

15 DR. DETWILER: And, Bob, this is the place where
16 you were saying up above to emphasize the different levels
17 of risk. I would think that would be appropriate here,
18 like necropsy versus the barn waste risk.

19 DR. ROHWER: Good point, yeah.

20 DR. DETWILER: I think this is the section where
21 that would be really important to emphasize that.

22 DR. ROHWER: Okay. I'm getting this down here.

23 DR. BELAY: And would it be appropriate, Nell, if
24 we have some additional recommendations that are not
25 mentioned by Bob Rohwer's description, that each of us

1 send to Bob or you?

2 DR. AHL: If we have additional recommendations,
3 I think they should go to Bob because they would go in
4 this section. And then I think we'll hash those out when
5 we meet in Ames. Does that sound reasonable?

6 DR. ROHWER: Yeah, that's fine. What I would ask
7 people to do is -- oh, I just got my power back -- is that
8 why don't you put those recommendations in text form that
9 can be inserted, integrated into this. And that would be
10 fine.

11 DR. AHL: Can everyone with recommendations do
12 that and send them to Bob Rohwer?

13 DR. ELLIS: Sure.

14 DR. AHL: Okay. Are there any other comments
15 that we want to make? There's obviously some
16 reorganization that we're going to be doing when we meet
17 on the 16th in Ames. This is the 3rd of November. And we
18 need to have all of our corrections, additions, et cetera.
19 I believe we need to get them to Sherri. Sherri, are you
20 there?

21 MS. BUXTON: Yes, ma'am.

22 DR. AHL: If we get all these pieces to you, what
23 day do you need them by in order to put them together for
24 us to have on the 15th when we arrive at our motel?

25 MS. BUXTON: The 13th.

1 DR. AHL: Can everybody get everything to Sherri
2 on or before the 13th?

3 DR. KREMER: Yes.

4 DR. DETWILER: Yes.

5 DR. BELAY: It would be ideal to have it at least
6 one day before the meeting so that we can have a chance to
7 read it in the plane.

8 MS. BUXTON: If I have it on the morning of the
9 13th, you'll have it on the 14th.

10 DR. DETWILER: That would be super. Thank you.

11 DR. AHL: That would be wonderful. That would be
12 just absolutely wonderful. And then you're going to have
13 that document that we have in our hands on a screen for us
14 to read together and comment on and make final corrections
15 on the 16th; is that correct?

16 MS. BUXTON: That's correct.

17 DR. AHL: Okay. And you or someone is going to
18 get us information on where we're going to go and travel
19 and so on?

20 MS. BUXTON: Right.

21 DR. AHL: I haven't seen any yet.

22 MS. BUXTON: I sent the hotel information by
23 e-mail. And you did not receive it, Dr. Ahl?

24 DR. AHL: When did you send it?

25 MS. BUXTON: I'll have to look here.

1 DR. ELLIS: It was either yesterday or the day
2 before.

3 DR. AHL: No, I did not get that.

4 MS. BUXTON: I'll make sure that you receive
5 that. I will send it again. And we'll order in lunches
6 the two days in order to just cut down the amount of time
7 we're out of the office. I have some menus. I can send
8 them prior to or just bring those with me.

9 DR. AHL: You know, we have been -- my
10 understanding was that Steve wanted us to plan to leave
11 Friday afternoon, in which case we're not going to need
12 lunches for that noon.

13 MS. BUXTON: For Friday? Okay. Just for
14 Thursday then.

15 DR. AHL: Am I incorrect about that, Steve?

16 DR. ELLIS: I think we need lunches Friday, but
17 then there will probably be various of us leaving sometime
18 during the afternoon. But I'd plan on lunch Friday.

19 DR. SHAFER: This is Shafer. When you folks
20 leave will just depend on when you finish up. I think
21 we've got the hotel arrangements -- Sherri, correct me if
22 wrong -- I think we've got the hotel arrangements so you
23 can stay there Friday night.

24 DR. AHL: Oh, okay. That's better. I'd hate for
25 us to have --

1 DR. SHAFER: Let me confirm that with Sherri. Is
2 that true?

3 MS. BUXTON: That is correct.

4 DR. AHL: All right. Then we need lunch on
5 Friday because I don't think we're going to finish up as
6 soon as we would like to.

7 DR. DETWILER: You mean we'll have to stay Friday
8 night?

9 DR. AHL: What?

10 DR. DETWILER: You mean we'll have to stay Friday
11 night?

12 DR. AHL: Yeah.

13 DR. ELLIS: I'm not staying Friday night.

14 DR. DETWILER: Me either.

15 DR. BELAY: I'm not staying either.

16 DR. AHL: Okay. Well, for some of us it's hard
17 to get home if we don't leave by noon on Friday.

18 DR. DETWILER: I'll work all night Thursday, but
19 I'm not --

20 DR. AHL: You're not going to stay in Iowa on
21 Friday night?

22 DR. ELLIS: Well, it's Thanksgiving at my house
23 on Saturday, so I better get out of here.

24 DR. AHL: Okay.

25 DR. ROHWER: Are we going to be having this

1 meeting at the hotel, or are we going up to Ames for the
2 meeting itself?

3 DR. SHAFER: We'll be at the Ames City Hall like
4 the very first time we met.

5 DR. ROHWER: So we're going to be doing all of
6 this editing in public?

7 DR. AHL: Yes.

8 DR. SHAFER: Just like you've been doing in this
9 phone call editing today.

10 DR. ROHWER: I see. All right. So basically
11 we'll be commuting back and forth between City Hall and --

12 DR. SHAFER: Ankeny.

13 DR. AHL: And the motel.

14 DR. SHAFER: I'll get you logistics on this, but
15 we'll need to meet early Thursday morning and carpool up.
16 It's about a half an hour from Ankeny to Ames. So we'll
17 go as a group as best we can to the City Hall and work all
18 day and have lunches arranged to be brought in.

19 If we're still there at the end of the day,
20 there's numerous restaurants around there where we can get
21 dinner. And we'll get you back to the hotel as a group
22 Thursday evening. How long we're there on Friday depends
23 entirely on you folks.

24 DR. BELAY: How late can we work on Thursday and
25 continue to make it a public meeting?

1 DR. SHAFER: Well, I put it in the Federal
2 Register that this would be 8 until 5. That's an
3 interesting question whether we -- I mean, technically
4 we're supposed to work 8 to 5. We probably ought to stick
5 to that.

6 DR. BELAY: Yeah. In my books, the more we work
7 into the evening, the better.

8 DR. ELLIS: Same here.

9 DR. KREMER: I guess it was my understanding that
10 Friday we were going to also set aside time for basically
11 a presentation of the recommendations.

12 DR. SHAFER: That is correct. At some point on
13 Friday we need to -- you need to present your findings and
14 the report to the City of Ames and the USDA, and that
15 presentation would be open to the public. That's before
16 we -- before we get out of there on Friday.

17 DR. KREMER: So do we need to decide ahead of
18 time what that time frame would be on Friday?

19 DR. ELLIS: Shouldn't have to.

20 DR. AHL: No. I don't think we can decide that.

21 DR. KREMER: I'm just thinking in terms of the
22 public, again, being --

23 DR. ELLIS: Yeah, that's correct.

24 DR. KREMER: -- respectful of them. I mean, they
25 don't want to sit around and listen to this discussion for

1 a long period of time. It would seem that it would
2 behoove us to set a time so if people are interested in
3 coming.

4 DR. SHAFER: Well, again, relative to the Federal
5 Register notices that have been published, it's just 8 to
6 5 on both days. And so at some point in that window is
7 all we said.

8 DR. AHL: Let me assist, Steve. If people begin
9 leaving on Friday and we have not made the formal
10 presentation, do we have to have a quorum for the formal
11 presentation?

12 DR. SHAFER: No. We need to get the report so
13 that the report is finalized. But if a couple of you can
14 hang around for the presentation of the report and perhaps
15 answer a few questions, no, I don't -- no, we don't have
16 to have a quorum.

17 DR. BELAY: So a presentation would mean
18 presentation and also submitting final written report?

19 DR. AHL: Yeah.

20 DR. BELAY: I was wondering if the typing and the
21 changing of the document, editing and everything else will
22 be taken care of by Friday?

23 DR. SHAFER: Well, I think --

24 DR. BELAY: What were your expectations, Steve?

25 DR. SHAFER: Expectation would be that the actual

1 text of the report would be completed. Now, there may be
2 things like literature cited, addition of a diagram,
3 something minor like that. But my expectation is that
4 when some representative of the panel goes before the
5 public and presents the report, that, you know, in terms
6 of the content, the report is finished.

7 DR. BELAY: Okay. And there would not be any
8 work such as, for example, editing after that?

9 DR. AHL: No, I wouldn't anticipate that.

10 DR. SHAFER: I wouldn't anticipate that either.
11 As I said, the only thing that I would anticipate after
12 that is a completion of the list of literature cited or
13 something like that. And we would need to get that done
14 very quickly after the 17th.

15 DR. BELAY: Okay.

16 DR. AHL: Okay. Any other questions?

17 DR. McMAHON: I don't have a question, but I need
18 to leave. This is Trina. I have to go teach a class.
19 I'm checking out.

20 DR. AHL: Okay. Thank you for being with us.

21 DR. McMAHON: Thank you. Bye.

22 (At this time, Dr. McMahon left the telephone
23 conference.)

24 DR. ROHWER: This public presentation in Ames, is
25 that going to be open for questions and things like that

1 to the public, or is it just an announcement?

2 DR. SHAFER: No, I think what we had in mind was
3 the presentation of the major conclusions and findings of
4 the panel, and then an opportunity for members of the
5 press and the public to ask questions. The Federal
6 Register notice will allow, like we did at the first
7 meeting, although nobody took advantage of it, but the
8 Federal Register notice just says that we'll allow a half
9 an hour, and people who sign up ahead of time can actually
10 get up and make up to a three-minute comment. And then we
11 also are going to allow -- at the end of the presentation
12 we'll allow a little bit of time for questions and
13 clarification from whoever's making the presentation on
14 behalf of you.

15 DR. AHL: Any other questions for Steve?

16 DR. SHAFER: I guess I should check with John
17 Dunn. Is that -- make sure that what I've said is
18 consistent with your thinking, John. Is that -- You're
19 standing in for Tom Neumann today.

20 MR. DUNN: Yeah, I think that's right. I think
21 we would like a little opportunity at the time maybe for
22 either staff from the City or from NADC to ask for
23 clarification just to make sure we understand everything
24 that you're recommending. But no, I think what you
25 described, Steve, is fine.

1 DR. SHAFER: Yeah, the staff of NADC and the City
2 staff, they would all just be part of that public
3 presentation. There will be no special presentations to
4 any group. It will just be an open presentation.

5 DR. AHL: Okay. If I hear no other comments,
6 then, I'm going to remind us that we have to have our
7 things in to Sherri no later than the morning of the 13th
8 of November. And we've got a lot of interacting to do as
9 noted in this discussion today with each other. And we'll
10 see you all on the 15th.

11 DR. SHAFER: Let me -- Yeah, let me just make two
12 other comments. One, yes, please do make your travel
13 arrangements to arrive on the 15th, to do that as soon as
14 possible.

15 And my final comment would be to remind everyone
16 that's both participating in this call and listening in
17 that this is the panel's first discussion of a draft
18 report, and it's all considered preliminary. Nothing is
19 finalized yet. And that will be done on the 16th and
20 17th. So as you think about what you've heard, keep in
21 mind that all of this is preliminary discussion.

22 DR. BELAY: One clarification, Steve. When you
23 say travel arrangements, are we supposed to book our
24 flight?

25 DR. SHAFER: Yes, isn't that correct, Sherri?

1 MS. BUXTON: You need to work with Karen
2 Burianek, because we will be paying for your flights so
3 you need to call the person at Ames, Iowa, to take care of
4 that. And if you need the number, I'll be happy to send
5 it to you.

6 DR. BELAY: Last time I think she booked the
7 flight for us.

8 MS. BUXTON: Yes, she does, she will take care of
9 that for you.

10 DR. DETWILER: Can you send that out for us,
11 then, please.

12 MS. BUXTON: I sure will, and I'll send her a
13 message as well to get ahold of each of you.

14 DR. DETWILER: Thank you very much.

15 DR. AHL: Okay. Any other business today?

16 DR. SHAFER: That concludes anything that I
17 needed to say.

18 DR. AHL: John?

19 MR. DUNN: No, I think we're good here.

20 DR. AHL: Okay. Well, then, I declare this
21 meeting closed.

22 (The conference call was concluded at 10:53 a.m.)

23

24

25

C E R T I F I C A T E

STATE OF IOWA

COUNTY OF STORY

I, SUZANNE M. E. SOGARD, a Certified Shorthand Reporter in and for the State of Iowa, do hereby certify that I was present during the foregoing proceedings and took down in shorthand the proceedings held;

That said shorthand notes were transcribed by me by way of computer-aided transcription; and that the foregoing pages of transcript contain a true, complete and correct transcript of the proceedings to the best of my ability;

That I am not counsel, attorney or relative of either party or otherwise interested in the event of this proceeding;

IN TESTIMONY WHEREOF, I have hereunto placed my hand this 27th day of November, 2006.

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