

In The Matter Of:
CARE, et al.
vs .
Cow Palace, et al.

Deposition of
Thomas Tebb
February 26, 2014



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IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF WASHINGTON

COMMUNITY ASSOCIATION FOR
RESTORATION OF THE ENVIRONMENT,
INC., a Washington Non-Profit
Corporation
and
CENTER FOR FOOD SAFETY, INC., a
Washington, D.C. Non-Profit
Corporation

Plaintiffs,

vs.

COW PALACE, LLC, a Washington
Limited Liability Company,

Defendant.

No. CV-13-3016-TOR

CERTIFIED COPY

COMMUNITY ASSOCIATION FOR
RESTORATION OF THE ENVIRONMENT,
INC., a Washington Non-Profit
Corporation
and
CENTER FOR FOOD SAFETY, INC., a
Washington, D.C. Non-Profit
Corporation

Plaintiffs,

vs.

GEORGE & MARGARET, LLC, a
Washington Limited Liability
Company

and
GEORGE DERUYTER & SON DAIRY, LLC, a
Washington Limited Liability
Company

Defendants.

No. CV-13-3017-TOR

1	COMMUNITY ASSOCIATION FOR)	No. CV-13-3018-TOR
	RESTORATION OF THE ENVIRONMENT,)	
2	INC., a Washington Non-Profit)	
	Corporation)	
3	and)	
	CENTER FOR FOOD SAFETY, INC., a)	
4	Washington, D.C. Non-Profit)	
	Corporation)	
5	Plaintiffs,)	
)	
6	vs.)	
)	
7	D & A DAIRY, a Washington)	
	Partnership)	
8	and)	
	D & A DAIRY, LLC, a Washington)	
9	Limited Liability Company,)	
	Defendants.)	
10	_____)	
)	
11	COMMUNITY ASSOCIATION FOR)	No. CV-13-3019-TOR
	RESTORATION OF THE ENVIRONMENT,)	
12	INC., a Washington Non-Profit)	
	Corporation)	
13	and)	
	CENTER FOR FOOD SAFETY, INC., a)	
14	Washington, D.C. Non-Profit)	
	Corporation)	
15	Plaintiffs,)	
)	
16	vs.)	
)	
17	HENRY BOSMA DAIRY, a Washington)	
	Proprietorship, aka HANK BOSMA)	
18	DAIRY, aka BOSMA DAIRY,)	
	and)	
19	LIBERTY DAIRY, LLC,)	
	Defendants.)	
20	_____)	

21 _____

22 DEPOSITION UPON ORAL EXAMINATION OF

23 THOMAS TEBB

24 February 26, 2014

25 Tumwater, Washington

26 _____

27 Taken Before:

28 Laura A. Gjuka, CCR #2057

29 CENTRAL COURT REPORTING 1-800-442-DEPO

30 Seattle - Bellevue - Yakima - Wenatchee



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CENTRAL COURT REPORTING 1-800-442-DEPO
Seattle - Bellevue - Yakima - Wenatchee



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1 BE IT REMEMBERED that on the 26th of February,
2 2014, at 7141 Cleanwater Drive SW, Tumwater, Washington,
3 before LAURA A. GJUKA, CCR# 2057, Washington State
4 Certified Court Reporter residing at University Place,
5 authorized to administer oaths and affirmations pursuant
6 to RCW 5.28.010.

7 WHEREUPON the following proceedings were had,
8 to wit:

9 * * * * *

10

11 THOMAS TEBB, having been first duly sworn by
12 the Court Reporter, deposed as follows:

13

14 EXAMINATION

15 BY MR. TEBBUTT:

16 Q Mr. Tebb, would you please state your full name and
17 address for the record?

18 A Yes. My name is Gordon Thomas Tebb. Would you like me
19 to spell that or --

20 Q Sure, please.

21 A G-o-r-d-o-n, T-h-o-m-a-s, T-e-b-b. My address is
22 13001 South 1538 PRSW Prosser, Washington 93550. My
23 business address is 15 West Yakima Avenue, suite 200,
24 Yakima, Washington 98902. My phone number at my office
25 is area code (509) 574-3989. Do you need my cell



1 number?

2 Q That's good. You can stop right there. I'm just going
3 to go over some basics first. Have you ever been
4 deposed before?

5 A Yes.

6 Q How many times?

7 A Probably three times.

8 Q In what type of cases?

9 A A variety of pollution cases associated with my
10 business --

11 Q So all in your role as an employee of the Department of
12 Ecology?

13 A Correct.

14 Q Can you tell me the names of those cases?

15 A They were over a decade ago, so I can't. But they
16 were -- I want to say one was associated with the
17 Hanford Nuclear Reservation, one was associated with a
18 water quality permit when I was a water quality section
19 manager at our Yakima office, I can't recall the case.

20 Q Have you ever testified at trial?

21 A I have not.

22 Q Okay. Just so you know, just to go over some ground
23 rules -- by the way, I'm Charlie Tebbutt and I represent
24 Community Association for Restoration of the Environment
25 and the Center for Food Safety in four actions involving



1 Research Conservation and Recovery Act claims for
2 imminent and substantial endangerment to human health in
3 the environment due to the groundwater contamination in
4 the Yakima Valley.

5 Just basic ground rules. Please wait until I finish
6 my question before you answer. Try not to anticipate.
7 Please give audible answers to every question, yeses and
8 nos. Shakes of the head and those sorts of things don't
9 work -- in this situation it's fine because I haven't
10 asked you a question, but when I ask you a question,
11 please give an audible answer. If you don't understand
12 a question of mine, please say that. Otherwise, I will
13 believe that you understood the question and the record
14 will reflect that. If for some reason it is confusing,
15 please say, "I don't understand the question."

16 You may hear some objections interposed either by
17 your counsel or Ms. Kristensen, the counsel for the
18 defendants in the case. That does not mean that you
19 don't have to answer the question, you still have to
20 answer the question.

21 This testimony, as you know, is taken under oath.
22 It can be used at trial later, either by itself or for
23 other purposes, such as refreshing recollection or other
24 things.

25 Any questions at this point?



1 A No, sir.

2 Q All right. If you need to take a break, please let me
3 know. That's fine. It's no problem taking a break, you
4 just can't take a break in the middle of a question,
5 while a question is pending, okay?

6 A I understand.

7 (Exhibit No. 44 marked for identification.)

8 MR. TEBBUTT: We are continuing on from
9 yesterday, so we are starting at 44.

10 BY MR. TEBBUTT:

11 Q Mr. Tebb, you have seen this document before that's
12 sitting in front of you, Exhibit 44?

13 A Yes, I have. I believe this was the notice for me to be
14 deposed.

15 Q Okay. The very last page of this document, Exhibit 44,
16 requests four categories of documents to be produced
17 today. Can you tell me what categories of documents of
18 these four have been produced on the CD that was
19 provided by your counsel Ms. Barker (sic) to us just
20 prior to the start of this deposition?

21 A I can tell you what we did in terms of trying to produce
22 those documents. I have not been able to actually
23 observe what is on the CD as they were being collected,
24 as I was in travel status. Essentially, I have been
25 here for two days on other business, and so I can tell



1 you what we attempted to produce as a result --

2 Q Okay. Let's do that. Why don't you tell me what you
3 have attempted to produce so far and what --

4 A Sure.

5 Q -- still needs to be produced --

6 A So --

7 Q -- to the extent you know.

8 A When we received this request, I notified our public
9 information officer, Roger Johnson. He works with all
10 of us, our staff at the Yakima office, as well as myself
11 and my assistant, and went through a process where we
12 reviewed all of my e-mail files back to the date, I
13 think it was 2005 was the request date backwards, as
14 well as my folder files, which I keep fairly regular
15 correspondence and information as a working file.

16 Q Is that an electronic folder file?

17 A No. Those are some of the hardcopies that you have
18 received. So I think those were produced. Also,
19 anything else that I had had in terms of notes and
20 things of that sort, I didn't really have a lot there.
21 So we basically looked at everything I had and tried to
22 produce it in respect to this request.

23 Q Okay. Do you know what --

24 A May I get some glasses?

25 Q Sure.



1 A I should have brought them to the table, I apologize.

2 I'm getting a little older to where I need them.

3 Q I understand and appreciate that.

4 A Thank you. Excuse me.

5 Q No problem. Take your time.

6 A Yeah.

7 Q So do you know what categories of documents have not
8 been produced yet?

9 A I do not.

10 MR. TEBBUTT: I will ask your counsel,
11 Ms. Barker.

12 MS. BARNEY: Barney.

13 MR. TEBBUTT: Barney, sorry. What do you
14 know has been produced and what hasn't been produced?
15 We talked about it before at the start of the
16 deposition.

17 MS. BARNEY: We did. My understanding is
18 that, from Mr. Johnson on the phone yesterday, was that
19 the disks produced today has approximately 80 percent of
20 the material. It contains e-mails responsive to the
21 third and fourth bullet points from a variety of Ecology
22 employees. It's identified on the disk as folder name
23 by those individual's names.

24 There is additional material in the second disk that
25 we hope will arrive this morning that continues the



1 production of e-mails. And there is a third disk due
2 early next week because there was an Ecology employee --
3 one Ecology employee's parent had passed away and she
4 was not in the office to do her e-mail searches, and it
5 also contains the material from Ecology headquarter's
6 employee Jon Jennings, because he had a great deal of
7 material in terms of his e-mails, and they were having
8 difficulty downloading all of that down to the disk
9 yesterday. So the decision was made to produce as much
10 as possible on the disk to be here this morning,
11 arriving this morning, to give you the most material,
12 but then those two things are following on.

13 BY MR. TEBBUTT:

14 Q All right. And may I ask who the employee is who was
15 not available to produce her file?

16 A I can respond to that. Her name is Melanie Redding, and
17 she is a hydrogeologist with our water quality program
18 here at headquarters.

19 Q All right. Thank you.

20 Mr. Tebb, could you please explain your educational
21 background?

22 A Sure. I graduated from Toppenish High School in 1978.
23 I went to Yakima Valley Community College, received my
24 AA degree. I subsequently transferred to Western
25 Washington University where I studied environmental



1 geology. And then I -- at that time I graduated with a
2 bachelor of science degree in 1984. I have pursued a
3 master's of engineering work at Cal Berkeley when I
4 moved down there for employment. I have attended the
5 Dan Evans School, University of Washington just --

6 Q Let me stop you for a sec. Did you complete your
7 master's?

8 A I did not.

9 Q How much of it did you complete?

10 A I had about a year.

11 Q And what type of classes did you take?

12 A Geotechnical engineering and civil engineering. The
13 firm that I worked for was a geotechnical firm and it
14 supplemented my work experience.

15 Q All right. You were beginning to tell me about some
16 other education you received after the master's work --

17 A Yeah. Subsequently, as part of my career here at
18 Ecology, I pursued a variety of trainings, particularly
19 most recently several quarters at the University of
20 Washington, Dan Evans School of Business. Actually, the
21 public administration program.

22 Q All right. Is that the extent of your education?

23 A It is.

24 Q I noticed you have some initials after your name.

25 A Uh-huh.



1 Q Tell me what "LHG" stands for.

2 A Sure. I'm a licensed engineering geologist in the state
3 of Washington, also a geologist in the state of
4 Washington and a hydrogeologist. I possess all three of
5 those licenses, license No. 408.

6 Q And so you are certified in the state of Washington as a
7 hydrogeologist?

8 A Yes, sir.

9 Q And an engineer as well?

10 A No, engineering geologist.

11 Q Okay. And when did you -- how long have you been
12 licensed as a hydrogeologist in the State of Washington?

13 A When the state of Washington instituted its
14 hydrogeology, engineering geology, and geology
15 licenses -- I believe it was about a decade ago when
16 they instituted the licensing requirements in this
17 state, I was one of the first -- obviously my license
18 No. 408 represents I was one of the first in the process
19 to be licensed.

20 Q All right. I would like to go over your work history a
21 little bit with you.

22 A Sure.

23 Q Let's start with present and then work our way back.

24 A Okay.

25 Q What's your present -- who is your present employer and



1 what's your job title?

2 A I work for the Washington State Department of Ecology in
3 our Yakima regional office. I'm the regional director
4 for the Department of Ecology in that office. I have
5 been in that position since 2008.

6 Q And what position were you in before 2008?

7 A From 2008 to 2005, I was our water resources section
8 manager in the Department of Ecology central regional
9 office.

10 Q And were you employed with the Department of Ecology
11 before 2005?

12 A Yes.

13 Q In what capacity?

14 A I have been employed with the Department of Ecology from
15 2005 to 1998 as a -- excuse me, there is two positions
16 in there. I was a water quality section manager for
17 Department of Ecology, central regional office after my
18 water resources stint, for two years. So I believe that
19 would take us to 2003.

20 And then from 2003 to 1998 I worked as our
21 shorelands environmental section manager out of our
22 Spokane and Yakima offices.

23 And prior to that, from '98 to '92, I worked in the
24 Washington State Department of Ecology's nuclear waste
25 program in Kennewick Washington on the Hanford Nuclear



1 Reservation.

2 Q Have you had your radiation levels checked now and
3 again?

4 A Not lately, sir.

5 Q I don't mean to make light of that.

6 A Yeah, it's a mess out there.

7 Q Prior to '92, where were you employed?

8 A I was employed for the firm that I mentioned. It was
9 Subsurface Consultants, an engineering company out of
10 San Francisco, Washington -- San Francisco, California.

11 Q What was the name of that?

12 A It's name was subsurface Consultants.

13 Q What kind of work did you do for them?

14 A It was basically I was hired as a geologist, and I
15 worked with a variety of clients, everything from the
16 Navy, working on a degaussing range that they had in the
17 bay, San Francisco Bay, as well as building ponds for
18 water storage in the Napa Valley. So anything kind of
19 soil related or engineering related to soil, that was
20 what I did.

21 Q And what years did you work for them?

22 A I worked for them from 1985 to 1992, right after I
23 graduated from college.

24 Q I just want to ask you about a couple of people who I
25 know used to work at Ecology and ask if they are still



1 working there. Max Linden?

2 A Max Linden no longer works for the Department of
3 Ecology.

4 Q Do you know when he moved on?

5 A I believe he moved on almost -- I want to say seven to
6 eight years ago.

7 Q Fair enough. Bob Rayforth?

8 A Bob Rayforth no longer works for the Department of
9 Ecology.

10 Q Do you know when he left ecology?

11 A I would say about five years ago.

12 Q Have you been involved at all with reviewing the EPA
13 study on groundwater that came out in September of 2012
14 concerning the Lower Yakima Valley?

15 A I have read the study. I have not been involved in an
16 official capacity per se.

17 Q And so when did you first become aware of the
18 contamination of groundwater in the Lower Yakima Valley
19 with nitrates?

20 MS. KRISTENSEN: Objection, vague.

21 MR. TEBBUTT: Go ahead and answer.

22 THE WITNESS: I believe I became aware of
23 it when I was in the capacity as a water quality section
24 manager for the Department of Ecology in the Yakima
25 office.



1 BY MR. TEBBUTT:

2 Q Let me just stop you for a second. Try to go slow. The
3 court reporter's fingers only move so fast. So try to
4 go as slow as you can. There is no rush here.

5 A Okay. It had to do with an enforcement action that we
6 were working with. I can't recall exactly what the
7 enforcement issue was. I can't recall if it was the
8 Port of Sunnyside or some other groundwater -- some sort
9 of surface discharge to ground where we were analyzing
10 contaminants, but I believe we began noticing there was
11 a nitrate problem. And as part of the enforcement
12 work -- now I may have this mixed up -- but the bottom
13 line is that it was an enforcement action that resulted
14 in a penalty. The penalty was used for a study to
15 essentially fund a small study to do some groundwater
16 sampling in the Lower Yakima Valley to determine whether
17 we had a nitrate problem.

18 Q Do you recall the approximate year?

19 A I want to say it was in the 2005 era, that era.

20 Q Okay.

21 A I know I brought this issue up to our executive
22 management team and all three directors that I worked
23 for in my current capacity.

24 Q Okay. Do you recall a study done by the Valley
25 Institute for Research and Education on groundwater



1 contamination in the Lower Yakima Valley?

2 A Yes, that was the study I was referring to. I couldn't
3 recall the name. It was a man, a professor. It was a
4 small group, and I believe his partner, I don't know if
5 they were married or not.

6 Q Okay. So that wasn't something that Ecology
7 commissioned; it was commissioned as a result of
8 settlements of other cases, enforcement actions by
9 citizens against some of the dairies in the area;
10 correct?

11 A Correct.

12 MS. BARNEY: Objection, misstates. Go
13 ahead.

14 THE WITNESS: I think that is correct.

15 BY MR. TEBBUTT:

16 Q Okay. And so if I told you that that study came out in
17 2002, would that refresh your recollection when that
18 study actually came out?

19 A I wouldn't be surprised. I deal with a lot of
20 information and my memory probably isn't that sharp.

21 Q So did you review that study when it came out?

22 A Yes, I did.

23 Q Were you aware of another study that was done by
24 Heritage College at the time, a similar type of study of
25 groundwater contamination in the Lower Yakima Valley?



1 A I was aware of it. And I believe the work that we
2 attempted to work with the Valley Institute or the firm
3 that you referenced was to build off that study and to
4 get a wider expansion and notice of the groundwater.

5 Q Did you read the Heritage College study?

6 A I did not.

7 Q Did you assist the Valley Institute of Research and
8 Education, and when I say "you," Department of Ecology,
9 with reviewing quality assurance protocols for that
10 proposed study?

11 A Yes. Again, I was acting in the capacity of a manager,
12 so I believe it was my staff. Whether it was Bob or --
13 Bob Rayforth or others that were involved in the
14 previous enforcement action, yes, to have data and
15 information that we can use, quality assurance project
16 plans are performed.

17 Q Right. So your staff was satisfied that the quality
18 assurance that was part of the -- I will call it VIRE,
19 V-I-R-E -- the VIRE study, it was satisfactory to meet
20 Ecology's standards?

21 A That is my recollection. Yes.

22 Q And they were not enforcement actions by the Department
23 of Ecology against the dairies; right? It was money
24 that came from citizens' suit settlements; correct?

25 A I don't recollect it that way.



1 Q Sir, I ask -- okay. How do you recollect it?

2 A I recollect it -- I just wrote down the name of the firm
3 there.

4 Q I would ask that you not write on the exhibits.

5 A Oh.

6 Q If you would like to have a separate pad of paper to
7 write on for your own purposes, please do. But the
8 exhibits --

9 A I apologize.

10 Q -- should not -- just so you know, there is handwriting
11 that says "VIRE study 2002/citizen" on the last page of
12 Exhibit 44.

13 A Sorry.

14 Q One of those protocols.

15 A I will scribble over here.

16 Q Feel free to scribble all you want.

17 A Okay. To answer your question, I don't recall it
18 exactly as the funding source. I seem to recall it as a
19 penalty that a portion of was used to fund the study.
20 That's how I recollect it.

21 Q Right. But it wasn't penalties assessed by the
22 Department of Ecology, was it?

23 A I believe so.

24 Q Have you had occasion to review other reports done by
25 Ecology employees about groundwater contamination in the



1 Lower Yakima Valley related to the dairy industry?

2 A Could you be more specific about the nature of the
3 reports? Because they -- what I'm trying to say is,
4 often in the job of permitting different facilities,
5 there are reports that are done to support those
6 permits.

7 Q On an individual facility basis?

8 A Yeah.

9 Q I'm talking more generally about studies done,
10 scientific studies by the staff at the Department of
11 Ecology about groundwater contamination, and I will
12 start first in the Lower Yakima Valley.

13 A I don't recall a particular study that we have funded.
14 Now, that's not to say that one exists. I don't recall
15 that the environmental assessment program or -- I don't
16 recall a comprehensive study that was performed by our
17 agency in that regard.

18 Q Have you reviewed other studies done by the Department
19 of Ecology about groundwater contamination generally in
20 the state of Washington from dairy facilities?

21 A I have reviewed a report associated with the Whatcom
22 nitrate study recently, as it relates to a study that
23 was performed by the Department of Ecology's
24 environmental assessment program. That is probably the
25 freshest on my mind. I deal with a lot of information,



1 so it's hard for me to answer your question as
2 accurately as --

3 MR. TEBBUTT: We will get down to some
4 more specifics then.

5 (Exhibit No. 45 marked for identification.)

6 BY MR. TEBBUTT:

7 Q Mr. Tebb, you have in front of you Exhibit 45, an issue
8 paper on construction of dairy lagoons below the
9 seasonal high groundwater table done by Melanie Kimsey,
10 a hydrogeologist with the Department of Ecology. Do you
11 know Ms. Kimsey?

12 A Yes, I do. I believe Melanie Kimsey is now Melanie
13 Redding. I believe that was her maiden name. Or if
14 I -- again, I'm -- this is my understanding.

15 Q So she now works in the central office in Yakima?

16 A No. She works in the headquarters office in Lacey.

17 Q All right.

18 A For the water quality program.

19 Q All right.

20 A And she often does work for the regional offices.

21 Q Okay. Can you tell me if this study looks familiar at
22 all to you?

23 A It does.

24 Q So you reviewed it before?

25 A I have.



1 Q Did you have any input into the either the
2 development -- well, let's start with the development of
3 this work.

4 A No, not specifically.

5 Q Did you have any input into this study as it was being
6 produced?

7 A Just as one of several reviewers. The recommendations
8 and the options are typical with the type of
9 construction requirements that I, as a geotechnical
10 engineer, would recommend for water retention or other
11 types of facilities.

12 Q Is it fair to say that you agree with the findings and
13 recommendations in this study?

14 A Professionally, I would.

15 Q Okay. Take a look at the third page of the study down
16 at the bottom, the last paragraph. Just read it to
17 yourself, if you would.

18 Are you all done?

19 A Yes.

20 Q Would you agree with the statement that the liquid
21 contained in the dairy lagoon is untreated manure?

22 A I would.

23 MS. KRISTENSEN: Objection, that's not
24 exactly what it says. It talks about lagoons
25 constructed below the seasonal high groundwater table,



1 not all lagoons. So I object that it misstates this
2 document.

3 MR. TEBBUTT: We will let the record speak
4 for itself.

5 BY MR. TEBBUTT:

6 Q Would you also agree with the statement that Ecology
7 does not allow the direct discharge of contaminated
8 wastewater or highly treated wastewater into groundwater
9 for other activities?

10 A I would agree with that.

11 Q What other activities does ecology prohibit direct
12 discharge of contaminated water or highly treated
13 wastewater into groundwater, what kind of activities?

14 A Activities such as state waste discharge to ground.

15 Q From what kind of facilities?

16 A A variety of facilities. It could be everything from an
17 individual pouring -- or not changing his oil correctly,
18 to a fairly sophisticated wastewater treatment plant
19 that applies its wastewater to an alfalfa field.

20 Q Like a municipal sewage treatment system, for instance?

21 A Yeah. Typically those discharge to surface water.

22 Q But there are situations where there are municipal
23 wastewater treatment holding ponds; correct?

24 A Correct. And there are also very large scale
25 Department of Health, I guess, sewage systems, if you



1 will.

2 Q Right. And those are not allowed to discharge to
3 groundwater; correct?

4 A They are intended to be designed so that the effluent
5 that is discharged is essentially cleaned through the
6 biological reaction of the soil.

7 Q Right. And are you familiar with the strength of
8 municipal waste, versus the strength of, for instance,
9 manure waste?

10 MS. KRISTENSEN: Objection, vague.

11 BY MR. TEBBUTT:

12 Q Do you understand the question?

13 A I believe I do, and I don't have specific -- I don't
14 have a specific sense of one facility versus manure. I
15 think manure can be applied in such a manner that it is
16 taken up in --

17 Q But let me ask the question more specifically. Raw
18 human sewage has a certain type of range of contaminant
19 concentration; correct?

20 A Yes.

21 Q And manure from dairy cows has another range of strength
22 of concentration?

23 A Correct.

24 Q Is it fair to say that manure from dairy facilities has
25 higher strength of contaminant concentration than human



1 sewage?

2 MS. KRISTENSEN: Objection, vague. Calls
3 for speculation.

4 THE WITNESS: I think in the way that it's
5 measured in terms of E. coli counts for nutrients or
6 nitrogen loading, yes. I think because manure often is
7 collected and concentrated in the manner that it is
8 handled, that, yes, it would be at a higher
9 concentration of contaminants.

10 Q So is it fair to say it is stronger, if you will? It
11 has more contaminants, more nutrients than human waste?

12 MS. KRISTENSEN: Same objection.

13 THE WITNESS: Again, I think it has to do
14 with how it is handled and managed and concentrated. I
15 think if it is distributed across the soil --

16 BY MR. TEBBUTT:

17 Q But we are not going there, we are just talking about
18 storage in a lagoon, in a liquid sense. We are
19 comparing the human waste that's in a municipal
20 sewage --

21 A Yes.

22 Q -- lagoon versus a dairy lagoon. Is it fair to say that
23 the dairy lagoon waste would be stronger than what is in
24 a human waste lagoon?

25 MS. KRISTENSEN: Objection, incomplete



1 hypothetical, calls for speculation.

2 MS. BARNEY: Join.

3 THE WITNESS: I believe that's correct.

4 BY MR. TEBBUTT:

5 Q On the fifth page of Exhibit 44, there is an option 2.

6 It says, and I read, "Construct a non-discharging lagoon
7 by designing a double membrane lined lagoon with a leak
8 detection system. This option achieves containment of
9 the dairy wastewater and creates a non-discharging
10 lagoon." Would you agree with that statement?

11 MS. KRISTENSEN: Objection, calls for
12 speculation.

13 THE WITNESS: I'm sorry, could you draw my
14 attention to that statement again?

15 BY MR. TEBBUTT:

16 Q Yes, option 2, the first two sentences.

17 A I would agree with that.

18 Q And have you -- strike that.

19 You have been involved in the regulation of dairy
20 waste now for how long, sir, in your capacity with the
21 Department of Ecology?

22 A Well, being refreshed with the VIRE study of 2002, I
23 would say that in my capacity, both as a section manager
24 and as a regional director, since that time.

25 Q And these options that are provided in Exhibit 44, which



1 is a January 18th, 2002 report, provide some options for
2 the Department of Ecology to regulate certain types of
3 dairy lagoons; correct?

4 MS. BARNEY: Objection, the witness hasn't
5 had the opportunity to read the entire document.

6 BY MR. TEBBUTT:

7 Q Would you like to take some time to look at the document
8 to refresh your recollection, Mr. Tebb?

9 A I would.

10 Q Please do.

11 A Okay.

12 Q All right. So is it fair to say that this study was
13 designed to deal with lagoons that are built in or near
14 a high water table?

15 A This study looks to be providing an analysis associated
16 with that phenomena, where lagoons had been built or
17 will be built in areas of high water table.

18 Q And Ecology proposed two options for addressing such
19 lagoons; correct?

20 A That is correct.

21 Q Which of the two options, option 1 or option 2, do you
22 think is more protective of the environment?

23 A Option 2.

24 Q And Ecology, also in this proposal, disagreed with the
25 NRCS proposal for how to deal with lagoons in high water



1 table areas; correct?

2 MS. BARNEY: I'm going to interpose an
3 objection here just to state for the record that
4 Mr. Tebb was not issued a 30(b)(6) subpoena. So he is
5 speaking here in his capacity as an ecology employee and
6 to his knowledge as an ecology employee. He is not
7 speaking for -- in an official capacity for the
8 Department of Ecology as it would be under a 30(b)(6).

9 BY MR. TEBBUTT:

10 Q Go ahead and answer.

11 A Could you restate the question, please.

12 MR. TEBBUTT: Would you mind reading back
13 the question?

14 (Pending question read back.)

15 THE WITNESS: That's correct. Well, I
16 would say the author of this study disagreed with NRCS.

17 BY MR. TEBBUTT:

18 Q And you reviewed this study, you said?

19 A Yes.

20 Q And do you disagree with that statement, that it's --

21 A No, I do not.

22 Q On the last page, page 7 of Exhibit 44, there is a list
23 of additional concerns. The second bullet point talks
24 about discrepancy between construction standards for
25 dairy lagoons and standards required for all wastewater



1 impoundments. Do you agree there is still a discrepancy
2 between dairy lagoons and other types of wastewater
3 impoundments in the state of Washington?

4 A Yes, I agree with that.

5 Q So the requirements for dairy lagoons are less strict
6 than for other impoundments; correct?

7 MS. KRISTENSEN: Objection, vague. Calls
8 for speculation.

9 THE WITNESS: The dairy lagoons are
10 designed under the NRCS standards.

11 Q Which you believe are less protective than the
12 Chapter 173-240 WAC standards for other lagoons?

13 A In my professional opinion as a hydrogeologist and
14 engineering geologist, yes.

15 Q Are you familiar with -- if you take a look at the last
16 page of Exhibit 44, the sixth reference, "Groundwater
17 Quality Assessment, Hornby Dairy Lagoon,
18 Sunnyside Washington, publication 1992." Are you
19 familiar with that study?

20 A No, I am not.

21 Q I have been misspeaking about the exhibit we were just
22 talking to, it's Exhibit 45, that's the Construction of
23 Dairy Lagoons Below the Seasonal High Groundwater Table.
24 It is Exhibit 45, not Exhibit 44, as I have been
25 referring to it. Exhibit 44 is the notice of deposition



1 and the request for production of documents that we
2 talked about in the beginning of the deposition.

3 Do you recall a woman by the name of Marci Ogden,
4 Mr. Tebb?

5 A Yes, I do.

6 Q And what do you recall about Ms. Ogden?

7 A I recall that Marci was a homeowner who had high levels
8 of E. coli and bacteria in her well water and was very
9 concerned that the agricultural practices that were
10 occurring adjacent to her home were affecting her
11 drinking water well. And I had numerous conversations
12 with her over the phone and possibly even via e-mail
13 with her about this subject.

14 MR. TEBBUTT: All right.

15 (Exhibit No. 46 marked for identification.)

16 BY MR. TEBBUTT:

17 Q Sir, you have in front of you Exhibit 46 to your
18 deposition. E-mails from 2005 in which you are copied
19 on at least some of them -- actually, all of them -- and
20 one in which you were the author; correct?

21 A Yes, that is correct.

22 Q And Exhibit 46, is this the first time that you obtained
23 information about Marci Ogden, if you recall?

24 A I believe so. That is correct. There may have been a
25 phone call ahead of this discussion.



1 Q From Ms. Ogden?

2 A Yes.

3 Q So you do recall speaking with her on one or more
4 occasions?

5 A Yes, I do.

6 Q Was it multiple occasions you spoke with her?

7 A I believe so.

8 Q Did you ever meet with her in person?

9 A I think I did. Again, I --

10 Q Did you go out to her house?

11 A I don't think so.

12 Q On page 2 of Exhibit 46 you made a comment at the top of
13 the page about your discussion with her, that she was
14 concerned about having to drink contaminated water from
15 her well as a result of a neighbor involved in the dairy
16 or feed lot industry. And your statement was, "I tend
17 to agree with her." Do you still agree with that
18 statement today?

19 A I do.

20 Q And you made a series of eight recommendations on
21 page 2. Who did you make those recommendations to?

22 MS. KRISTENSEN: Objection, there is
23 nothing about recommendations. The document says
24 "questions." Misstates this document.

25 BY MR. TEBBUTT:



1 Q Well, I will rephrase my question. You listed eight
2 questions for, you say, "We need to think about." Are
3 you referring -- when you say "we," are you referring to
4 the Department of Ecology?

5 A That is correct.

6 Q And so those were questions that you asked in your role
7 as a Department of Ecology employee; correct?

8 A That is correct.

9 Q Have you come to any answers to those questions as the
10 Department of Ecology?

11 A We have made some progress on this issue. For example,
12 we have -- there is a formation of the Lower Yakima
13 Valley groundwater management area, which is, I believe,
14 question four on this e-mail that I wrote. I do also
15 believe the agency is in review of the CAFO permit, and
16 I think we continue to work with our other state
17 agencies, particularly the Department of Ag on our
18 respective roles/responsibilities, and that has evolved
19 over time.

20 Q I'm going to ask you specifically about question three.
21 You say, "What about high nitrate levels? How do we
22 address those?" What has the Department of Ecology done
23 to address those since 2005, if anything?

24 A Within the current configuration of our CAFO permit and
25 the activities that we have with the Department of



1 Agriculture and responding to citizen complaints or
2 activities associated with dairy operations, we have --
3 we continue to work on those issues, which I believe is
4 improving the management of manure. It's not perfect.
5 The relationship and the coordination between our
6 respective agency is it is sort of a delicate dance
7 about who does what when. And I think the staff at the
8 lower level have a better sense of that than I do, now
9 that I'm in a different capacity. But I -- it has
10 always been a challenge.

11 Q Around this time, around 2005, a responsibility for
12 overseeing the dairy regulatory side was given from
13 Ecology to Department of Agriculture, wasn't it?

14 A I believe that is correct, yes.

15 Q So Ecology essentially abdicated its role to the
16 Department of Agriculture to undertake the regulatory
17 structure?

18 MS. KRISTENSEN: Objection as to the word
19 "abdicated."

20 THE WITNESS: I would say that the
21 Washington State legislature provided a different
22 regulatory framework from which the Department of
23 Ecology and the Department of Agriculture would work on
24 this issue.

25 BY MR. TEBBUTT:



1 Q Did EPA approve that delegation of authority from
2 Department of Ecology to Department of Agriculture?

3 A I don't believe they have received the Clean Water Act
4 delegation. I believe they are obligated to pursue
5 that, and I don't know the status of that.

6 Q So you say that the agencies are -- you said generally
7 trying to address the high nitrate levels, but what
8 specifically has Ecology done to forward the ball on
9 reducing nitrate levels since 2005?

10 A We have -- I don't have a specific program or activity,
11 other than the general activities I have mentioned, to
12 provide.

13 Q And the groundwater management area, GWMA, the GWMA that
14 you discussed in this e-mail in 2005, did you have
15 discussions with anyone in Yakima County about
16 implementing a GWMA?

17 A I have had numerous discussions with Yakima County
18 officials, Vern Redifer with Public Works, director,
19 Yakima County. I have probably had conversations with
20 Yakima County commissioners. Mike Lieta, Rand Elliott,
21 and Kevin Bouchey, and their predecessors. I have had
22 conversations with Senator Honeyford,
23 Representative Chandler.

24 Q Did you discuss the possibility of a GWMA with
25 Yakima County in 2005?



1 A That's entirely possible. I have felt that -- I think
2 as my e-mail illustrates, we have more work to do here.

3 Q Yeah, that's fine. Let's hold off on that for now.

4 In your initial discussions with Yakima County
5 officials, did they decline to enter into any kind of
6 GWMA?

7 A I think there was a funding question and a "How are you
8 going to do this" kind of question that they just
9 weren't prepared to answer at that time.

10 Q Was there political pushback about whether to do a GWMA
11 because of the importance of the dairy industry to the
12 economy in Yakima County?

13 MS. KRISTENSEN: Objection, vague. Lack
14 of foundation.

15 BY MR. TEBBUTT:

16 Q Go ahead and answer.

17 A I think in all aspects of the work that the Department
18 of Ecology does there is always a political factor in
19 our decision-making.

20 Q What did Representative Honeyford tell you about the
21 GWMA? Did you have discussions with him about that?

22 A It's Senator Honeyford. The discussions were primarily
23 around whether the Environmental Protection Agency or
24 the Department of Ecology, a state agency, or the State
25 would have a more leading role. And I believe also I



1 had this conversation with
2 Representative Bruce Chandler.

3 Q What was Senator Honeyford's position, do you recall?

4 A I believe Senator Honeyford and
5 Representative Chandler's positions were that the State
6 should remain the primacy regulatory agency on this
7 issue.

8 Q Asking you about question No. 6 on page 2 of Exhibit 46,
9 you say, "Why is it that we have no direct course of
10 action (between agencies) to resolve this issue for the
11 affected public." Has this question ever been answered
12 to your satisfaction?

13 A Partially.

14 Q Okay. Can you explain that for me, please?

15 A Yeah, as I mentioned, with the formation of the GWMA,
16 the review of the CAFO permit, and some of the
17 discussions about the issue of nitrate in groundwater
18 generally across the state, there is a heightened
19 awareness, both at the political level and at the
20 executive level, as well as the technical level. So I
21 think progress has been made since 2002, and maybe 2005
22 when this was written, but we are not there yet.

23 Q Okay. So let's say someone like Marci Ogden were to
24 call today with the same kind of problem: I have
25 nitrates in my well in excess of the maximum contaminant



1 level, what do I do? And she called you, what would you
2 tell her?

3 A I would have her contact Yakima County, groundwater
4 management area, and they actually have a well water
5 testing program. And depending upon the results of
6 those tests, an opportunity or an option for drinking
7 water.

8 Q For an alternative drinking water source?

9 A Correct.

10 Q And there is funding for that?

11 A There is a limited amount of funding for that.

12 Q How much funding is available?

13 A It is part of the recent funding that Senator Honeyford
14 provided for the groundwater management area. As of the
15 last biennial budget, the 2013 budget, there was a grant
16 that was provided for the GWMA, but it went through the
17 Department of Ecology's contracting process. And so we
18 have a contract with Yakima County to do this work. And
19 as an element within that contract, there is a water
20 quality testing and potential off-the-shelf technology
21 options. And subsequently, depending upon the issue and
22 sort of where she falls on a criteria list, an
23 opportunity for replacement water.

24 Q Do you know how much the fund --

25 A I want to say in the order of a hundred thousand



1 dollars. I don't know the exact figure.

2 Q Do you know if anyone has applied to that fund at this
3 point?

4 A I do. I believe we have had two rounds of that process.
5 There was the initial round where we had an extensive
6 mail-out program with Yakima County. We had -- the
7 Department of Health worked with us. We had a variety
8 of workshops that we held throughout the Lower Yakima
9 Valley, both in English and in Spanish. Those workshops
10 were moderately attended.

11 I think we are continuing to try to improve our
12 outreach and our ways to communicate with the affected
13 community. And then subsequently that funding -- that
14 initial funding went away and then we got the 2013
15 funding, the formation of the GWMA, and then we
16 reinstated the program. So there is another round of
17 it.

18 So we are in the second round of that. And there is
19 similarly an outreach program, there is a website you
20 can go to, you can call a number now, and it's a little
21 bit -- it's much better than it was, let me put it that
22 way.

23 Q Is that on the Department of Ecology's website?

24 A No, this is on Yakima County's website.

25 Q Okay. And so the information about how that process is



1 working and how much has been funded, is that available
2 in the Yakima County website?

3 A It's not readily available on the website, but that's
4 information we can get. It's associated with our
5 contract with Yakima County to move forward and then you
6 can see how we have divvied out the work tasks.

7 Q That's information within the possession of Department
8 of Ecology?

9 A Yes.

10 MS. BARNEY: Charlie are you at a breaking
11 point?

12 MR. TEBBUTT: Want to take a break?

13 MS. BARNEY: We have been going for about
14 an hour.

15 MR. TEBBUTT: Would you like to take a
16 break? It's a good time.

17 THE WITNESS: Sure.

18 (Short break taken.)

19 BY MR. TEBBUTT:

20 Q Mr. Tebb, just for the record, you understand you are
21 still under oath?

22 A Yes, sir.

23 Q A little before the break we talked about Exhibit 45 and
24 options for protecting groundwater from dairy lagoon
25 waste. You are both a hydrologist and a soils



1 scientist, would you agree with that statement?

2 A I'm a licensed hydrogeologist and a licensed engineering
3 geologist. A soil scientist is slightly a different --

4 Q As a --

5 A So the physical properties and how they react to soil
6 and water, as opposed to the biological property, like a
7 soil scientist would be more familiar with.

8 Q From the engineering point of view, a lagoon built into
9 earth would not be an impermeable lagoon, would it?

10 MS. KRISTENSEN: Objection, vague.
11 Incomplete hypothetical, calls for speculation.

12 THE WITNESS: A lagoon built on earth, if
13 not properly constructed, would leak.

14 BY MR. TEBBUTT:

15 Q Is there a way that a constructed lagoon, built into the
16 earth, with only using native soils, could be
17 impermeable?

18 A Not to my knowledge.

19 Q It would have to have some kind of synthetic liner in
20 order to potentially keep water from seeping through the
21 bottoms of the lagoons?

22 A That is correct.

23 Q And even then there is questions about whether the
24 liners leak?

25 MS. KRISTENSEN: Objection, calls for



1 speculation. Incomplete hypothetical.

2 THE WITNESS: That is correct.

3 BY MR. TEBBUTT:

4 Q And that's why the recommendation in Exhibit 45 is to
5 have a double-lined system with a leak detection system
6 between the two liners, correct, to see if those two
7 liners are performing as required?

8 MS. KRISTENSEN: Objection, calls for
9 speculation. He didn't write this paper. He doesn't
10 know why she included that or not included that.

11 MR. TEBBUTT: Speaking objections are not
12 necessary.

13 MS. BARNEY: My objection is it misstates
14 the document, the question.

15 BY MR. TEBBUTT:

16 Q You understood the question, didn't you, Mr. Tebb?

17 A Yes. In my professional opinion, option 2 is probably
18 the most appropriate and protective constructed lagoon
19 at the current industry standards.

20 Q Now, you were involved with the -- what became the 2006
21 Concentrated Animal Feeding Operation, NPDES, and State
22 Waste Discharge General Permit, were you not?

23 A Again, I believe my staff or staff that I worked with
24 were primary authors or the assignment. As a manager, I
25 was involved and provided review, but didn't generate



1 the documents.

2 (Exhibit No. 47 marked for identification.)

3 BY MR. TEBBUTT:

4 Q You have in front of you Exhibit 47, 2006 CAFO general
5 permit, NPDES, and State Waste Discharge Permit;
6 correct?

7 A That is correct.

8 Q So you said you were involved in reviewing it; correct?

9 A That is correct.

10 Q Do you believe that this permit provides -- strike that.

11 Are you familiar with the original recommendations
12 from the staff about requiring groundwater monitoring
13 around dairies?

14 A That is correct.

15 Q And the final version did not have groundwater
16 monitoring, did it, as a requirement?

17 A It did not.

18 Q In your professional opinion, is that an adequate
19 response to the concerns you have of the potential for
20 leaking lagoons and over-application of manure to fields
21 and dairy facilities?

22 MS. KRISTENSEN: Objection, vague. Calls
23 for speculation.

24 THE WITNESS: In my professional opinion,
25 the option that was identified in Melanie Kimsey's



1 report, option 2, is the highest protective option. And
2 while this permit doesn't require that, in my
3 professional opinion, if you were to provide an
4 absolutely -- a program that provided minimal, if any,
5 opportunity for leakage, that would be the option to
6 pursue.

7 BY MR. TEBBUTT:

8 Q Take a look at page 9 of the permit. There is a section
9 near the top begins, "Process Wastewater Discharges," if
10 you will read that section. Feel free to read the whole
11 section about S1, Effluent Limitations, if you would
12 like. But this is particularly S1(b), "Groundwater
13 Effluent Limitations." It starts at the very bottom of
14 page 8, which is the subtitle of that section, and
15 continues about halfway onto page 9, if you will read
16 that to yourself.

17 Are you done?

18 A Yes, I am done.

19 Q That section talks about, (as read) "Process wastewater
20 discharges, including seepage from waste storage
21 facilities, may not reduce existing groundwater quality
22 except in certain circumstances," and it lists two
23 circumstances; correct?

24 A That is correct.

25 Q Can you envision any situation where, number one, an



1 overriding consideration of the public interest would be
2 served by discharges into groundwater from storage
3 facilities?

4 A I guess I would answer that if there was some sort of
5 alternative that required protection of human health
6 and/or property. In other words, if there was some sort
7 of natural disaster and there was just no other option,
8 that maybe -- that may fall under this notion of
9 overriding concern for the public interest.

10 Q But not a dairy operation of a dairy lagoon in eastern
11 Washington, that wouldn't fall into the overriding
12 consideration of public interest, would it?

13 A Not in my professional opinion.

14 Q Do you know anyone who has ever applied to the
15 Department of Ecology for an exception that fits these
16 two criteria on page 9 of Exhibit 47?

17 A I personally do not.

18 Q And under any circumstances, do you agree that
19 discharges may not cause or contribute to a violation of
20 state groundwater quality standards?

21 MS. KRISTENSEN: Objection, vague.

22 THE WITNESS: I agree with that statement,
23 if that's the nature of your question.

24 MR. TEBBUTT: That is the nature of my
25 question.



1 (Exhibit No. 48 marked for identification.)

2 BY MR. TEBBUTT:

3 Q Sir, you have in front of you Exhibit 48, a series of
4 e-mails about soil column testing. Can you tell me a
5 little bit more about the context of the questions that
6 you asked in this series of e-mails? Take your time and
7 review it.

8 A Yes, I have read it.

9 MR. TEBBUTT: Can you read my question
10 back please.

11 (Pending question read back.)

12 THE WITNESS: I think this e-mail is in
13 reference to enforcement action in the nature of a
14 letter of warning to DeRuyter Brothers Dairy, and it was
15 in regards to soil testing to see if in fact the soil
16 was being overly loaded with nutrients and/or nitrate.
17 And my understanding was that we had the authority and
18 the permit to do that as a measure of protection in
19 contrast to groundwater monitoring.

20 And let me just say that, even if you had a
21 groundwater monitoring well, in my professional opinion,
22 as I understand how nitrate and contamination moves in
23 the soil, it may indicate a problem but may not indicate
24 when that problem was essentially discharged below the
25 root zone. Water really pushes that loading, and what



1 you will see over time is that loading will move; that
2 is, not taken up through the root zone. It will move
3 through the soil column. And this was a measure of
4 compliance in the vadose zone --

5 Q V-a-d-o-s-e?

6 A It's a term of art in the profession where everything
7 above the water table to, I guess, the surface of the
8 soil essentially constitutes the vadose zone. So it was
9 a measure of being able to determine if there was a
10 history of over-application.

11 Q So the vadose zone is the unsaturated area, essentially;
12 is that right?

13 A That's correct.

14 Q So if there is saturation between a surface impoundment
15 all the way down to groundwater, the vadose zones would
16 essentially not be in existence in that situation, in
17 the scientific definition; correct?

18 MS. KRISTENSEN: Objection, calls for
19 speculation. Beyond the scope of this notice of
20 deposition. He has not been noticed as an expert.

21 BY MR. TEBBUTT:

22 Q Go ahead and answer.

23 A That is my understanding.

24 Q And you are familiar with the nitrogen cycle?

25 A Yes.



1 Q So when manure is applied, it has nitrogen in it,
2 elemental nitrogen?

3 A (Witness nods head.)

4 Q And it transforms in the soil and mineralizes to become
5 nitrate that is then usable potentially by crops;
6 correct?

7 A Correct.

8 MS. KRISTENSEN: I just want to object.
9 Again, beyond the scope of this deposition. And Charlie
10 is testifying in this case. So object to the form of
11 the question.

12 MR. TEBBUTT: These are foundational
13 questions, and I don't appreciate your speaking
14 objections.

15 BY MR. TEBBUTT:

16 Q So when the nutrient is in the soil and it gets below
17 the root zone or the crop, it has nowhere to go but down
18 towards groundwater; correct?

19 MS. KRISTENSEN: Objection, calls for
20 speculation, assumes facts not in evidence, incomplete
21 hypothetical.

22 BY MR. TEBBUTT:

23 Q Go ahead and answer.

24 A Yes.

25 Q So the means for carrying that -- carrying the nitrate



1 down to groundwater would be water itself, because
2 nitrate is very soluble in water; correct?

3 MS. KRISTENSEN: Same objection.

4 THE WITNESS: Application of irrigation
5 water or precipitation from the sky would drive material
6 down through the soil column that wasn't taken up by the
7 plant and eventually into the vadose zone, and
8 eventually into groundwater potentially.

9 BY MR. TEBBUTT:

10 Q So in your e-mail in Exhibit 48, you were concerned
11 about the levels of nitrate in the soil column; is that
12 correct?

13 MS. KRISTENSEN: Objection, leading.
14 Assumes facts not in evidence.

15 THE WITNESS: I was attempting to provide
16 a request that we would take soil samples to determine
17 the loading of nitrate in the soil column.

18 BY MR. TEBBUTT:

19 Q So how far down did you want to take the tests?

20 A Typically, we would take a deep soil sample up to six
21 feet.

22 Q Okay. Why would you do that?

23 A Because it would provide a historical record, if you
24 will, of application of -- or, if you will, loading of
25 nitrogen and nitrate in the soil column at various



1 depths within the soil. It would infer to us either an
2 over-application on the field or some other problem
3 essentially.

4 Q And that would be a more recent history, the six feet
5 would give you an indication of the more recent history
6 of applications of manure; is that correct?

7 A I think that's hard to say exactly because it depends on
8 how often the field is farmed, the amount of water
9 that's been on over time. The nitrogen actually can get
10 locked up if the field hasn't been irrigated or farmed
11 for sometime. It can just sit there until some time the
12 field gets cultivated and again the water drives it. So
13 it's hard exactly to make a one-for-one correlation
14 there.

15 Q Sure. But if it's a field that's regularly cultivated,
16 regularly irrigated, would you be concerned that the
17 nitrate would be driven down to the groundwater from
18 those regular activities?

19 A Yes.

20 MS. KRISTENSEN: Same objections.

21 THE WITNESS: Yes, I would be concerned.

22 BY MR. TEBBUTT:

23 Q And you could tell by testing in the top six feet, if
24 you will, what recent activity has impacted those top
25 six feet, wouldn't you?



1 A With the normal scenario that we described of a regular
2 cultivated field with a regular irrigation application,
3 that is my assumption.

4 Q And with manure application records that would be
5 available for the dairy facilities that are required by
6 the dairy nutrient management plans; is that correct?

7 A That is correct.

8 (Exhibit No. 49 marked for identification.)

9 BY MR. TEBBUTT:

10 Q You have in front of you Exhibit 49, which includes an
11 e-mail from you to other people at the Department of
12 Ecology. And was this an e-mail related to the e-mail
13 that we just discussed in Exhibit 48, at least in part
14 related to Exhibit 48?

15 A I'm sorry, can you restate the question now?

16 Q Yes, I will restate the question. Exhibit 48 was
17 involving a letter of warning issued to
18 DeRuyter Brothers Dairy; correct?

19 A Exhibit 48, yes, that's correct.

20 Q And this Exhibit 49 includes some reference for the
21 attorney for DeRuyter Brothers Dairy; correct?

22 A I believe that is correct. I simply -- Lori Terry
23 Gregory, who was a Foster Pepper attorney, I can't
24 recall exactly if she was the DeRuyter attorney or not.

25 Q But it says right here in the third line about



1 DeRuyter Dairy; is that correct?

2 A Yes, that is correct.

3 Q What I want to ask you about is not so much about that,
4 but the second paragraph where it says, (as read) "I
5 share your concern and perspectives on the optics.
6 Furthermore, I don't really have a good sense or
7 understanding on where we are headed (as a state and
8 agency) with the Lower Valley Yakima County ground
9 nitrate problem other than to kick the can down the road
10 more."

11 What do you mean by kicking the can down the road
12 more there?

13 A I felt as a professional geologist, hydrogeologist, and
14 engineering geologist that we could be doing more around
15 providing monitoring and basically understanding of the
16 system in our permit. And as you saw in the Exhibit 47,
17 we did not require groundwater monitoring as part of
18 that.

19 Q So it is your belief that the Department of Ecology
20 should require groundwater monitoring?

21 A Yes, I do.

22 Q And this e-mail was, at least in part, a response to a
23 Washington Court of Appeals decision in CARE versus
24 Department of Ecology where the 2006 permit was upheld
25 by the Court of Appeals; correct? And this is your



1 response to that?

2 A Yes, that is my response to that.

3 Q So in the next paragraph, you say, "This one is tough
4 for me because it seems like four years ago all over,
5 when we acknowledged we had a problem but due to
6 priorities chose not to do anything."

7 What were the priorities that caused Ecology not to
8 do anything?

9 A I can't recall exactly, but I think they were probably
10 more focused on storm water and other activities that
11 the water quality program was embarking upon.

12 Q So essentially Ecology let this problem fester for years
13 because of its failure to adequately require monitoring
14 in the 2006 permit; correct?

15 MS. KRISTENSEN: Objection, calls for
16 speculation.

17 THE WITNESS: I believe the Department of
18 Ecology has been wrestling with this issue for a number
19 of years.

20 BY MR. TEBBUTT:

21 Q And you believe they were remiss in their duties in not
22 requiring more strict permitting in the 2006 permit;
23 correct?

24 A In my professional opinion, I would agree. I do not
25 speak for the agency --



1 Q I understand that. Thank you.

2 Mr. Tebb, are you familiar with the new draft permit
3 that has been circulating for the CAFO general permit,
4 NPDES, and waste discharge general permit?

5 A I'm familiar that we are in the process of renewing that
6 permit. I have not read it.

7 Q Have you seen it?

8 A I have not.

9 Q Has your staff seen it?

10 A That's entirely possible, yes.

11 Q So are you familiar with it at all; have you talked with
12 anyone about what proposals are listed in the draft
13 permit?

14 A Not specifically, no. My duties have been more focused
15 on water resource issues over the past several years.

16 Q Do you know if the present draft permit or have you had
17 any discussions with anyone about whether the present
18 draft permit requires groundwater monitoring?

19 A I think there have been discussions at the policy level
20 and at the technical level within the agency, but I have
21 not been aware and have not participated in those
22 discussions.

23 Q Do you know whether groundwater monitoring is a
24 component of the present draft permit as it sits?

25 A My understanding is that it is not a component.



1 Q Have you made any comments to anyone within Ecology
2 about the failure to require groundwater monitoring?

3 A I have not.

4 Q Why not?

5 A I believe I have expressed my professional opinion on
6 this matter at the previous cycle. I believe that the
7 Department is working with a sister agency, the
8 Department of Agriculture, to come up with a program
9 that provides that protection in a different manner.

10 Q Do you believe it is your responsibility, as someone
11 with a professional opinion, that groundwater monitoring
12 is necessary to give your input into the present permit
13 process?

14 MS. KRISTENSEN: Objection, argumentative,
15 calls for speculation, lack of foundation.

16 THE WITNESS: If I understand your
17 question to ask should the Department of Ecology ask me
18 as a professional hydrogeologist for my opinion on this
19 matter?

20 BY MR. TEBBUTT:

21 Q Yes.

22 A If they did, I would provide it, and it would be that
23 groundwater monitoring should be required.

24 Q My question is a little bit different. As a
25 professional manager, as the head of the central office,



1 as someone who has worked for the Department of Ecology
2 now for 22 years, do you feel that it's your duty to
3 give your advice to your staff and to the water quality
4 management division without them having to ask for it?

5 A Yes, I would.

6 Q And you haven't done that yet?

7 A I have not. I have been remiss in that.

8 Q I appreciate your honesty, sir.

9 When EPA released its report on Yakima groundwater
10 quality in the fall of 2012, you were provided with an
11 advance copy of that study; correct?

12 A Yes, I was.

13 (Exhibit No. 50 marked for identification.)

14 BY MR. TEBBUTT:

15 Q Sir, you have in front of you Exhibit 50. It's an
16 e-mail from Marie Jennings at EPA, conveying the EPA
17 groundwater report on the Yakima Valley; correct?

18 A That is correct.

19 Q Did you participate in the briefing that EPA did that's
20 referenced in this e-mail?

21 A Yes, I did.

22 Q Did you ask questions of EPA about the scientific
23 protocols they used in conducting the study and coming
24 to the conclusions they did in the report?

25 A I recall at the briefing a robust discussion on a



1 variety of topics, some of which had to do with the data
2 that was collected, the nature of how it was collected,
3 and the information that was produced.

4 Q Have you reviewed the study yourself?

5 A I have read it.

6 Q Do you take issue with any of the findings in the study?

7 A I think there are issues of debate around how the
8 Environmental Protection Agency made its conclusions and
9 how it sort of, if you will, its sampling strategy. But
10 I was not surprised by the results or the conclusions of
11 the study.

12 Q When you say you are not surprised by the results or
13 conclusions, why is that?

14 A Because of my professional opinion, I believe that
15 groundwater contamination has/is occurring at these
16 locations.

17 Q Around the dairies?

18 A Correct.

19 Q In your opinion, is part of the reason why the 2006
20 permit was changed from originally having groundwater
21 monitoring required to not having groundwater monitoring
22 required, was the political pressure from the dairy
23 industry a part of that equation?

24 MS. KRISTENSEN: Objection, lack of
25 foundation. Calls for speculation.



1 THE WITNESS: I think there were a variety
2 of conversations, both the policy and technical level,
3 around whether groundwater monitoring was the best
4 mechanism to determine whether a grower or a person who
5 is applying the application of manure, how to provide
6 that information to the dairy or to the feed lot.

7 BY MR. TEBBUTT:

8 Q Right, but that's not my question. My question is:
9 Were you aware of -- I will rephrase my question -- were
10 you aware of the pressure from the dairy industry on
11 Department of Ecology and Department of Ag to not
12 require groundwater monitoring?

13 MS. KRISTENSEN: Same objection.

14 THE WITNESS: I was aware of, I guess I
15 would say, conversations with the dairy industry with
16 our agency. I can't say whether that was pressure or
17 not. I'm not sure the nature of the word pressure.

18 BY MR. TEBBUTT:

19 Q Did you have any discussions with anyone in the dairy
20 industry about the permit requirements in 2006 or the
21 2006 permit requirements?

22 A Not to my recollection.

23 Q Have you had any discussions with anyone in the dairy
24 industry about the new proposed permit?

25 A I have not.



1 Q Have you ever had discussions with any of the principals
2 of the Bosma dairies?

3 A I have not.

4 Q Have you ever met Mr. Henry Bosma?

5 A It is entirely possible.

6 Q You don't recall specifically?

7 A I don't recall specifically. There is a variety of
8 meetings I attend, and they may be on a variety of
9 topics, or I'm engaged with the local community and
10 business and farmers and things of that sort.

11 Q Were you in attendance at a meeting with a number of
12 people from Department of Ecology in 1997, shortly after
13 the dairies received notices of intent to sue from CARE,
14 my client, over the Clean Water Act discharges?

15 A I was aware of your lawsuit. I was actually the
16 shorelands and environmental assistant section manager
17 at the time, so I was focused on shoreland issues and
18 wetland issues in Eastern Washington as a whole.

19 Q So you didn't participate in any of those meetings
20 between Ecology and the dairy industry?

21 A No, sir.

22 Q Do you know Jay Gordon?

23 A Yes, I do.

24 Q What interactions have you had with Jay Gordon?

25 A Very minor. They are typically at a very high level,



1 either in conversations with the dairy federation
2 locally or the farm bureau, but they are typically -- he
3 is a participant at a function or at a meeting and it
4 could be a conference, it could be a variety of things.

5 Q Have you had any discussions with him about the
6 regulation of the dairy industry in the state of
7 Washington?

8 A Me personally?

9 Q Yes.

10 A No.

11 Q How about the same question with respect to Dan Wood?

12 A I'm sorry, I don't know --

13 Q Do you know Dan Wood?

14 A I don't know Dan Wood.

15 Q Okay. Do you know Bill or Bob Dolsen?

16 A It sounds like a dairy family.

17 Q Dolsen's Cow Palace, do you know them at all?

18 A I know the Cow Palace and I have heard of the name.

19 Q But you haven't met them?

20 A I haven't met them.

21 Q How about George DeRuyter, have you ever met
22 George DeRuyter?

23 A I have not met Mr. DeRuyter but I have probably met
24 relations of DeRuyter.

25 Q Have you met Dan DeRuyter, his son?



1 A I believe so.

2 Q Do you know in what context?

3 A I believe he is a participant on the Groundwater
4 Management Area as an advisory board member.

5 Q Do you participate in the Groundwater Management Area?

6 A I do; I'm an alternate.

7 Q So you are not there all the time?

8 A I try to be there as much as I can, but I'm not there
9 all the time.

10 MR. TEBBUTT: Why don't we take a short
11 break. We are having some more copies made of some
12 documents today. I'm getting close to done.

13 MS. BARNEY: Okay.

14 (Discussion held off the record.)

15 MR. TEBBUTT: Let me go on the record
16 right now and we will take care of this before I forget,
17 that if there are documents that we receive later after
18 this deposition is concluded this morning, I would like
19 to reserve my right to ask Mr. Tebb some additional
20 questions about documents that we receive after we
21 conclude this deposition today.

22 MS. BARNEY: Well, Ecology would object to
23 leaving the deposition open, even for that limited
24 purpose, but maybe we could -- there might be a way that
25 we could have a written, perhaps, response.



1 MR. TEBBUTT: What I would suggest is that
2 we just continue by telephonic deposition so that we can
3 not have to appear in person, we can just ask some
4 follow-up questions, if any, telephonically.

5 MS. BARNEY: On specific documents and for
6 that limited purpose?

7 MR. TEBBUTT: Yes. Not that it's left
8 open for us to go back, but just for documents that we
9 receive after -- that we receive after the disk that we
10 receive this morning.

11 MS. BARNEY: For that limited purpose
12 then?

13 MR. TEBBUTT: Yes.

14 MS. BARNEY: Okay.

15 MR. TEBBUTT: All right. Let's take a
16 break.

17 (Short break taken.)

18 MR. TEBBUTT: On the record, any
19 additional documents that we find that are produced
20 today, we can ask questions about with follow-up
21 questions.

22 (Exhibit No. 51 marked for identification.)

23 BY MR. TEBBUTT:

24 Q Mr. Tebb, you have in front of you Exhibit 51, an agenda
25 draft for a meeting that you attended; correct?



1 A Yes.

2 Q And did you make a presentation on the Yakima River
3 Basin at this meeting?

4 A Yes, I did.

5 Q Was it a PowerPoint presentation?

6 A I believe so.

7 Q Do you know if that PowerPoint presentation has been
8 provided on the disk provided today?

9 A I do not know. I would be glad to provide it, though,
10 if it is missing.

11 Q We would like to see that PowerPoint presentation.

12 Did you have other notes that you would have made to
13 help you present on that day?

14 A The notes and materials would primarily have been what
15 the USGS provided in the context of the John Vaccaro
16 report in its relationship to illustrating and
17 demonstrating the hydrologic continuity of surface and
18 groundwater.

19 Q Right. But my question is: Did you prepare separate
20 notes to help you make a presentation?

21 A Typically, those would be part of just sort of the
22 making of the presentation itself. There might be, but
23 I don't -- I don't recall a specific set of notes for
24 this particular presentation.

25 Q Could you search to see if you have notes --



1 A I will.

2 Q -- from that presentation?

3 A Yeah, it's not my normal style. I kind of do it as I'm
4 creating the presentation, but I can look.

5 Q So you normally would do the presentation, and just use
6 that as the outline --

7 A Yeah, I would have my reference materials and I would
8 just start building the presentation.

9 Q I understand. I do something very similar when I do
10 them myself.

11 A Okay.

12 Q The USGS study that you are referring to, did it come
13 out right around this time?

14 A Yes, it did.

15 Q And what were its conclusions, do you recall?

16 A Its conclusions were significant in that the Department
17 of Ecology was required as part of a settlement to help
18 fund and participate in the development and creation of
19 this report, both by funding as well as participating in
20 some of the technical reviews.

21 The report basically concluded that groundwater and
22 surface water are hydrologically connected, which means
23 there is a relationship.

24 Q It's not a stunning scientific finding, is it, as a
25 hydrogeologist yourself?



1 A It is not a stunning finding, but you would be surprised
2 how information and methods of doing business were
3 different without that information in the context of how
4 we managed water quantity. We managed water quantity
5 and issued permits in two separate buckets, groundwater
6 and surface water. And this report basically said we
7 shouldn't be doing that, that in fact the water in the
8 Yakima basin is a single resource.

9 Q And so if, for instance, an entity like the dairy
10 industry is polluting the groundwater, it will be
11 hydrologically connected to the surface waters in that
12 area; correct?

13 MS. KRISTENSEN: Objection, incomplete
14 hypothetical, assumes facts not in evidence.

15 BY MR. TEBBUTT:

16 Q Isn't that a fair inference?

17 A I think that's a fair inference. It would be dependent
18 upon space and time. There is a timing difference as it
19 relates to groundwater when it expresses itself into a
20 surface water body.

21 Q Right. But the general principle that the aquifer in
22 the Lower Yakima County Valley, what is known as the
23 Granger drain, that is it hydrologically connected to
24 the Yakima River is a fairly certain scientific
25 principle, is it not?



1 MS. KRISTENSEN: Same objection.

2 THE WITNESS: That is correct.

3 BY MR. TEBBUTT:

4 Q Certainly more likely than not as a scientist you could
5 say that; correct?

6 MS. KRISTENSEN: Same objection.

7 THE WITNESS: In my professional opinion,
8 that's correct.

9 BY MR. TEBBUTT:

10 Q And even as I said before, it's a far higher degree of
11 certainty than more likely than not, would you agree?

12 MS. KRISTENSEN: Assumes facts not in
13 evidence, beyond the scope of this deposition notice.
14 He is not an expert in this case.

15 BY MR. TEBBUTT:

16 Q Go ahead.

17 A Reviewing, and in my experience as a licensed
18 hydrogeologist and geologist, engineering geologist, and
19 reviewing the USGS study report that was prepared by
20 doctoral-level geologists from the United States
21 Geological Survey, provides, I think, ample evidence and
22 scientific evidence to make that conclusion.

23 Q So we talked about one of the bullet points was
24 potential legal impacts. What were the potential legal
25 impacts that you discussed?



1 A This was more specifically two parts. One was the water
2 quantity issue that I referred to earlier in regards to
3 how water rights are permitted and issued and how they
4 relate to the -- what we call the priority system. In
5 other words, to achieve a water right, the moment that
6 you achieve it, essentially when you file an
7 application, you have what's called a priority date.
8 And so what we basically had was, is we had a series of
9 surface water rights that were issued priority dates.
10 And in the Yakima Basin to be a senior water right you
11 have to have a pre-May 10th, 1905 water right. The
12 groundwater rights that we issued were subsequently
13 after World War II, and therefore largely junior to that
14 senior surface water right. So the relationship that I
15 was speaking of in terms of the legal impacts is the
16 fact that we have gone through a 30-year,
17 30-million-plus-dollar adjudication in the Yakima Basin,
18 solely focused on the surface water rights. There is
19 almost double the amount of information and process we
20 have to go through to resolve groundwater rights in the
21 context of an adjudication.

22 So what I was speaking of was my predecessors have
23 created an out-of-priority use of groundwater in the
24 Yakima Basin that's dependent upon a federal irrigation
25 project that basically asks the state of Washington to



1 secure that water for its use as of May 10th, 1905. And
2 so we had this issue here that -- I'm still dealing with
3 it today.

4 Q Let me ask you, the dairies in the Lower Yakima Valley,
5 use -- are you familiar with how much water they use?

6 A I'm familiar that they use a lot of water, I'm not
7 familiar with how much exactly.

8 Q And that they have been given water rights?

9 A They have been given water rights.

10 Q But are they -- are those water uses regulated in any
11 respect?

12 A They are regulated in the context of either the stock
13 water permit -- stock water exemption, or they have an
14 actual groundwater permit. So, in that instance, that's
15 the form of regulation that they have. They are not --
16 if you mean during a time of drought that we would
17 interrupt them, we have not resolved those issues yet.
18 And that was what I was trying to illustrate, that we
19 have, in my opinion, out-of-priority water use that is
20 not being treated under the same regulatory regime that
21 surface water rights are being treated under the
22 Yakima Superior Court.

23 Q So the dairies are the out-of-priority water use that
24 you are referring to? Because they have been subsequent
25 to World War II?



1 MS. KRISTENSEN: Objection, lack of
2 foundation.

3 THE WITNESS: In my opinion, they have a
4 junior priority date to the May 10th, 1905 water right
5 that was associated with the Yakima irrigation project.

6 BY MR. TEBBUTT:

7 Q Did you discuss any potential legal impacts of the
8 hydrological connection that was found in the study to
9 pollution discharges into the Yakima Basin?

10 A Yes. I think that was the context of the lower subject
11 here, demonstrating that there was an observed high
12 nitrate contamination in the shallow groundwater in the
13 Yakima Basin, and therefore making a similar conclusion
14 or analogy that this water then subsequently gets into
15 surface water and that's a violation of our state water
16 quality laws, as well as the Clean Water Act.

17 Q So those discharges to surface water from groundwater
18 would add nutrients to the surface water; correct?

19 MS. KRISTENSEN: Objection, assumes facts
20 not in evidence, incomplete hypothetical.

21 THE WITNESS: That was my conclusion.

22 BY MR. TEBBUTT:

23 Q And those additional nutrients will change water quality
24 in the Yakima Basin; correct?

25 MS. KRISTENSEN: Same objection.



1 THE WITNESS: They will add to the
2 degradation of the quality of the water quality.

3 BY MR. TEBBUTT:

4 Q What types of degradation?

5 A I think in the report some of the things are large
6 E. coli, BOD issues, suspended sediments, chlorine,
7 other kinds of contaminants that are associated with
8 typical manure configuration.

9 Q So your concern with manure contamination of groundwater
10 and its hydrological connection to surface water
11 included E. coli?

12 A Potentially.

13 Q What about other pathogens?

14 A I would imagine the same for them.

15 Q Okay. Do you also have concerns about surface water
16 runoff from manure applied to fields?

17 MS. KRISTENSEN: Same objection, lacks
18 foundation, incomplete hypothetical.

19 THE WITNESS: I would.

20 BY MR. TEBBUTT:

21 Q So the same issues of nutrient contamination, nutrient
22 and loading?

23 MS. KRISTENSEN: Same objection.

24 THE WITNESS: Yes.

25



1 BY MR. TEBBUTT:

2 Q And also exposure to pathogens?

3 A Yes.

4 Q So humans could be exposed to those pathogens in the
5 surface water?

6 MS. KRISTENSEN: Objection, calls for
7 speculation, incomplete hypothetical.

8 THE WITNESS: Yes. Actually, one of the
9 beneficial uses that the water quality criteria provides
10 is recreational use of a water body.

11 BY MR. TEBBUTT:

12 Q So if pathogens were affecting the surface waters, those
13 would negatively impact those recreational values;
14 correct?

15 MS. KRISTENSEN: Same objection.

16 THE WITNESS: That is my understanding.

17 BY MR. TEBBUTT:

18 Q And potentially put people at risk of health impairment?

19 MS. KRISTENSEN: Calls for speculation,
20 objection.

21 THE WITNESS: Yes, that is correct.

22 MR. TEBBUTT: That's all I have. Thank
23 you.

24 MS. KRISTENSEN: Mr. Tebb, I have a couple
25 of follow-up questions for some of the things that you



1 were asked about earlier.

2 (Discussion held off the record.)

3

4

EXAMINATION

5 BY MS. KRISTENSEN:

6 Q Mr. Tebb, again I'm Deb Kristensen, I'm counsel for the
7 dairy defendants in the four cases that you have been
8 noticed here to appear for. And we have gone through a
9 couple of different documents, and I will ask you to
10 first turn to Exhibit 45.

11 I know Mr. Tebbutt asked you a bunch of questions
12 about this, but the paper is titled "Issue Paper." Can
13 you tell me what an issue paper is?

14 A Yes. An issue paper, or white paper depending upon the
15 nomenclature, is typically a paper that would be
16 produced by a professional hydrogeologist or geologist,
17 in this instance, to provide a discussion on what
18 options or approaches, based on science and based on the
19 current standard of practice, would be used to
20 essentially implement or improve our regulations.

21 Q Do you know why this specific issue paper, Exhibit 45,
22 was written?

23 A I believe it had to do in the context of whether we
24 would be requiring lined manure lagoons in the context
25 of the CAFO permit.



1 Q I see the title on Exhibit 45 is a "Construction of
2 Dairy Lagoons Below the Seasonal High Groundwater
3 Table." Do you see that?

4 A Yes.

5 Q And then if you turn to page 4 of that same exhibit,
6 under the paragraph that begins with "Options," and
7 before we get to option 1 there, the last sentence says,
8 "There are two main options for designing dairy lagoons
9 in areas where there is a seasonally high groundwater
10 table." Do you see that?

11 A I do.

12 Q Is this issue paper meant to address only those lagoons
13 where there is a seasonally high groundwater table?

14 A That is my understanding.

15 Q Okay. Is there -- in your opinion, is there a
16 seasonally high groundwater table in the Yakima Valley?

17 A There can be, based on irrigation-induced, artificially
18 elevating the groundwater table.

19 Q Do you know where the Cow Palace area is located?

20 A I do.

21 Q Do you have an opinion as to whether or not there is a
22 seasonally high groundwater table at the Cow Palace
23 location?

24 A My professional assessment and judgment of that is that
25 there is not.



1 Q Okay. Do you know where the Liberty Bosma area is?

2 A I believe it is further down in the basin; and I don't
3 know exactly where it is.

4 Q Do you have an opinion as to whether or not there is a
5 seasonally high groundwater table at the Liberty Dairy?

6 A Again, not knowing its exact location, but if it is in
7 the lower portions below, say, the canals, either the
8 Rosa or Sunnyside Canal, that's a potential.

9 Q I will represent to you that the Liberty Dairy is
10 adjacent and close to the Cow Palace Dairy.

11 A Okay.

12 Q Do you know where the DeRuyter, the DNA dairy is
13 located?

14 A I do not.

15 Q Do you know where the George DeRuyter dairy is located?

16 A I do not.

17 Q So do you have an opinion one way or another as to
18 whether the recommendations in Exhibit 45 apply
19 specifically to the lagoons in any of the four dairies
20 at issue here?

21 A I do not have an opinion on that.

22 Q Mr. Tebbutt also asked you about Exhibit 47. And page 9
23 of that report, which has the Bates number CARE 26421 --
24 do you see that one -- yeah, 9 of 34.

25 Mr. Tebbutt asked you about the language there at



1 the top of that page, and that's under "Effluent
2 Limitations" of S1 and subparagraph B, "Groundwater
3 Effluent Limitations." The top of that sentence that we
4 didn't go over, can you read that out loud?

5 A On top of page 9, the top sentence?

6 Q Yes.

7 A Yes. "The permittee must only apply manure, litter, and
8 processed wastewater to lands as specified in its
9 nutrient management plan."

10 Q Okay. So what is your understanding of what that
11 language means? If a dairy applies its processed
12 wastewater in accordance with this nutrient management
13 plan, then it's in compliance with this provision?

14 A That is my --

15 MR. TEBBUTT: Objection, calls for a legal
16 conclusion.

17 BY MS. KRISTENSEN:

18 Q Is that your understanding?

19 A That is my understanding.

20 Q In the paragraph below 1 and 2 there, Mr. Tebbutt,
21 again, drew your attention to the first sentence there
22 of that language. The second sentence there reads,
23 "Contaminant concentrations of chemicals and nutrients
24 found in saturated soils that have been applied at
25 agronomic rates for agricultural purposes are exempt



1 from all requirements of," and then it lists chapter
2 173-200 WAC, and it goes on.

3 Do you understand what an "agronomic rate" is as
4 that term is used in that provision?

5 A Yes, I have a basic understanding.

6 Q Can you describe?

7 A My understanding of that is that the materials or the
8 contaminant concentrations of the manure, if you will,
9 is applied to the soil in such a manner and in such a
10 concentration that the crop would basically take that
11 material up in its production --

12 Q Okay. And --

13 A -- as a form of fertilizer.

14 Q On the agronomic rates that are referred to here, are
15 they reflected in the nutrient management plans?

16 A That is my understanding.

17 Q So if a dairy is applying its nutrients at agronomic
18 rates consistent with the nutrient management plan, it
19 is your understanding they are complying with this
20 provision?

21 A That is correct.

22 MR. TEBBUTT: Objection, calls for a legal
23 conclusion.

24 BY MS. KRISTENSEN:

25 Q Turn to Exhibit 50, if you could. This is the e-mail



1 that Mr. Tebbutt was asking you to get into your
2 conversation about the EPA study that came out in 2012.
3 During the course of your discussion with Mr. Tebbutt,
4 you said words to the effect of -- and I don't want to
5 put words in your mouth -- but something along the lines
6 of that you believe groundwater contamination is
7 occurring around the dairies in the Yakima Valley; is
8 that fair? Is that --

9 A I think there is a high probability that contamination
10 is potentially coming from those facilities, yes.

11 Q Do you have an opinion as to whether there are other
12 potential sources of nitrate contamination?

13 A I do. Yes, I believe there are other sources of
14 contamination such as irrigated crop land, orchards,
15 septic systems, a variety of things.

16 Q Are there any efforts at the Department of Ecology to
17 identify those potential other sources of nitrate
18 contamination?

19 A Yes. Under the Groundwater Management Area, advisory
20 board process, we have just embarked upon a process what
21 we are calling a nutrient loading model to determine
22 just that.

23 Q Okay. How far along is that process? Where is the
24 process?

25 A Unfortunately, it is not as far along as we would like.



1 But we just authorized, as of, I believe, last week,
2 funding to be spent on that issue.

3 Q Is there a lead person in charge of that effort or is it
4 a group effort? Could you describe that --

5 A Yakima County is the contracting agency as a grant with
6 us, so it would have to be a conversation with
7 Yakima County to determine who is the lead on that.

8 Q Okay. Are there any kind of timelines or milestones set
9 up for what the group is going to do to identify other
10 sources of potential nitrate contamination?

11 A Yeah. I believe that would be part of the scope of work
12 that will be developed for the funding that's just been
13 released into this nitrogen-loading model.

14 Q It sounds like it's pretty early in that process; is
15 that fair?

16 A Yes, ma'am.

17 Q Have you been directly involved with those efforts?

18 A I have not.

19 Q Who from Ecology has been?

20 A Charlie McKinney, our water quality section manager.

21 Q Where is he located?

22 A He is in Yakima, Washington. He is the actual board
23 member; I'm his alternate.

24 Q But he works for Ecology?

25 A Yes, ma'am.



1 Q In any of the documents that have been produced today,
2 to the extent there are any documents related to these
3 efforts to identify other potential sources of nitrates,
4 either through your work as an alternate or
5 Mr. McKinney's work, are those documents included in the
6 materials that were produced today or will be produced
7 shortly; do you know?

8 A I do not know. I don't think they were because of the
9 nature of the request for the document production.

10 Q If you turn to Exhibit 51, I notice this is a draft
11 agenda, and I realized it just came off the desk. Did
12 this change in any meaningful way from the time it was
13 drafted to the time it became final?

14 A I do not believe so.

15 Q Who attended, ever -- do you recall who attended this
16 meeting?

17 A I don't. It looks to be at a fairly high level, though,
18 because those are myself, as a regional director;
19 Jeannie Summerhays is a regional director out of our
20 Northwest Regional Office; and then Josh Baldi was the
21 special assistant to the director on water quality
22 issues.

23 Q Where is Mr. Baldi, is he here?

24 A Mr. Baldi is currently employed by the Department of
25 Ecology at the Northwest Regional Office, regional



1 director. He took Jeannie's place.

2 Q Okay. Are you aware that there are consent orders that
3 each of the four dairies -- that are at issue today have
4 been -- have entered into with the EPA?

5 A I am aware --

6 MR. TEBBUTT: Objection to the extent it
7 mischaracterizes what they are.

8 THE WITNESS: Yes. I'm aware of a form of
9 consent or some legal document that requires the dairies
10 to do certain things.

11 BY MS. KRISTENSEN:

12 Q Have you ever reviewed any of those consent orders?

13 A I have not.

14 Q Prior to those being entered into between the dairies
15 and EPA, did you have any discussions with EPA about the
16 need or their efforts to enter into consent orders with
17 the dairies?

18 A I did not.

19 Q Okay. Do you know if anyone at Ecology did?

20 A That's entirely possible. The Environmental Protection
21 Agency pretty much held that material and their
22 subsequent regulatory action pretty tight.

23 Q I know Mr. Tebbutt asked you previously about the 2012
24 EPA study that was conducted. Did you have an
25 opportunity to actually review that and provide any



1 comments back to the EPA on that study?

2 A I personally did not. I believe our staff does, either
3 both at our regional office in Yakima,
4 Charlie McKinney's staff, or possibly someone at
5 headquarters I wouldn't be aware of.

6 Q You think someone at Ecology may have provided
7 comments --

8 A I'm not specifically aware of that.

9 Q Are you aware of any comments that were provided by
10 Ecology back to EPA on their study?

11 A As I said, I believe there were some comments. I'm not
12 specifically aware of them, nor their nature.

13 Q Okay.

14 MS. KRISTENSEN: That's all I have.

15 MR. TEBBUTT: Okay. I just have one
16 follow-up.

17

18 EXAMINATION

19 BY MR. TEBBUTT:

20 Q With regard to Exhibit 47, Mr. Tebb, Ms. Kristensen
21 asked you some questions about the language on page 9.
22 If you would turn to that, please.

23 Ms. Kristensen asked you questions about whether
24 applications at agronomic rates -- if a facility was
25 applying at agronomic rates, if they would then be in



1 compliance with the permit, and I believe you answered
2 yes; is that correct?

3 A Yes.

4 Q Doesn't the last clause of the last sentence of
5 paragraph B, which states, "If those contaminants will
6 not cause pollution of any ground waters below the root
7 zone," change your -- doesn't that language change your
8 opinion about whether compliance would be achieved?

9 A Absolutely.

10 Q So if the contaminants reach groundwater, then
11 compliance will not be achieved; correct?

12 A That is correct.

13 MR. TEBBUTT: That's all I have. Thank
14 you. We will reserve the opportunity to -- on the
15 record ask further questions pending the provision of
16 additional documents.

17 (Proceedings adjourned at 11:00 a.m.)

18 (Signature reserved.)

19

20

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24

25



1 C E R T I F I C A T E

2 I, Laura Gjuka, a Certified Court Reporter in
3 and for the State of Washington, residing at
4 University Place, Washington, authorized to administer
5 oaths and affirmations pursuant to RCW 5.28.010, do
6 hereby certify;

7 That the foregoing Verbatim Report of Proceedings
8 was taken stenographically before me and transcribed
9 under my direction; that the transcript is a full, true
10 and complete transcript of the proceedings, including
11 all questions, objections, motions and exceptions;

12 That I am not a relative, employee, attorney or
13 counsel of any party to this action or relative or
14 employee of any such attorney or counsel, and that I am
15 not financially interested in the said action or the
16 outcome thereof;

17 That upon completion of signature, if required, the
18 original transcript will be securely sealed and the same
19 served upon the appropriate party.

20 IN WITNESS HEREOF, I have hereunto set my hand this
21 ____ day of _____, 2014.

22

23

24

25

Laura Gjuka, CCR No. 2057

1 DEPOSITION OF THOMAS TEBB
2 CORRECTION AND SIGNATURE CERTIFICATE

3 I, _____, hereby certify under
4 penalty of perjury of the laws of the state of
5 Washington that I have read my foregoing deposition
6 taken the _____ day of _____, 2014, and
7 that to the best of my knowledge the deposition is true
8 and accurate with the exception of the following
9 corrections:

10 PAGE LINE CORRECTION
11
12
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14
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16
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20

21 Executed at _____, Washington on
22 the _____ day of _____, 2014.

23
24 _____
25 (Deponent's Signature)



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