

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

BOARD MEETING)
MARCH 23, 2012)

TRANSCRIPT OF PROCEEDINGS

Heard at Room 111 of the Metcalf Building
1520 East Sixth Avenue
Helena, Montana
March 23, 2012
9:00 a.m.

BEFORE CHAIRMAN JOSEPH RUSSELL,
BOARD MEMBERS LARRY MIRES, HEIDI KAISER,
JOE WHALEN, MARVIN MILLER;
and LARRY ANDERSON (By telephone)

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1 WHEREUPON, the following proceedings were
2 had and testimony taken, to-wit:

3 * * * * *

4 CHAIRMAN RUSSELL: It's a little after
5 9:00, and I will call the regular meeting of the
6 Board of Environmental Review to order. The first
7 item on the agenda is the review and approval of
8 the minutes of the January 27th, 2012 Board
9 meeting.

10 MR. MIRES: So moved.

11 CHAIRMAN RUSSELL: It's been moved by
12 Larry.

13 MS. KAISER: I'd second.

14 CHAIRMAN RUSSELL: It's been moved and
15 seconded. Any questions, comments?

16 (No response)

17 CHAIRMAN RUSSELL: Hearing none, all
18 those in favor of approving the minutes, signify
19 by saying aye.

20 (Response)

21 CHAIRMAN RUSSELL: Opposed.

22 (No response)

23 CHAIRMAN RUSSELL: Motion carries
24 unanimously.

25 MR. LIVERS: Mr. Chairman, real quickly,

1 please. For the record, Tom Livers, Deputy
2 Director of the Department of Environmental
3 Quality.

4 It was noted in the minutes you just
5 approved that I had indicated that we would come
6 to this meeting with DEQ4, and it's not on the
7 agenda. Unfortunately we've kind of lost our
8 window where we had time to dedicate staff to work
9 on that, so it's going to be awhile. It will
10 probably be at least a couple months, if not
11 potentially into the fall that we're going to be
12 able to pick that up again, based on subdivision
13 activities. So just so you know. And you'll
14 recall we had a lengthy discussion on that at the
15 January meeting. We're kind of past where we had
16 available, so it will be awhile.

17 CHAIRMAN RUSSELL: I have to say I was
18 heart broken when I didn't see it on the agenda
19 this time.

20 So with that, the next item on the
21 agenda is the contested case updates, all those
22 contested cases which are all of those assigned
23 to Katherine.

24 MR. WHALEN: Mr. Chairman, could we have
25 a roll call?

1 CHAIRMAN RUSSELL: On?

2 MR. WHALEN: On members present.

3 CHAIRMAN RUSSELL: I guess we could. Do
4 we need one? We have Larry Anderson on the phone;
5 and Robin is in transit today and so she will not
6 be joining us.

7 MR. WHALEN: Okay. Thank you.

8 MS. ORR: Mr. Chairman, members of the
9 Board, good morning. Katherine Orr.

10 In Item II(A), I just wanted to go over
11 the changes that have happened since the agenda
12 was formed. And actually on Items A, C, D, E, F,
13 and G, there are AOC's and dismissals forthcoming;
14 and on "B", a ruling is forthcoming, on the
15 pending motion.

16 MR. MIREs: On which one.

17 MS. ORR: "B". And on the other cases
18 assigned to the Hearing Officer, the agenda sort
19 of speaks for itself on 2(a). And Roseburg Forest
20 Products, there is going to be oral argument on
21 the motion for summary judgment in April. And
22 with Item (c), (d), (e), and (f), involving a
23 challenge to an open cut mining operation up near
24 Kalispell, there is a ruling forthcoming.

25 And I forgot to mention (c), which is

1 City of Helena, and a second amended -- let's see.
2 There is a motion to modify the first scheduling
3 order, and that was granted on March 9th. So a
4 second amended scheduling order went out on March
5 9th.

6 On Roman Numeral II(3), the first
7 scheduling order -- this the one involving Camas
8 Prairie Gravel Pit. A first scheduling order
9 dated March 1st was issued setting the hearing for
10 September 28th.

11 And on (4), this is a case that was
12 appealed, and there is a decision issued by the
13 District Court, and it basically analyzed whether
14 a summary judgment motion could be issued in that
15 case. I had issued a summary judgment order.

16 The Court said it's not quite
17 appropriate under the exchange of the burden of
18 proof regarding motions for summary judgment, and
19 is remanding it to the Board, but I understand the
20 case is going to be settled. There is an issue of
21 underground storage tanks, who was responsible for
22 those, and on what property did the underground
23 storage tanks lie out in Fort Peck. So apparently
24 there is a talk of settling that.

25 CHAIRMAN RUSSELL: All right. Thanks.

1 Does the Board have any questions for Katherine on
2 the briefing?

3 (No response)

4 CHAIRMAN RUSSELL: All right. Let's
5 keep moving then. I believe the next item is
6 other briefing items.

7 MR. LIVERS: Mr. Chairman, members of
8 the Board, this is in response to a request from
9 Mr. Mires to take up some discussion of regulation
10 of oil and gas development in eastern Montana, and
11 a discussion of what's being done, what might be
12 some possibilities. I think this is going to be
13 an iterative discussion. I don't expect that
14 we're going to cover everything we need to in one
15 meeting.

16 So what we wanted to do as a start is to
17 kind of give a fairly high level overview of where
18 the Department has authority in oil patch
19 regulation and where we don't. We're not the
20 primary regulating agency on production, but there
21 are several areas where we do touch on both
22 production, and then driven impacts from
23 production. So that's what we want to start with.

24 And I think with that, I'm going to turn
25 it over to Judy Hanson, who is head of our

1 Permitting and Compliance Division.

2 MS. HANSON: Good morning, members of
3 the Board. For the record, my name is Judy
4 Hanson. I am the Administrator of the Permitting
5 and Compliance Division. Today I'm going to
6 separate my comments into three areas.

7 First I'm going to talk about where we
8 don't have authority. The regulatory authority
9 for siting the wells, drilling, and fracking is
10 with the Board of Oil and Gas, which is attached
11 to the Department of Natural Resources. There is
12 a wealth of information on a couple of websites,
13 both on the Board of Oil and Gas's website, and
14 then there is a website that's called "Frack
15 Focus," which is a national website, and it has
16 information about fracking nationwide, broken down
17 state by state; it has a chemical registry; it has
18 information about wells that have been approved,
19 and it also covers the regulations by state. So
20 there is a lot of information on Frack Focus.

21 The second thing I'll talk about is
22 which ones of our laws are triggered by oil
23 production itself. First, we have open cut
24 permits. That's the extraction of gravel or
25 scoria for their roads and their pads. We don't

1 regulate the roads or the pads, but the extraction
2 of the gravel.

3 Air quality. Air quality permits are
4 required for the construction, and installation,
5 and operation of equipment or facilities that may
6 contribute to air pollution: Natural gas burners,
7 oil storage tanks, diesel burners, etc.

8 The Oil and Gas Registration Program is
9 where the permitting for that occurs, and it's a
10 registration program. You guys have adopted those
11 rules.

12 In water quality, there are a number of
13 potential impacts where permits or registrations
14 are required: For stream bank disturbance, for
15 storm water construction, storm water permits for
16 oil and gas activities, surface water discharge,
17 and discharge permits for produced waters; also
18 groundwater discharge permits. So there are
19 permits required for the water that's being used
20 or produced.

21 Waste disposal. Some of the by-products
22 of the production are hazardous waste disposal
23 under the Resource Conservation Recovery Act,
24 RCRA, and there is also side products that are
25 being disposed of in landfills. So our solid

1 waste program has been working with landfills
2 about acceptability or non-acceptability.

3 The third topic -- so that's kind of the
4 programs that are triggered by the production of
5 oil itself. The other programs that are triggered
6 are because of the increased people, the social
7 aspect, so subdivisions review, plan and spec
8 review, wastewater discharge, the whole drinking
9 and flushing process with the increased people.

10 Also there is an increased activity with
11 the septic pumper program if there is not a system
12 to be utilized; and again, solid waste just by
13 increased garbage from people. Those are the
14 impacts that we are seeing here.

15 The most conversation we're having is
16 about drinking water and wastewater, and we have
17 sent some people out to eastern Montana; there
18 have been some public meetings with citizens,
19 legislators. We are putting -- A person out of
20 the Billings office is going to Glendive and
21 Sidney once a month to assist and provide
22 assistance for permitting processes. And so we
23 have a face out there, not daily, but a little
24 bit. And that's all for my presentation.

25 CHAIRMAN RUSSELL: You probably want to

1 stay up there, though. From a purely public
2 health perspective, all I hear are these man camps
3 that pop up, and cross-connections of garden hoses
4 serving RV's. And what does it actually look like
5 out there in a Montana perspective? I do care
6 about North Dakota, but I really want to make sure
7 that we're doing our job here in Montana about
8 regulating these --

9 I mean if you get four RV's, and someone
10 is like renting a piece of ground, that actually
11 constitutes a subdivision violation if they
12 haven't gone through the -- correct me if I'm
13 wrong, but I'm pretty sure I'm right. Are you
14 actively seeking compliance with these folks?

15 MS. HANSON: Mr. Chairman, I'm going to
16 ask to defer to Steve Kilbreath. He has been out
17 there. He can give a description of what's going
18 on.

19 MR. KILBREATH: Mr. Chairman, members of
20 the Board, Steve Kilbreath with Public Water and
21 Subdivision Program. And we've got a couple
22 things that's happening out there.

23 We are actively pursuing compliance on
24 recreational camping vehicle parks, mobile home
25 parks, and work camps. There is a very clear

1 distinction, a statutory description, of what a
2 work camp is, and a work camp is an
3 employer/employee provided housing, and we're
4 picking those true work camps up under public
5 water and public wastewater.

6 A true work camp is not a subdivision,
7 but if you've got two or more recreational camping
8 vehicles, you are a subdivision, and we're picking
9 those up under subdivision rules.

10 In the last year and a half, we have
11 about 75 submittals that we've been working on out
12 there; probably currently ten to twelve
13 enforcement actions we're working on. We're
14 taking enforcement complaints currently from local
15 government out there, planning boards, county
16 health departments, etc., and we're giving those
17 to our Enforcement Section, and they've assigned
18 one person to follow up on those complaints.

19 The interesting aspect that's going on
20 is most of the stuff we're dealing with is already
21 there. It's been done, and built, so we're just
22 catching up and bringing them into compliance.

23 And we're seeing a couple of new breeds
24 of cat for us. The true work camp is something we
25 haven't seen before. It is a dormitory complex

1 with a central commissary. And the true work
2 camps are not a significant issue. The true work
3 camps are fenced, they've got security, they've
4 got regulations; you've got companies like
5 Haliburton providing housing for their employees.
6 They're serious about their business. The word
7 "man camp" is synonymous with any collection of
8 people that live in a place and work, and those
9 things range from "A" to "Z".

10 The other interesting thing that we've
11 seen are truck camps, or truck parking facilities.
12 We see a central service building that has
13 toilets, showers, kitchen, laundry, and 80
14 electrical pedestals provided by a trucking
15 company. Their employees come in, they do their
16 business in the commissary building, and they live
17 in their trucks. Not quite a subdivision, but
18 we're picking those up under public water and
19 public sewer.

20 So we're getting a lot of the basic
21 public health stuff covered out there, but we are
22 seeing some strange new things in that part of the
23 world. And as Judy said, we've got an engineer
24 we're putting out in the field, not a lot, but
25 it's two days a month. So Matt is in Glendive and

1 Sidney next week.

2 CHAIRMAN RUSSELL: All right. I have to
3 take a call. We have some pertussis up in our
4 county. We have a few schools that aren't being
5 real compliant right now. So I'll be back in
6 about five minutes maybe.

7 MR. MIRES: Can I make a request?
8 You're in charge.

9 MS. KAISER: Second in command.

10 MR. MIRES: Coming back to Judy. Is
11 there a way that you could provide us with kind of
12 a hard copy list of the items that you identified
13 there that BER has oversight on, or that we need
14 to be concerned about. I'm not real fast on
15 writing.

16 MS. HANSON: Ms. Vice Chair and Mr.
17 Mires. Yes, I will get something to you before
18 the end today.

19 MS. KAISER: Any other questions?

20 MR. WHALEN: Thank you, Ms. Vice
21 Chairman. Judy, quick question for you.

22 I'm a little nebulous with respect to
23 the difference between oversight when it comes to
24 major facility siting between DEQ and Oil and Gas.
25 When does Oil and Gas become involved in the

1 approval of the major facility, or is that always
2 done under DEQ?

3 MS. HANSON: Madam Chair, Mr. Whalen.
4 The Major Facility Siting Act is triggered by size
5 of pipeline. So it has to be at least 30 inches;
6 it has to be at least -- I don't recall if it's
7 100 or 150 miles. So the other piping that's
8 installed does not trigger Major Facility Siting
9 Act. That would be part of the drilling and
10 fracking approvals granted by the Board of Oil and
11 Gas.

12 MR. WHALEN: Over 30 inches or under 30
13 inches?

14 MS. HANSON: Under.

15 MR. WHALEN: Under Oil and Gas or DEQ?

16 MS. HANSON: We don't necessarily
17 separate it by Oil and Gas. It is by the size of
18 the facility or the pipe that triggers our
19 regulations.

20 MR. LIVERS: Madam Chair and Mr. Whalen.
21 First let me reiterate. Judy is correct in terms
22 of the thresholds for the Facility Siting Act.

23 And one thing that's happened with the
24 Major Facility Siting Act over the years is
25 successive Legislatures have removed quite a bit

1 from its authority and its oversight. Where it
2 used to be kind of true to its name and deal with
3 major facilities, now it's limited almost
4 exclusively to linear facilities, pipelines and
5 transmission lines, and oddly some geothermal
6 facilities.

7 But one of the things I think we're
8 learning through the Governor's Pipeline Safety
9 Council that was established in the wake of the
10 Silvertip oil spill last summer is there is an
11 awful of stuff that is not regulated: A lot of
12 the collection lines, a lot of the smaller
13 transmission lines.

14 The main pipeline regulatory agency in
15 the country, including Montana, is the US
16 Department of Transportation's Pipeline Hazardous
17 Materials Safety Administration. And if you
18 consider there are essentially four major types of
19 pipelines -- interstate, and intrastate, and then
20 oil, and natural gas -- US DOT has authority over
21 three of those, and they've delegated their
22 authority for intrastate gas to the Public Service
23 Commission.

24 So DOT is the primary regulatory agency
25 for pipelines, but I think there is a general

1 sense that on smaller collection lines, there is
2 probably a regulatory gap. I don't know that
3 there is anybody actively, either with the
4 authority at least actively practically overseeing
5 those activities.

6 MR. WHALEN: Thank you.

7 MS. KAISER: What are the smaller ones?
8 Under 30 inches? Is that what you're saying?

9 MS. HANSON: Madam Chair, thank you.
10 Mr. North, our attorney, corrected me. What we
11 regulate is over 25 inches, and it is 50 miles.
12 So anything smaller and shorter are regulated by
13 the entities that Tom spoke about.

14 MS. KAISER: That's 25 inches in
15 diameter?

16 MS. HANSON: Yes.

17 MR. LIVERS: Madam Chair, one other
18 clarification. In terms of our regulatory
19 authority, even over those large ones, it's really
20 over only the siting of those initially. We don't
21 regulate them once they're in place. We don't
22 have any authority over the operation. It is just
23 for doing the environmental impacts and the siting
24 initially.

25 MR. MIRES: Madam Chair. So then who

1 regulates after it's in operation?

2 MR. LIVERS: Madam Chair. That would be
3 US Department of Transportation. And they have
4 frankly gotten much more aggressive in the wake of
5 what happened on the Yellowstone this summer. DOT
6 has done some pretty extensive stream crossing
7 analysis, existing stream crossings on major
8 pipelines; and you're starting to see some action
9 as a result of that.

10 On the Silvertip pipeline, in addition
11 to the directional drilling at the Laurel crossing
12 where the rupture occurred, there were two other
13 major stream crossings on that line, one on the
14 Clark Fork of the Yellowstone south of Bridger,
15 and another at Rock Creek, Rock Creek from Red
16 Lodge flowing into the Clark Fork at Rockvale.

17 And Exxon has gone through and redrilled
18 those. At the time the pipeline was installed in
19 I think 1991, that technology was not available.
20 It is not that old of a pipeline, which is kind of
21 a concern. But the Laurel crossing I know is in
22 excess of fifty feet under the river bed now where
23 it was exposed from a scour.

24 And then Conoco Phillips recently did
25 some directional drilling to drop the line, the

1 major refined oil line going into Missoula, under
2 the Clark Fork of the Columbia. They're going to
3 be doing that or just completed it.

4 MS. KAISER: Tom, you mentioned the task
5 force, the Pipeline Safety Council. Have they
6 identified all of the pipeline crossings under
7 rivers?

8 MR. LIVERS: Madam Chair, I'm actually
9 not actively involved in that council. So I think
10 they have gotten that information. I think
11 they've gotten presentations from DOT, and they
12 have looked at all the major stream crossings. I
13 think they're in the hundreds, and if you start to
14 look at smaller and ephemeral drainages, you're in
15 the thousands.

16 But I think they have provided
17 information, DOT has provided information to that
18 council on certainly all the major stream
19 crossings. Our Director Richard Opper sits on the
20 Council, along with Mary Sexton, who heads up the
21 Department of Natural Resources and Conservation,
22 and Tim Reardon, who heads up the Montana
23 Department of Transportation.

24 MR. MIRES: How many people are on the
25 council?

1 MR. LIVERS: I think it's just those
2 three.

3 MR. MILLER: Madam Chair. Judy, all
4 these communities in eastern Montana -- let's
5 start with Sidney and Glendive, but also the
6 littler communities -- do they have the facilities
7 to handle increased sewage, increased water use,
8 so forth? Are we being proactive to make sure
9 that they can handle all of this?

10 MS. HANSON: Madam Chair, Mr. Miller.
11 We had a discussion yesterday, and the City of
12 Glendive has a wastewater treatment plant; the
13 City of Sidney has a lagoon. They say they have
14 capacity. I think we have some question about
15 that.

16 I know that staff from our Planning
17 Division are going to be out in April, and I'm not
18 sure which communities they're going to visit.
19 But we have concerns about the capacity. So I'm
20 not going to say they do and they don't. We have
21 concerns.

22 MR. MILLER: I was just hoping we could
23 kind of be proactive and be ready to accept
24 this if the boom does really come. Thank you.

25 MR. WHALEN: Judy, a question, if you

1 would. Relating to Marv's question, we can
2 anticipate I think that oilfield and gas field
3 service companies are going to try to tap into
4 municipal wastewater treatment facilities. Are
5 you seeing any of that yet? How do you anticipate
6 that municipalities are going to be able to
7 accommodate wastewater treatment for some of these
8 oil and gas related activities?

9 MS. HANSON: Mr. Chairman, Mr. Whalen.
10 At this point in time, I don't think there is a
11 notification process. If they're tapping in, if
12 the communities call in, our Permitting staff
13 would know about that; but until they would come
14 in for their five year renewal, we may not have
15 knowledge of that.

16 They're wanting to talk. The permitters
17 and the enforcers are wanting to talk. May I
18 defer?

19 MS. KAISER: Go ahead.

20 MR. KILBREATH: Members of the
21 committee. We get requests from the Subdivision
22 Program for additions. So in Sidney we had an
23 addition for a 300 lot subdivision, and we had a
24 certification letter from the city engineers
25 saying, "We have capacity to serve this, and we

1 authorize the connections." That allows us to
2 approve that subdivision. We take the word of the
3 community.

4 We have an 800 unit work camp that's
5 being proposed in the Town of Baker, and Baker
6 says, "We have the capacity for water, and we have
7 the capacity for wastewater."

8 One of the conversations I got in in
9 Culbertson with the community leaders out there
10 was the Public Works Director from the Town of
11 Bainville said, "Why does it take five years to
12 have DEQ approve my plans, and specs, and project
13 for my wastewater treatment plant improvement?,"
14 and my answer was, "It didn't take five years to
15 approve it. It took five years to approve your
16 funding." So there is a difference.

17 If a company comes into a town and wants
18 to make improvements on a wastewater or water
19 system, and the company has a checkbook, they can
20 get their improvements approved and constructed
21 quickly. If they want to go through the public
22 funding process of grants, and then bridge the
23 excess funding with loans, that takes legislative
24 action, and takes a time period.

25 MS. KAISER: Thanks, Judy. Any other

1 questions?

2 MR. MIRES: Madam Chairman. And I don't
3 know who to address this to. I'm a young whipper
4 snapper, coming in out of state, and I have a rig,
5 and I've entered into an agreement with somebody
6 to poke a hole in the ground, and I want to go
7 into the Bakken, and I've got visions of getting
8 really, really rich. And I'm not from the state
9 of Montana, and I've just heard a whole lot of
10 people that have a permitting process.

11 So where do I start, and what all
12 permits do I need to have? Does that make sense
13 what I'm asking here? When I come in, I'm going
14 to punch a hole. Who do I start with, and whom
15 all do I have to talk to to get permitted to
16 proceed without going to jail and without
17 violations?

18 MS. HANSON: Mr. Chairman, Mr. Mires. I
19 think your first stop is the Board of Oil and Gas.
20 And I know that in conversation with them, they
21 are doing some communication about other permits
22 that we might need. I've gotten some phone calls
23 from people that have been referred to us by Tom
24 Richmond and the Board of Oil and Gas.

25 MR. MIRES: Thank you.

1 MR. WHALEN: Madam Chairman. There is a
2 gentleman from the back of the room that wanted to
3 address the Board I think that came up to the
4 front. May we hear from him?

5 MS. KAISER: Yes.

6 MR. ARRIGO: Mr. Chairman, members of
7 the Board. My name is John Arrigo, Administrator
8 of the Enforcement Division, and I just wanted to
9 follow up on Mr. Miller's question about: Is the
10 Department being proactive?

11 We're concerned about the capacity to
12 treat all of this sewage. And the Water
13 Protection Bureau and the Enforcement Division
14 have been proactive as far as compliance with
15 wastewater discharge permits. Since 2009, we've
16 launched a concerted effort to take enforcement
17 actions against municipal wastewater treatment
18 systems that are violating their discharge permit.
19 What we do is we offer them an Order on Consent
20 where we agree not to fine them for those
21 violations if they move forward on a compliance
22 schedule to upgrade their facility.

23 We have also looked at some of these
24 sites. Some of these sites are in eastern
25 Montana, so we're picking up some of those under

1 Orders on Consent, but it does take years to go
2 through the funding, and do the plans and specs.
3 I believe we settled with the city of Miles City
4 on their wastewater system.

5 So those are the permitted sewage
6 systems. There are a lot of unpermitted sewage
7 systems, such as Sidney, and we're not sure
8 whether or not they have the capacity to handle
9 these new wastes, but our engineers from the
10 Planning Division are going out there and
11 evaluating the systems.

12 Most of them are new enough that their
13 plans and specifications were reviewed and
14 approved by the Department. It may have been in
15 the 1970s or earlier. But the public water supply
16 law says that you cannot operate in violation of
17 your approved plans and specs.

18 If we have the engineering analysis that
19 says they're not meeting their design, that is a
20 violation, and we will offer them an
21 Administrative Order on Consent to upgrade to a
22 new facility, or modify the current facility. So
23 we're trying to address the municipal sewage
24 systems through permit compliance and through
25 engineering review, and our approach is not to

1 hammer, but offer them a consent order which gives
2 them time to secure the funding and return to
3 compliance.

4 MR. WHALEN: Thank you.

5 MR. LaVIGNE: Mr. Chairman, members of
6 the committee, my name is Paul LaVigne, and I
7 manage the Water Pollution Control State Revolving
8 Fund under DEQ, and it's our group that's going to
9 be going out to eastern Montana the week after
10 next. And our plan is to visit about dozen
11 systems out there, municipal systems. We're
12 concerned about whether there is capacity or not,
13 and the condition of some of the older
14 infrastructure. Sidney would be a prime example.

15 So our intent is to try to do an
16 engineering evaluation, but also listen to these
17 communities. They're getting pushed from the oil
18 companies, and just all the growth, too, and the
19 impacts tend to end there. And it is just not the
20 impact to the infrastructure, it's funding impacts
21 and financial impacts that might be necessary to
22 improve these facilities.

23 So we want to go out there and listen,
24 but also kind of evaluate as well.

25 MR. MILLER: Thank you.

1 MR. LIVERS: If I could just maybe
2 follow up a little bit on Paul's comments in
3 response to Mr. Miller's questions about being
4 proactive.

5 Paul is right. There are typically --
6 Well, treatment systems have long lead times.
7 They have lead times for design and construction,
8 and as Steve alluded to, or as Steve mentioned,
9 they also have lead times for funding.

10 Almost all major treatment systems,
11 whether water treatment or wastewater treatment
12 systems in the state, almost all the public
13 systems avail themselves of public financing, and
14 they usually do it by pulling together a
15 collection of funding sources.

16 They try to get grants under the
17 Treasure State Endowment Program, so that the
18 amount they have to finance is reduced,
19 particularly the smaller systems that can't rate
20 base the improvements as readily as the larger
21 systems. That requires legislative approval, and
22 that's probably the critical path in terms of
23 funding, and that is a multi year process at least
24 as it currently goes. There is a lot of
25 competition for those funds. Then typically

1 they'll fill in with loans, usually the State
2 revolving funds that we administer in our Planning
3 Division.

4 And we're looking -- At the cabinet
5 level, the various agencies that are involved in
6 infrastructure financing are starting discussions
7 we probably should have started earlier, but we're
8 starting discussion to see: Are there ways we can
9 change our manner of operation to more readily
10 address some of these problems? Should we
11 consider overhauling some of our priority
12 assignments, based on what is happening out there?
13 There's a lot of competition for this money but we
14 are looking at different ways to do that.

15 The other concern of course is --
16 particularly I think you see it in the Sidney --
17 is where they've endured boom and bust cycles
18 before, and how much do you want to expend in
19 terms of gearing up for the boom, and how long is
20 it going to last, how much of your infrastructure
21 do you want to have constructed. So some real
22 challenges out there, and we are wrestling with
23 those.

24 MS. KAISER: Thank you.

25 CHAIRMAN RUSSELL: Heidi is still

1 running this, so you know.

2 So how many onsite systems have been put
3 in out there, and how many of them have been
4 multi-user or small public systems? And that's a
5 leading question, just so you know.

6 MR. KILBREATH: Mr. Chairman, members of
7 the committee. The bulk of what we're seeing in
8 the Subdivision Program for our RV parks and work
9 camps, except for a couple, are typically onsite
10 systems.

11 We have an application in right now that
12 we're reviewing for an 800 person work camp
13 outside of the Town of Fairview, and the first 200
14 units of it, the first 200 people unit of it are
15 on an onsite drainfield system. Picture clay
16 soils, Joe, and picture 50 gallons an employee and
17 200 people, and you've got a mile and a half to
18 two miles of drainfield with the appropriate
19 septic tankage, so things get sort of complicated
20 sort of quick out there.

21 CHAIRMAN RUSSELL: And isn't there some
22 areas out that have some high groundwater?

23 MR. KILBREATH: There's a lot of areas
24 with high ground water down along the Yellowstone
25 River bottom, and so --

1 CHAIRMAN RUSSELL: So are they getting
2 culture shock? This is not a community that's
3 used to high tech septic systems. No offense,
4 but --

5 MR. KILBREATH: The interesting thing
6 that happened in our journeys out there, we did
7 public meetings in Glendive, Sidney, and
8 Culbertson, and there was a collection of
9 engineering groupies following the meetings, and
10 there was engineers from Kalispell, and Missoula,
11 and Helena. So the more technical engineers are
12 following the work right now.

13 And we're seeing a lot of different
14 things proposed. I do have concerns about the
15 ideas of some of the more technical onsite
16 wastewater treatment systems being maintained, but
17 some of them that are being proposed.

18 CHAIRMAN RUSSELL: All right. I just
19 feel that -- I hope you're keeping up.

20 MR. KILBREATH: We're keeping up with
21 what's coming in to us, and right now our plan and
22 spec -- we made this promise to the community that
23 we would dedicate a person, one person, and we
24 made this promise, dedicated one staff person to
25 everything out east; and right now we're keeping

1 that promise, and we're turning around our public
2 water and our subdivision reviews in less than ten
3 days. The consultants on the other aren't.

4 CHAIRMAN RUSSELL: They never do. Not
5 you. That go through subdivision, the consultants
6 that do subdivision work. The high tech
7 consultants. I'm burying myself here. And you're
8 the cause. I might get another call, so I'm going
9 to let you keep going on this one.

10 MR. LIVERS: Madam Chair, if I might. I
11 just do want to acknowledge the work that all of
12 our staff, and in particular Steve and his group,
13 have done in terms of trying to adapt and meet the
14 demand out, dedicating Matt Wade, a real work
15 horse out of our Billings office, to be out in
16 eastern Montana. To be getting things turned
17 around with that kind of work load in ten days is
18 impressive. So we're pretty proud of that.

19 MR. MILLER: Madam Chair. Tom, to kind
20 of follow up on your question. Here a month or
21 two ago there was a quite an article in the paper
22 about the development out there, and they
23 mentioned on the funding that most all of the tax
24 revenue in that 50 percent, if I remember the
25 number right, was coming to the State of Montana,

1 about 25 percent to the schools, and 25 percent
2 roughly to the county, but the cities out there
3 and small communities were getting virtually
4 nothing, I think only one percent or two percent.

5 Is this something that -- or did I get
6 this totally wrong? And I just thought if the
7 communities were getting a little more of the tax
8 action, they would have more revenue to start
9 with, and be more interested in accepting the
10 problems.

11 MR. LIVERS: Madam Chair, Mr. Miller.
12 I'm going to be out of my depth on this one, so
13 I'm not going to go very far on it. That's my
14 understanding as well, but I don't know the tax
15 flow specifically directly. I'm picking up from
16 the same sources you are.

17 What I can say maybe along this line is,
18 again, we're dealing with this at the cabinet
19 level. It's a bigger problem than just the
20 resource agencies clearly. We have our own
21 challenges, but every agency in State government
22 has its challenges, and certainly the local
23 communities do as well. We're all struggling to
24 keep up with the workload demand.

25 And that's not directly to your point of

1 how the tax revenues are distributed, but I know
2 there is discussion about how resources can be
3 made available to help out the situation there at
4 all levels of government.

5 CHAIRMAN RUSSELL: Well, this is an
6 age-old problem with anything that wants to -- and
7 I'm sure you see it out in Miles City. They want
8 to get all of the amenities, so what goes on in
9 Miles City, all the retail, commerce, and
10 everything else, but they end up not being in the
11 city, so the City doesn't have the tax base, but
12 they take all of the burden.

13 So what you're seeing is that, and
14 unless these communities want to annex, then
15 they're not going to reap the benefits of the
16 services they're providing. This happens all over
17 the state. It is just happening really bad out
18 there.

19 MR. MILLER: Thank you.

20 MS. KAISER: Any more questions?

21 MR. MILLER: I guess I have one other
22 one. Several people from western Montana have
23 went out there that I know, and they worked for a
24 few weeks or a month out there, and they have come
25 back, big money and so forth, but come back and

1 said, "Some of these smaller companies, half the
2 people are on drugs," and they said, "The safety
3 conditions are terrible," and they've come back
4 and said, "We'll take the low paying job here."
5 And I don't know if it's true or not, but I read
6 some things in North Dakota there that the Police
7 Department is having a terrible problem with the
8 drug use and so forth.

9 Is there -- I don't know. I presume
10 that's the Police Department that has got to
11 handle all those things, but I don't know if there
12 is any other enforcement.

13 MR. LIVERS: Madam Chair, Mr. Miller.
14 I'm pretty sure that's not us, but I suspect
15 that's correct. And again, I can't comment first
16 hand, but we're seeing the same stories.

17 MR. WHALEN: Madam Chairman, I have one
18 final question, if I may.

19 If I understand, just to summarize,
20 going back to this Major Facilities Siting Act,
21 and how it relates to oil and gas, particularly
22 pipeline work, Judy, as you have pointed out, the
23 first stop for the wildcat driller that Larry had
24 illustrated would be Board of Oil and Gas; the
25 permitting would take place; the US DOT and the

1 Board of Oil and Gas pretty much administer those
2 pipelines, most of the pipelines that are in the
3 ground.

4 But in the case of the rupture of the
5 Silvertip Pipeline, it was DEQ that was called in
6 in addition to Exxon staff to handle the emergency
7 response. Is DEQ funded for emergency response
8 from any of that revenue that's coming in for this
9 pipeline activity, and some of the oil and gas
10 that goes through it, in order to mitigate some of
11 the expense?

12 MR. LIVERS: Madam Chair, Mr. Whalen.
13 We were able to cost recover the State's costs
14 from Exxon. So the way -- the DEQ is not a
15 response agency, and the way that all developed
16 actually was over the Fourth of July weekend, some
17 calls between Disaster and Emergency Services
18 Chief Ed Tinsley and me -- Richard was out of
19 state at the time.

20 And normally Disaster and Emergency
21 Services within the Department of Military Affairs
22 would be the response agency for the State. We
23 would come in to assist in overseeing cleanup
24 activities.

25 Ed had asked if DEQ would take this on,

1 given the fact -- two things -- his agency had
2 been tapped out for several months because of the
3 demands of the flooding; and this was essentially
4 all going to be driven by cleanup, remediation,
5 restoration, and he did not have the expertise in
6 his agency for that. So I agreed we would take
7 that on. The Governor wanted an active State
8 presence in this effort, and we started building
9 that pretty quick in the wake of the rupture.

10 So that's how we came to have that
11 function. We're neither funded or organized for
12 that, although we asked our Quality Assurance
13 Council internally within DEQ to do a pretty
14 intensive lessons learned analysis through our
15 interviews with the people we had. Just over the
16 course of the summer, we probably rotated 100
17 people down there at various times.

18 And our biggest involvement was on ---
19 my favorite new acronym of the summer was SCAT
20 teams. Being a Montanan, I always have a certain
21 understanding of what scat was, but it apparently
22 stands for "Shoreline Cleanup and Assessment
23 Techniques."

24 And basically those are the folks that
25 would go out either on land or by boat, and kind

1 of conduct an analysis of the segments, the
2 shoreline segments, the islands and shoreline
3 segments, lay out a plan for the operations team,
4 Exxon's operations contractors, to follow in terms
5 of what needed to be cleaned up and where the
6 cutoffs would be, because you reach a point on a
7 lot of those where you begin to do more long term
8 damage than good if you go too far. So SCAT teams
9 would go down and do both pre and post assessments
10 before and after Operations had been through, and
11 that was our big workload assignment, plus just
12 some of the internal coordination.

13 But regardless, we were able to reach an
14 agreement with Exxon for recouping our costs. The
15 Department of Fish, Wildlife and Parks also had a
16 very big presence down there. DNRC as well had
17 some folks there. We were able to recoup it.

18 We're looking at whether we should
19 develop a more formal, permanent, response
20 structure for environment emergencies. We haven't
21 reached a recommendation on that yet, but if we
22 were to do that, that we would try to able to tap
23 into existing mechanisms for emergency funding.

24 In the case of environmental
25 emergencies, typically we're going to get cost

1 recovery from the responsible party.

2 MR. WHALEN: Thank you.

3 MS. KAISER: Thanks, Tom. Is that it?

4 MR. MIRES: I only have one comment,
5 Madam Chair. I'd just like thank Tom and the rest
6 of the staff for providing the information update.
7 I found that to be very, very beneficial for me
8 personally, so thank you.

9 MR. MILLER: Yes, thank you.

10 MS. KAISER: Thank you. I just have one
11 comment, that there is other portions of the state
12 where the Bakken may be economically viable. So
13 Joe, back to you.

14 CHAIRMAN RUSSELL: Sure. Well, and I
15 have a comment. I tend to believe -- and I'm very
16 proud of the work that the Department of
17 Environmental Quality does. I tend to believe
18 when it comes our resources, that we know we have
19 them, and we extract them correctly. I remember
20 going through the coal bed natural gas, many
21 things that we've done, and I think we've done an
22 admirable job between the Board and the
23 Department.

24 Those resources are there, and we should
25 be grateful we have them, and it makes our state

1 better, and the better we do on getting them out
2 in a fashion that doesn't cause environmental
3 disaster -- which we may have seen in other states
4 -- the better off we're going to be. And I
5 continue to believe that Montana, from a resource
6 extraction, Montana does it right. And I'm very
7 proud that we do.

8 So with that, I would move on. And we
9 have great consultants that work in the natural
10 resources industry.

11 We do have another briefing item, and
12 that would be the nutrient reduction strategy
13 briefing. Tom.

14 MR. LIVERS: Mr. Chairman, you didn't
15 mention the inspired leadership of the policy
16 makers on the Board, but --

17 CHAIRMAN RUSSELL: I think that just
18 goes without saying, doesn't it?

19 MR. LIVERS: We do have actually a good
20 Board.

21 So on this one, Mr. Chairman, I
22 mentioned this a little bit on our teleconference
23 the last meeting, but you'll recall in January
24 when we spent a lot of time discussing DEQ4, we
25 found ourselves at the Department in kind of an

1 awkward position of saying, "There is extensive
2 Board comment here." We were coming in to
3 initiate. And is this going to be official public
4 comment? What role does it serve?

5 What we decided from that is we tried to
6 do a better of anticipating which rulemakings
7 might draw for more Board interest and more Board
8 discussion, and when that was the case, we felt
9 that it would be productive, prior to any
10 initiation of rulemaking, to have more briefing,
11 more open discussion, so that we could get some
12 high level input from the Board, consider that as
13 we begin our rule development package prior to
14 initiation.

15 We've certainly done that in the past.
16 Certainly the coal bed methane rulemaking had lots
17 of that, mercury, some of the real intense and far
18 reaching rules. So we're trying to do that here.

19 We're going to have several kind of
20 related rulemakings coming up over the next
21 several meetings, and felt it would be good to
22 just have a more interactive briefing, open
23 discussion, but also with an idea of giving you an
24 overview so you had a sense of how some of these
25 rulemakings might tie together. You'll be dealing

1 with them as components, but we feel the overview
2 and integration of it would be a valuable thing
3 before you begin that discussion.

4 So that's kind of what we're hoping to
5 accomplish with this. With that, I'd like to turn
6 it over to George Matheius, who is the
7 Administrator of our Planning Prevention
8 Assistance Division.

9 MR. MATHEIUS: Good morning. Is it
10 still Madam Chair, or are we back to --

11 CHAIRMAN RUSSELL: You can call me
12 whatever you want.

13 MR. MATHEIUS: Mr. Chairman, members of
14 the Board, for the record, my name is George
15 Matheius -- that's spelled M-A-T-H-E-I-U-S. I'm
16 the Administrator of the Planning Division.

17 As Tom indicated, we're taking an
18 approach to offer some briefing items today for a
19 couple of reasons. One is the complexity of some
20 of the rulemakings that the Department is bringing
21 forward; and secondly, I thought it was important
22 to sort of pull all these pieces together, and I
23 wanted the Board to understand a lot of things
24 that the Department has been working on the last
25 couple years, and how all these things are

1 interrelated, and how we strategically are going
2 to put these rulemakings forward.

3 Just to start, the Department has been
4 working on the development of numeric nutrient
5 standards for well over ten years. Due to the
6 stringent nature of the draft criteria,
7 implementation is a very critical component to
8 those water quality standards. I feel that the
9 standards development process has served as sort
10 of a catalyst for many other processes and actions
11 that we have to reduce nutrients. I like to call
12 it the nutrient reduction strategy, hence the name
13 of this series of briefings.

14 Just to give you guys a couple of
15 examples of some of the things the Department has
16 been involved in regard to nutrient reduction
17 across the state, legislation, for example. There
18 has been several pieces of legislation in the last
19 two, three sessions that we've either been
20 directly involved in or supported indirectly.

21 For example, Senate Bill 200 was in the
22 2009 session, and that was basically a phosphorus
23 ban, dishwashing detergent. You might remember
24 maybe 15 years ago or so, there was a similar ban
25 for laundry detergent. So we supported -- That

1 was a bill that came out of Missoula. We
2 supported that bill.

3 Senate Bill 95 is a piece of legislation
4 that came out of the Department that basically was
5 a way for us to implement our numeric nutrient
6 criteria that you're going to hear more about
7 today. I believe you have heard about it in the
8 past as well.

9 House Bill 52, for example, that was a
10 bill we had last session, and that was to give the
11 Board authority to adopt a reuse standards for
12 reusing wastewater. You'll also hear more about
13 that this morning.

14 House Bill 28, that was a mixing zone
15 bill that basically said that an easement must be
16 attained if your mixing zone in a subdivision is
17 going to cross over into another property
18 boundary.

19 Senate Bill 267, that was our TMDL bill,
20 which for those of you that don't know what TMDL's
21 are, total maximum daily load. They're a
22 pollutant reduction strategy that we work on for
23 many pollutants across the state. So this was
24 part of an ongoing settlement agreement that we've
25 been working with.

1 Finally Senate Bill 367, that was in
2 addition to Senate Bill 95. Senate Bill 95
3 created the Nutrient Work Group, and Senate Bill
4 367 came out of discussions of that group between
5 2009 and 2011, and just put some clarifications in
6 there about how we were going to implement our
7 nutrient criteria.

8 A couple other things the Department has
9 been doing. We've increased our public process,
10 so I believe we have more involved stakeholder
11 groups across the board in the Department. I
12 think that's been a pretty aggressive effort in
13 the last several years.

14 We've also increased our internal
15 coordination among divisions, especially between
16 Planning and Permitting, because so many things we
17 do are intertwined. We develop water quality
18 standards. Permitting has to implement them. So
19 we've got a pretty significant coordinated effort
20 that happens here internally, as well as how we're
21 going to lay out rulemakings, for example.

22 Nonpoint source I think is still a
23 critical component of nutrients and nutrient
24 reduction, and we lead several efforts across the
25 state to try to deal with the nonpoint source

1 problem.

2 A couple of just small examples.

3 Currently we're providing contract money for
4 assistance for producers on nutrient best
5 management practices for feeding operations.

6 We've got a septic work group. That septic work
7 group, internal work group, has developed a
8 nutrient trading policy, which is something else
9 you're going to hear about this morning.

10 And finally, just the other side of the
11 division, obviously most of the division is water,
12 but the other side is energy, and alternative
13 energy in particular; and that program, through
14 stimulus dollars, funded an interesting project in
15 Columbia Falls last year that is basically growing
16 algae in a greenhouse environment, and using that
17 algae for biochar, fertilizer, there is
18 possibilities of biofuel, so on and so forth.

19 But longer term, there is a lot of
20 technologies out there. I'm optimistic that they
21 could turn into the scale to be used at wastewater
22 treatment plants. In concept scale is an issue
23 obviously today.

24 So we provided -- The same briefings
25 that we're going to provide the Board today we

1 provided to WPCAC in February. And again, just
2 wanted to take a chance to describe these upcoming
3 proposed rulemakings that we've got this spring,
4 and summer, and fall. But I wanted to just try to
5 pull it all together, and just say all these
6 really are related: The legislation, the
7 rulemaking, the different efforts we're doing
8 across the Department, and are much more extensive
9 than I described this morning.

10 So with that, I'll just say we have
11 three additional separate briefing items: We have
12 the nutrient criteria; we've got DEQ Circular 2,
13 and the reuse I spoke of that came out of House
14 Bill 52; and we have our nutrient trading policy.

15 So with that, I'll pass it on to Dr.
16 Mike Suplee who is going to talk about our
17 nutrient criteria. Thank you.

18 MR. SUPLEE: Mr. Chairman, members of
19 the Board. My name is Michael Suplee. I'm with
20 Water Quality Standards Section of the Department
21 Environmental Quality, and I'm going to talk to
22 you today about numeric nutrient criteria
23 development.

24 First I'd like to just kind of go over
25 an outline of what I'm going to talk about to the

1 Board today. I'd like to go over the timeline of
2 the criteria; why are we developing numeric
3 nutrient criteria; what is just a basic view of
4 how the criteria are derived; and I'll be looking
5 a three different types of water bodies that we've
6 worked on, wadeable streams, large rivers, and
7 I'll touch on lakes and reservoirs which are still
8 in development.

9 I'd like to go over briefly what's been
10 happening on the Clark Fork River, since that was
11 the last time the Board made a rulemaking relative
12 to numeric nutrient standards of this type. Then
13 I'll discuss in a little bit more detail than
14 George about implementation, which relates back to
15 Senate Bill 95 and 367; the Nutrient Work Group,
16 an advisory council we've been working with on
17 this topic for some years; and then some of the
18 draft rule and circular packages that we may be
19 bringing to you here later this year.

20 I'd also like to go over the EPA's view
21 on this, and they have also been working with this
22 very closely, in addition to Montana stakeholders;
23 and finally touch on potential adoption timelines.

24 So nutrient criteria development has
25 been ongoing for some time, just kind of a big

1 overview, in the 1990s. Probably the biggest
2 first effort was when the Clark Fork criteria were
3 developed, and then the voluntary nutrient
4 reduction program was developed for that river
5 basin.

6 In 2001, the Department began working on
7 nutrient criteria beyond the Clark Fork, and began
8 working on it for the whole state.

9 In 2002, this Board adopted the VNRP
10 targets as standards for the river, so they've
11 been in place in ten years now.

12 Between 2003 and 2008, statewide
13 criteria were developed, refined, and we worked
14 out a system to have different criteria in
15 different geographic regions, because it was never
16 anticipated that you'd have the same number
17 everywhere. This would have been more complicated
18 than that.

19 And then in 2009 and 2011, we had two
20 different legislative actions: The first one,
21 Senate Bill 95, which allowed variances from the
22 criteria because they are very stringent in some
23 cases; and then Senate Bill 367 was a refinement
24 of that original bill, which made it a little bit
25 more easy to implement, and I'll talk about those

1 more as I go on.

2 So one of the questions that we usually
3 get is: Why would you need numeric nutrient
4 standards? What is their purpose? We have
5 standards already on the books that address
6 nutrients. Some of them are narrative. For
7 example, water must be free from substances which
8 cause nuisance to aquatic life or undesirable
9 aquatic life. These are already on the books.
10 And although the intent of these standards is
11 relatively clear, implementation and application
12 has not always been so much.

13 In addition, nutrients affect directly
14 things that we already have other water quality
15 standards for, for example, dissolved oxygen, pH,
16 etc. And so by developing numeric nutrient
17 standards that have application to different
18 regions, essentially we are providing a mechanism
19 to deal with the other two directly, and also it
20 makes TMDL's and permitting more consistent.

21 So one of the major manifestations of
22 excess nutrients that we typically see in the
23 state -- especially in the western part of the
24 state, although criteria will be for the eastern
25 part of the state as well -- is excess algal

1 growth. This can become quite excessive in areas
2 where nutrients are highly elevated relative to
3 natural background. Here are some examples from
4 the Clark Fork River and other locations.

5 And I'll be showing you some slides that
6 benchmark different sorts of water quality impacts
7 to benthic algae levels, algal growth that occurs
8 in the river, because that's the easiest way to
9 understand what the implications of the standards
10 are.

11 This slide is focused more on western
12 Montana. It's a little more complicated in
13 eastern Montana, though we do have standards out
14 there as well. And I'll kind of walk you through
15 what you're looking at here. So on the previous
16 slide I showed you some photos of different types
17 of algae levels that we know can become quite
18 excessive in streams and rivers.

19 Over the last ten years, between work
20 we've carried out in the state, or literature,
21 research that's been done in the scientific
22 community, etc., this is a general pattern of what
23 kind of different effects on beneficial uses --
24 which is of course what water quality standards
25 are intended to protect -- relative to different

1 types of benthic algae levels. And as a step back
2 from that, we already have an understanding of the
3 types of nutrient concentrations that will lead to
4 these different types of algae levels, so that's
5 the linkage there.

6 Starting at the top, if you look at the
7 recreational esthetic beneficial use, which is
8 universal across all water, streams, and rivers,
9 essentially from levels of zero up to about 150
10 milligrams per square meter, all the public
11 perception surveys we've carried out in the state
12 show that that's acceptable to the Montana public.
13 Levels beyond that are not, so that's kind of a
14 threshold right there.

15 Dropping down here to aquatic insect
16 communities, which are very typically important to
17 flyfishermen, etc., in western Montana. At the
18 low algae level, you typically see contamination
19 by stoneflies, caddis flies, mayflies, etc.
20 Somewhere around this same type of algae level,
21 150, that ballpark, we start to see a shift in the
22 community structure.

23 Sometimes we'll see more of some species
24 and less of others. And eventually when you get
25 out here to a very high level, dominated by more

1 tolerant species: Scuds, mollusks, midges, etc.

2 So these are the shifts we see with increasing
3 nutrients and increasing algae levels.

4 Relative to dissolved oxygen, this is a
5 pretty critical numeric standard because that gets
6 directly at supportive fish and aquatic life. At
7 these low algae levels, below 150, we basically
8 never see dissolved oxygen problems. Around this,
9 again this central area here, we tend to see
10 sporadic dissolved oxygen problems beginning to
11 occur, and we have studies that have actually
12 demonstrated that directly. Out here, these high
13 levels, dissolved oxygen problems are fairly
14 certain.

15 The picture with fish or salmonid fish
16 -- trout, etc. -- it's a little more complicated.
17 What you generally see is that a very, very low
18 algae level down around here, as they increase,
19 you actually see increased salmonid growth and
20 survival, so there's actually net improvement when
21 one considers to a fishery up to a point.

22 The picture becomes a little more fuzzy
23 here in the central area. There is some things
24 that would suggest that salmonid growth and
25 survival continues to increase even past this

1 level, and other studies and data show that it
2 tends to become reduced. But we do know that once
3 you get out here to these high levels, salmonid
4 growth and survival is definitely impaired.

5 So putting these all together, what you
6 essentially have is nutrients that we can relate
7 to these different benthic algae levels, and a
8 threshold that basically is occurring right about
9 this amount of algae in the rivers and streams of
10 the western part of the state.

11 So I'm just going to go over briefly how
12 the criteria were developed, and the techniques
13 that we use. We basically have three major
14 pieces. First, we needed to identify geographic
15 zones where specific criteria would apply, because
16 the natural background soils, climate, and geology
17 basically allow -- there is natural background
18 levels that are highly variable already across the
19 state, based on those factors.

20 We needed an understanding of the
21 cause/effect relationship between nutrients and
22 beneficial uses. We saw some of that just a
23 moment ago. For that, you need to know what harm
24 to use, and at what point of use we're trying to
25 protect harm, and again, for different areas of

1 the state.

2 I want to mention here that in
3 developing these criterias, we used dose response
4 stress response studies applicable to Montana and
5 the local region first; and then ones wider out
6 from the United States, North America, or beyond
7 secondarily when we developed these criteria. So
8 the more local the dose response study was, the
9 more importance we gave it in terms of developing
10 the standards.

11 Finally, we've devoted over ten
12 continuous years of collecting data from reference
13 sites, which by definition support all the
14 beneficial uses, and have no impacts of any note;
15 and they help us benchmark the standards when we
16 get to the point where we're developing them. So
17 I'll go over what that looks like here.

18 So we did a series of analyses, we did
19 these about six, seven years ago, and compared a
20 couple of different potential geographic systems,
21 mapping systems, that could be used to define
22 where the different nutrient criteria would be
23 best applied.

24 The one that came out on top, in other
25 words, it was the one that predicted different

1 nutrient concentrations the best, was the
2 geographic system called ecoregions. It was
3 developed by Jim Ohlrick (phonetic) in the early
4 1970s, and it was mostly set up for the purposes
5 of defining water quality especially related to
6 nutrients.

7 It breaks out different Level IIIs.
8 That's these gray or different colored zones that
9 you can see here. And in addition, there are a
10 series of Level IVs that are particularly
11 important. They tend to run along the Rocky
12 Mountain Front here. These are typically B-1 or
13 B-2 waters, so they're salmonids, although they
14 are technically part of the plains, and we are
15 treating them as a special entity. Most of their
16 water quality standards tend to look more like the
17 mountainous region than like the plains.

18 I mentioned earlier that we tend to give
19 more importance to the dose response studies that
20 have been carried out regionally or in Montana,
21 and we have quite a few of those now, much more
22 than when we first started on this.

23 Some of these we've carried out
24 ourselves. For example, we've carried out a
25 natural whole stream nutrient addition study out

1 here in eastern Montana, this ecoregion, to try to
2 understand that part of the state. We have
3 studies here, studies on the Clark Fork, studies
4 down here.

5 So between what's been done by other
6 researchers and by the Department itself, we have
7 a pretty good coverage. We have a dose response
8 study in all of the southern major ecoregions that
9 we are concerned with developing criteria for at
10 this point.

11 So I mentioned earlier to the reference
12 streams. Basically water bodies that have minimal
13 impacts are also part of the picture. What we did
14 is we compiled nutrient concentration data from
15 these sites. As I said, we've been going out and
16 visiting and identifying these sites continuously
17 for the last ten years, and we have some even from
18 before that; and we used these to help benchmark
19 the criteria that we derive.

20 And that's done in this manner. What we
21 typically see, when you look at reference data, is
22 that if you were to plot this, where you usually
23 find the concentration from one of these dose
24 response studies -- this is the threshold, this is
25 the point where harm begins to occur -- they

1 generally occur out here relative to the reference
2 site data.

3 So what does this mean? What it means
4 is -- and this is fairly intuitive -- most of the
5 data, most of the nutrient concentrations
6 collected from reference sites is below the levels
7 that would harm use, which fundamentally makes
8 sense to us, why they're reference sites to begin
9 with. And we use this information to help cross
10 check our dose response studies, and in some case
11 make adjustments to those if the numbers seem to
12 not make sense.

13 So coming soon -- and I think this will
14 actually be very useful for the Board in terms of
15 the scope of rulemaking -- we'll be providing
16 ecoregion by ecoregion discussion, and we'll have
17 a recommendation for each Level III or Level IV
18 ecoregion.

19 An example I'm showing here now is the
20 Middle Rockies, which you probably saw, I showed
21 them on the map earlier.

22 All these white dots are the reference
23 sites that were used. We'll have some descriptive
24 statistics of what the nutrient concentrations
25 look like in the reference sites from the region;

1 our recommended criteria; and then there will be a
2 one to two page discussion of each ecoregion of
3 how we came to those numbers, including ranges,
4 which I think would be useful, especially when you
5 get to the point where we have to decide what the
6 final criteria should be, if we opt to do
7 something that's different than the Department's
8 recommendation.

9 Up to now I've been pretty much talking
10 about wadeable streams, the smaller streams that
11 are spread out across the landscape. Our large
12 rivers are another story. This is a list of
13 rivers that we've defined, and it's fairly
14 straight forward. The Clark Fork River below the
15 Bitterroot, the Yellowstone, the Missouri, etc.,
16 these are the large rivers of the state.

17 We've taken a different tactic for
18 developing the criteria for these because
19 essentially one of the missing pieces of our three
20 legged stool, the reference sites, those are not
21 available. All these river systems have been
22 altered, dammed, changed, and so we don't have any
23 reference point of comparison. So not having
24 that, we thought it would be better to take a
25 different tactic.

1 In addition, their fundamental physical
2 characteristics makes them -- their vulnerability
3 to excess nutrients is different than smaller
4 streams, because they're deeper, light becomes
5 more limiting to the algal growth, etc., in large
6 rivers, and so we took another tactic. We're
7 using mechanistic water quality models.

8 Now, the nice thing about these models
9 is you can basically add nutrients in a computer
10 simulation once we have the model validated and
11 calibrated, and see what the impacts to those
12 other types of standards we discussed earlier look
13 like. So you can see what the effects on
14 dissolved oxygen will be, on pH, on total
15 dissolved gas, etc.

16 And that's exactly what we've done.
17 We've done our first case study on the lower
18 Yellowstone. We began this in 2005; we put our
19 report out for the technical model last year; and
20 we're just finishing up addressing peer review
21 comments. This particular model was carried out
22 from Forsyth down to Glendive, and we do have
23 draft criteria completed for this section of the
24 river based on this model.

25 Here is a table of our draft criteria.

1 It's updated through essentially yesterday, but
2 I'm still finalizing a few of the numbers. One of
3 the things I'd really like to point out is that
4 they are seasonal criteria. Most of the problems
5 that we see in terms of impacts occur in the
6 summer when you have base flow, high light levels,
7 and that's when -- and high algal growth occurs,
8 etc., the dissolved oxygen problems occur. So
9 these criteria essentially run from the end of
10 runoff basically around the end of June through
11 early fall, and then they commence again the
12 following year.

13 And these are the types of
14 concentrations we're talking about. For example,
15 in the middle Rockies, 30 micrograms total
16 phosphorus per liter, and 300 micrograms total
17 nitrogen. You can see in the plains region that
18 they're considerably higher, more milligrams per
19 liter, as are the ones for the large rivers. This
20 is because many of these stream systems tend to be
21 more light limited, more turbid, and so the
22 manifestation is less intense than it is relative
23 to the western Montana clear streams.

24 There is a common misunderstanding that
25 I just wanted to clarify for the Board, that the

1 criteria is so stringent that all the streams out
2 there are going to end up on the 303D list, our
3 list of impaired streams, and that's basically not
4 true.

5 Based on probabilistic surveys that have
6 been carried out across the state, we estimate
7 about 70 to 80 percent of our stream miles
8 statewide currently meet the total phosphorus
9 criteria we were just looking at; and about 85 to
10 90 percent of the stream miles meet total
11 nitrogen. Those that are not typically have
12 impacts that you can link back to some kind of
13 problem, either point or nonpoint source.

14 Lakes. I'm just going to touch on lakes
15 briefly. They, like rivers and streams, have been
16 pretty well defined, and in fact relative to
17 rivers and streams, much better defined impacts
18 from excess nutrients, loss of water clarity,
19 noxious algal blooms, including toxic algal blooms
20 in some cases; loss of esthetic or property value;
21 changes in fish species competition, etc. And for
22 drinking water sources, they can also lead to
23 taste and odor problems.

24 Right now our lakes criteria are under
25 development, our large reservoir criteria are also

1 under development, and we're going to plan to do a
2 modeling approach similar to what we did on the
3 Yellowstone River. And so at this stage, we don't
4 have any lake or reservoir criteria
5 recommendations for you. However, we might have
6 some for the Flathead Lake, since much work has
7 been done up there. But we're still just kind of
8 trying to work out the last details on whether we
9 will carry that forward to you or not.

10 I thought the Board would find this very
11 interesting, because this is last time -- and I
12 was here at the time they did the rulemaking in
13 2002 for the Clark Fork River -- that nutrient
14 standards were brought to this Board at these type
15 of nutrient standards, and I just thought it would
16 be good to show you what's been going on in that
17 basin since.

18 So just stepping back in time a bit. In
19 1989 -- and George touched on this -- there was
20 the phosphate laundry soap ban, and interestingly
21 in retrospect, that single action was the largest
22 reduction of phosphorus of anything that's
23 happened since. It knocked down a large amount of
24 phosphorus, a full ten years before the voluntary
25 nutrient reduction program was signed.

1 In 2002, the Board here adopted the
2 criteria that you see there, and you can see
3 they're very similar to what we were just looking
4 at in the Middle Rockies wadeable streams. The
5 science continues to sort of converge on about the
6 same numbers, even though we've got a lot more
7 data, and analyses, and studies to fall back on.

8 In 2004, Missoula upgraded to a
9 biological nutrient reduction plant, and Butte has
10 one coming up in 2014.

11 By 2004, there were a lot of other
12 improvements in place along the river, and we did
13 an analysis recently comparing basically what
14 happened between 1998 and 2009, so the ten years
15 of the VNRP essentially. Over that time, total
16 phosphorus significantly dropped across the entire
17 basin; total nitrogen did not, but it clearly was
18 declining below Missoula.

19 Benthic algal biomass, which is one of
20 those benchmarks that we look at, significantly
21 declined at all sites downstream of Missoula, and
22 this was clearly linked back to their upgrade, and
23 they are now being consistently met below
24 Missoula.

25 In contrast, benthic algae biomass is

1 still not being met at the upper part of the
2 river, and the criteria are not quite being met
3 yet either, but they are moving in the right
4 direction in most cases. And we have an
5 assumption that when Butte's upgrade goes in
6 place, we'll probably see some additional
7 significant improvements to the upper river.

8 So having developed the criteria, we had
9 a pretty good sense of what the criteria would
10 look like about 2005, so quite some years ago; and
11 what was immediately obvious is that there was
12 going to be some serious difficulties with
13 implementation. A lot of that relates back to the
14 difference between what the criteria looked like
15 and the technologies that are out there right now
16 for treating nutrient removal.

17 So if you look at a typical western
18 Montana stream criterion, something around 30
19 micrograms total "P" per liter, and then you look
20 at the approximate wastewater technology limit
21 from a high end wastewater facility, depending on
22 the engineer you talk to -- which that's what
23 these error bars represent -- they may be --
24 they're higher, but they may be almost the same.
25 So technology today, with a fairly high end

1 facility, something like a large community like
2 Missoula could put in, can probably meet these
3 total phosphorus criteria end of pipe.

4 In contrast, the total nitrogen, there
5 is quite a big gap still. So what we see is
6 typical total nitrogen criterion is about 300
7 micrograms per liter; whereas wastewater
8 technologies tend to bounce around about three to
9 four thousand micrograms, a full order of
10 magnitude higher. Herein lies the rub when you're
11 trying to implement these, and to phosphorus as
12 well to some degree, and so that's what led to
13 some of these Senate bills that we were going over
14 as well.

15 So we have options now for communities
16 to receive temporary relief from the criteria
17 based on the inability to pay for treatment,
18 essentially affordability, or the limits of
19 technology. And the only thing I want to point
20 out to you about these is that these apply to
21 wastewater treatment beyond the federal mandated
22 technology regulations, the national secondaries
23 that you're familiar with. So these are specific
24 to nutrient standards.

25 There is a lot of stuff on this slide,

1 but it basically goes over the -- it summarizes
2 the essence of what Senate Bills 95 in the 2009
3 Legislature and 367 from the 2011, and they're now
4 at 75-5-313, what they do. So we now have
5 authority to grant variances from the nutrient
6 criteria, based on substantial and widespread
7 economic harm that would result if the criteria
8 had to be implemented immediately. Variances can
9 be up to twenty years, and they're subject to
10 three year reviews.

11 The original Senate Bill 95 only allowed
12 variances on a case-by-case basis, and this was
13 problematic, and so then Senate Bill 367 made it a
14 little bit more straight forward and easy. Under
15 Senate Bill 367 and the law that fell underneath
16 there, if the permittee can't meet the criteria,
17 they can treat -- but they can treat to some
18 defined levels in their wastewater, then they can
19 receive a general variance.

20 So if you are a facility discharging
21 greater than one million gallons per day, that's
22 equivalent to a milligram TP per liter or ten
23 milligrams TP per liter, so they can apply for and
24 receive a variance. If you're less than one
25 million gallons per day, it would be two

1 milligrams TP per liter, and 15 milligrams total
2 nitrogen per liter. And lagoons are basically
3 locked at maintaining current performance.

4 For small communities, with a few
5 hundred people, to switch from a lagoon to a
6 mechanical plant is probably not realistic
7 cost-wise in many cases.

8 So they're kind of left with two
9 options. If they can't meet the standards,
10 because there's little dilution available in the
11 stream that they're discharging to, they can land
12 apply in the summer -- which there are cases of
13 those in the state that have been successful, so
14 they can meet the standards that way -- or if not,
15 they're going to have to just simply maintain
16 current performance and discharge throughout the
17 summer until something comes along where a
18 technology could handle those situations more
19 effectively.

20 There is also still -- and this is
21 something that was originally part of Senate Bill
22 95, but continues to exist under the law --
23 individual variances are now available, or still
24 available, and a permittee can apply for these if
25 meeting even the general variance concentrations

1 appears to them to be financially excessive. The
2 difference in these cases is that they need to go
3 through a case by case demonstration to show the
4 Department that they really would have financial
5 hardship in attempting to meet these numbers.

6 These rules are currently in statute,
7 and they need to be adopted as Department rules by
8 May of 2016. At that point the Department
9 essentially takes them over as rules. And then we
10 have to revisit these treatment levels every three
11 years to determine if they're still meaningful.
12 So if some technologies or changes come along that
13 will allow, for example, these to come down
14 substantially, then that would be a justification
15 for the Department to change those numbers to
16 something closer to the standards, the actual
17 criteria.

18 So in essence, what these laws have done
19 is they've allowed Montana time to implement these
20 nutrient criteria over time in a staged manner,
21 over approximately a 20 year period, which we
22 believe will allow critical time to better address
23 both point and nonpoint sources, and for treatment
24 technology to come down and to -- improve and come
25 down in cost.

1 MR. WHALEN: Mike, may I interrupt you
2 for just a minute.

3 MR. SUPLEE: Absolutely.

4 MR. WHALEN: That statute that was
5 referenced in the previous slide, what was that
6 number?

7 MR. SUPLEE: 75-5-313.

8 Here is a little bit more on 75-5-313.
9 In addition to the treatment levels that you were
10 just looking at, it also established the Nutrient
11 Work Group, which is an advisory council to the
12 DEQ. We've got a broad cross section of
13 stakeholders in there, industry, League of Cities
14 and Towns, small towns, large towns, environmental
15 groups. We tried to pull in a full gamut of
16 stakeholders to get feedback as we worked through
17 the criteria, and also the implementation process.
18 And we've met with them 16 times since May of
19 2009, and we've worked through many, many
20 difficult hurdles, and I think we've got a lot of
21 the problems, issues resolved through that.

22 And we've also got, as part of 75-5-313
23 a trading policy, which Todd Teegarden is going to
24 talk about in greater detail later.

25 So now I'm coming to the materials that

1 the Board will actually see down the road when we
2 approach you for initiation of rulemaking. One of
3 the documents would be a new circular DEQ12, and
4 has parts "A" and "B." This document includes
5 things such as general variance procedures,
6 permitting requirements. And then in addition we
7 have a rule package that addresses nondeg and some
8 other details in rule that need to be adjusted, so
9 that this circular can be incorporated into our
10 rules.

11 The Board would be primarily focusing on
12 Part A, which is the nutrient criteria themselves,
13 the numbers, and also how they are implemented
14 through permitting. Part B pertains to variances,
15 which according to statute are primarily or all
16 Department rules.

17 We also have been working very closely
18 with EPA on this, because this is a very tricky
19 topic, it's complicated. They were not initially
20 very excited about our variance procedure, but we
21 have careful examined the Clean Water Act variance
22 procedures therein, and believed that it was
23 appropriate.

24 After much discussion, we have a memo
25 from them stating that they, "A," recognize that

1 we've taken a strong science-based approach to
2 develop the criteria themselves, and also that the
3 issue of variances -- those numbers we were
4 looking at earlier for treatment -- would be
5 consistent with the Clean Water Act and its
6 implementing regulations.

7 I should point out that EPA has told me
8 this is not an official acceptance of the
9 standards or the criteria, that this all happens
10 after it passes through the Board, but they have
11 indicated that they believe the process would be
12 acceptable.

13 So this is the proposed timeline that
14 the Department is considering at this point. We
15 have another Nutrient Work Group meeting coming up
16 here in early April. There are still some issues
17 that they have indicated they wish to talk to us
18 about in terms of permitting details, etc.; but
19 assuming we can get those worked out, we might
20 come to the Board to request initiation of
21 rulemaking at the July 2012 meeting. That's our
22 target.

23 And these have slipped in the past. I
24 can't predict for sure how it will go, but that is
25 the -- Discussions with George and others suggest

1 that this is definitely something we're working
2 very hard to try to achieve.

3 So thanks, and if you have questions, I
4 can answer them, Bob is here, or anyone else.
5 Permitting is here as well.

6 (Recess taken)

7 CHAIRMAN RUSSELL: Why don't we get
8 going again, and I believe -- even though I've had
9 to be briefed by my Co-Chair -- we're going to
10 take some questions for our first segment of
11 nutrient reduction strategies. Any questions?

12 Mike, we were just having a discussion
13 about this. What constitutes a wadeable stream?

14 MR. SUPLEE: Well, there is just the
15 obvious intuitive sense of what it is. Beyond
16 that, the way we've defined them is we did some
17 hydrological analyses, and looked at a wadeability
18 index, and what it boils down to, those large
19 rivers that I pointed out to you, they generally
20 have depths and velocities during base flow in the
21 summer that would essentially knock a typical
22 person over and wash them downstream.

23 So another way to look at it is
24 Straddler stream order. Most of the wadeable
25 streams are between first and about fifth or

1 sixth. The large rivers that we were looking at
2 are all seventh order or larger. So they're at
3 the trunk of a large system of streams coming
4 together.

5 There probably are some intermediate
6 streams between maybe fifth order and sixth order,
7 in that ballpark, that are still pretty large,
8 still technically wadeable. It may fall a little
9 bit in the gray zone. But at the stage where we
10 are in terms of the science and the development,
11 and breaking out different groups, we essentially
12 had two groups: Large rivers and wadeable
13 streams.

14 CHAIRMAN RUSSELL: So how does -- like
15 the Stillwater?

16 MR. SUPLEE: That would be an example of
17 one of those ones that falls probably to the very
18 high side of wadeable. It is wadeable, but it's
19 starting to approach more what you would think of
20 as a river, a bigger river.

21 CHAIRMAN RUSSELL: Why was the south
22 fork of the Flathead on there?

23 MR. SUPLEE: Just when we did the
24 hydrologic analysis, it fell into that category of
25 what I described to you earlier.

1 CHAIRMAN RUSSELL: It's more wadeable
2 than the middle fork?

3 MR. SUPLEE: (Nods head)

4 CHAIRMAN RUSSELL: It appears to be.

5 MR. SUPLEE: We have a technical
6 document out on the subject, but the basic break
7 points is that generally more than a meter deep
8 through most of their average wedded width, and
9 they have velocities such that they're not
10 wadeable by a typical person.

11 CHAIRMAN RUSSELL: When you say mouth,
12 and that's the termination point, that's the mouth
13 of the river where it joins a lake?

14 MR. SUPLEE: I'm trying to think what
15 would be a example.

16 CHAIRMAN RUSSELL: Like the Flathead.
17 It says from this point to the mouth.

18 MR. SUPLEE: Yes. In that case it would
19 be where it joins the lake, or it would join --

20 CHAIRMAN RUSSELL: -- another river?

21 MR. SUPLEE: Another major river, right.

22 MR. WHALEN: Quickly, Mike, this
23 threshold of acceptability with respect to benthic
24 algae level, at 150 --

25 MR. SUPLEE: -- milligrams per liter.

1 MR. WHALEN: That pretty much holds true
2 for either wadeable streams or large rivers; is
3 that correct?

4 MR. SUPLEE: It holds true in large
5 rivers within the wadeable regions of those
6 rivers, and so when we ran our model, a lot of
7 these large rivers have in some cases large
8 sections, 25, 30 percent of the channel width is
9 actually wadeable -- the lower Yellowstone are a
10 number of examples of them.

11 So when we ran our model simulations, we
12 would run it in the wadeable region where most
13 people initiate, or carry out recreation, or
14 launch their boats, launch their tubes, etc., fish
15 from the shore, this sort of thing. On the
16 wadeable streams, it applies essentially to the
17 whole channel.

18 MR. WHALEN: As a followup, could you
19 discuss some of the differences, the major
20 differences between that threshold level in the
21 larger rivers versus the wadeable streams? In
22 other words, I'm trying to anticipate a devil's
23 advocate argument coming from, for example, our
24 municipal water director, who is concerned about
25 the standards.

1 MR. SUPLEE: Let me give you an example.
2 On the Yellowstone River that we modeled, there
3 were actually two -- we broke it into two pieces.
4 We broke it into the section from upstream down to
5 the Powder River. At that point, the Powder River
6 introduces a lot of high levels of natural
7 turbidity, so the river essentially from that
8 point on is much more turbid, and much more light
9 limited; and then we ran our simulations on both
10 halves.

11 And what it turned out is as we looked
12 at the way additional nutrients in the simulation
13 changed -- the dissolved oxygen levels, pH levels,
14 the algal growth, etc. -- in the more clear water
15 segment upstream, the pH standard was actually
16 exceeded first, before benthic algae levels hit
17 any kind of a level that would be considered
18 nuisance.

19 In contrast in the downstream reach,
20 because of the higher light levels, pH was more
21 muted, didn't change as much with each additional
22 amount of nutrients, and there it was actually the
23 benthic algae in the wadeable regions of the river
24 that ultimately set the criteria, but it was at a
25 much higher level.

1 So for example, in the lower part of the
2 river -- lower meaning the lower of those two
3 segments -- it was something like 900 micrograms
4 total nitrogen; and in the downstream section
5 below the Powder, it was more like 1400, 1.4
6 milligrams TN per liter. So it's still in there
7 as part of the model, and it did set a threshold,
8 but it's not always the first water quality
9 criterion to be triggered necessarily.

10 On the Yellowstone River, depending on
11 which section you look at, other water quality
12 standards that we're concerned were with actually
13 triggered first by excess nutrients.

14 MR. WHALEN: Thank you, and thank you
15 for this work. That ecoregion development was
16 really interesting.

17 MR. SUPLEE: Thank you.

18 CHAIRMAN RUSSELL: Just a quick question
19 on -- You're just looking at "N" and "P"?

20 MR. SUPLEE: Yes, we're focusing on
21 nitrogen and phosphorus.

22 CHAIRMAN RUSSELL: How does carbon
23 figure into this?

24 MR. SUPLEE: That's a good question.
25 Actually, Mr. Chairman, throughout the 1960s,

1 there was a wide debate in the scientific
2 community about whether it was carbon, nitrogen,
3 or phosphorus that was the primary limiting
4 nutrient in fresh water systems.

5 That was largely resolved in the early
6 1970s, work done by Schindler in the Experimental
7 Lakes area in Canada, where they found that
8 because there is a large amount -- enough carbon
9 dioxide in the atmosphere, or the fact that there
10 is a fair amount that can get into the water by
11 diffusion, that it has never turned out to be a
12 limiting factor in and of itself.

13 So after that, there was large focus on
14 phosphorus only; and then more recently there has
15 been a realization that both nitrogen and
16 phosphorus tend to, especially in in-flowing
17 systems, limit or co-limit nutrient or co-limit
18 algal and plant growth.

19 CHAIRMAN RUSSELL: What form of nitrogen
20 is a problem for primary production of algae?

21 MR. SUPLEE: The one that they take up
22 most readily is ammonia. That's of course
23 regulated by other laws. Next after that is
24 nitrate, and they take that up pretty readily as
25 well.

1 The criteria that we're talking about
2 are total nutrients, so that would comprise
3 organic nitrogen, ammonia, and nitrate plus
4 nitrite, the whole package; and the reason we're
5 doing that is because it's very difficult to
6 establish a surface water, ambient surface water
7 criterion based on solubles.

8 We looked at this in fact on the Clark
9 Fork many years ago, and the problem is that when
10 the algal or the plant growth is very rapid,
11 sometimes they can take it all out of the water,
12 and so if you were going to actually go out and
13 measure it, you'll measure no nitrate at all, and
14 yet the problem is manifested.

15 Totals on the other hand, although not
16 perfectly, they tend to have much better
17 correlations. So if you have higher total end in
18 the river, as the algae die, recycle, etc., a
19 higher TN means you're exceeding the problems
20 manifested as well. So the totals have been
21 looked at, as well as the solubles, and the totals
22 tend to work better as a practical surface water
23 criterion.

24 That doesn't mean that they are the sole
25 problem. A lot of times it's the soluble

1 components that are subcomponents of them, that
2 the plants are actually taking up most readily.

3 CHAIRMAN RUSSELL: Any questions, more
4 questions for Mike?

5 MS. KAISER: The only one I have is I
6 would like to get a copy of your presentation if
7 that's possible.

8 MR. SUPLEE: Sure. That's fine. We'll
9 make sure that you get that.

10 CHAIRMAN RUSSELL: Nice job. Either you
11 or George.

12 MR. LaVIGNE: Mr. Chairman, members of
13 the Board. Again, I'm Paul LaVigne, and I manage
14 the Water Pollution Control State Revolving Fund
15 here at DEQ, and that's in the Planning Division.

16 As Mike alluded to, his nutrient
17 standards that municipalities or other dischargers
18 are going to need to meet are fairly stringent, in
19 fact at or beyond the limits of technology. So we
20 started looking at design criteria for consultants
21 to use to try to address these issues that are
22 going to be coming up, because I expect there are
23 going to be a lot of dischargers that are going to
24 have to do some sort of nutrient removal in their
25 facilities in order to meet these standards.

1 I'd like to take a minute just to
2 explain what our program does, take another minute
3 to put circular DEQ2 in context with other design
4 circulars in the Department, and then I'll talk
5 about the changes, the proposed changes we're
6 going to make for DEQ2, and reuse as part of that.

7 So our little group, we do low interest
8 loans for municipalities, public land treatment
9 works generally, so we've got some engineers that
10 work in the planning, design, construction, and
11 post-construction activities on those projects.
12 And then our other function is we do technical
13 assistance, so we train operators in classroom
14 settings, train engineers in classroom settings,
15 and others as well.

16 We do a lot of onsite technical
17 assistance; we do operation and maintenance
18 inspections; and then in depth what are CPE's or
19 comprehensive performance evaluations, where we go
20 to facilities, generally larger facilities, for a
21 couple of days with a team of people, and try to
22 find anything that's affecting the performance of
23 that plant, give them recommendations; and then
24 which leads us into the current issue. We also
25 write design standards for generally the larger

1 wastewater treatment and collection systems.

2 So there is four design circulars in my
3 little world here and I generally just deal with
4 one of them. Just to put DEQ2 in context, DEQ1 is
5 for public drinking water systems; DEQ2 is for the
6 larger wastewater systems; and then DEQ3 is the
7 non-community, the real small drinking water
8 systems; and then DEQ4, which you guys listened to
9 a presentation last session I think, talking about
10 these smaller systems, and onsite subsurface
11 discharging systems.

12 So DEQ2 covers the larger systems that
13 we generally deal with in our world here. It
14 covers collection and treatment. It covers both
15 discharging systems, the groundwater surface
16 discharging systems, and then non-discharging
17 systems as well. So examples of those would be
18 spray irrigation facilities, and total retention
19 lagoons. So essentially these standards are just
20 a big tool box, a bunch of different design
21 standards that consulting engineers can draw from
22 to design his or her project.

23 Our first addition to this was called
24 WQB2, for the Water Quality Bureau back in the old
25 days. We did one revision in 1999, which is kind

1 of just some minor clean-up stuff. But generally
2 the backbone of this document is what's called Ten
3 State Standards, and this is a document prepared
4 by ten states in the midwest that have been doing
5 this for years and years, and they get together
6 every year; and through experience they've decided
7 what works and what doesn't, and it's a fairly
8 conservative set of design standards.

9 So that's kind of the backbone of our
10 standards, but there were things in there that
11 weren't addressed -- spray irrigation was not
12 addressed, UV, disinfection, and that -- so we
13 added those back in 1994. Then we're going to do
14 some more changes and some additions this time.

15 So generally what we're proposing is
16 just a lot of clean-up, and then some significant
17 modifications to the land application or spray
18 irrigation guidelines. These standards, the way
19 we did it before was pretty good, and we've got
20 some good systems out there.

21 There were two issues that I thought
22 needed correcting, and one was: We relied on an
23 EPA land application document which had a little
24 different take on some things. The main thing was
25 that it allowed -- because EPA doesn't regulate

1 groundwater -- it allowed nutrients to pass beyond
2 the root zone into groundwater, and we didn't
3 implement that, but we just wanted a stand alone
4 document, so there was no confusion on that issue.

5 And the other thing that I think we fell
6 short on in 1994 was -- and then we're seeing out
7 in the field through our inspections -- is that
8 the operations side of things really wasn't
9 addressed that well, and taking steps to deal with
10 that.

11 But in this document, we decided to
12 really lay out what we want to do, or want the
13 operators to do. So essentially a nutrient
14 management plan, an operation plan, that sort of
15 stuff would be a requirement in order for us to
16 approve it. So they needed to think this thing
17 out beforehand on their daily operations, and they
18 need to continually demonstrate that they don't
19 impact State water, is basically what it comes
20 down to.

21 And we added some new sections. We have
22 some new technologies that have come out since we
23 started dealing with this -- membrane bioreactors,
24 sequencing bioreactors -- and then just biological
25 nutrient removal in general, which none of those

1 are addressed in Ten State Standards, so we did
2 our own research, and starting tackling those
3 issues.

4 And then reuse standards, we decided
5 that maybe this was the best place to put the
6 actual standards. So in the standards, there are
7 treatment standards to be met prior to types of
8 uses, and then a classification of those allowable
9 uses, and I'll talk about that in a little bit
10 here in a second.

11 So the land application thing, as I
12 mentioned, I guess I've kind of covered most of
13 this, or some of it. What we have in there now is
14 for land application or spray irrigation at
15 agronomic rates only, so essentially the plants
16 uptake all the nutrients before any groundwater is
17 percolating -- or application water is percolated
18 further into the groundwater.

19 These have been going on for about 30 or
20 so years, so even before we had these standards,
21 there were some facilities that were approved, and
22 are in operation. There is about 50 of these
23 systems in Montana at the municipal level. It's
24 used pretty well. And aside from probably total
25 retention, it is probably environmentally probably

1 the next best thing you can do, better than
2 dumping it in the stream.

3 The way the rules are now, the
4 groundwater rules, is these systems, if they're
5 approved by us at agronomic rates, are exempt from
6 a groundwater discharge permit. So there it comes
7 back to the part I mentioned earlier. These guys,
8 because they've got a permit, need to continually
9 demonstrate they aren't impacting State water.

10 And I mentioned that we just need to
11 take a better look at operations, so we'll have
12 sampling, monitoring, and recordkeeping
13 requirements within the system we approve from
14 here on out, assuming these changes get adopted.

15 The new technologies. Membrane
16 bioreactors, or MBR's -- and actually in your
17 handout on the very last sheet, I have a list of
18 acronyms and what they stand for. These are
19 essentially -- membranes are just a physical
20 barrier, so you still have the whole biological
21 treatment part of things, and then you have
22 membranes that act as a barrier, and allows you to
23 do several things in the treatment process to take
24 advantage of that.

25 In terms of reuse it's important,

1 because it does provide a physical barrier. We
2 have one of these in construction in Bigfork right
3 now, and we have two in design -- one in Butte
4 that should be going online here in a couple
5 years, they're going to start construction next
6 year -- and then one in River Rock Water and Sewer
7 District just outside of Belgrade.

8 So they had a fecal coliform problem
9 with contamination of downstream wells. They have
10 a permit now for zero fecal coliform, so this is a
11 physical barrier that kind of helps there.

12 Then a sequencing batch reactor, so
13 several versions of this. The most sophisticated
14 one is up in Glacier National Park right now, and
15 it's an amazing facility, in my mind probably one
16 of the -- it's probably the standard in the
17 country for effluent quality from a municipal
18 level system. Nutrients are -- nitrogen I think
19 is two milligrams per liter, and phosphorus is
20 .02, so it is a state of art limits technology
21 system. It's very well operated, great system.

22 So we have a lot of history of BMR in
23 Montana. It generally started up in the Flathead
24 basin. So we've got nutrient removal plants --
25 not all of them are biological at this point -- in

1 Kalispell, Columbia Fall, Bigfork, Whitefish, and
2 then Yellow Bay Biological Station. Those have
3 been in place since like the late 1980s or early
4 1990s.

5 CHAIRMAN RUSSELL: Did you actually say
6 Whitefish?

7 MR. LaVIGNE: Chemical. They've got
8 chemical removal, and they're doing some.

9 CHAIRMAN RUSSELL: I don't know if I
10 would --

11 MR. LaVIGNE: They have a ways to go,
12 but they've taken some steps.

13 CHAIRMAN RUSSELL: Kalispell certainly,
14 and Columbia Falls.

15 MR. LaVIGNE: Columbia Falls just did an
16 upgrade; Kalispell just did an upgrade. Those are
17 -- Kalispell is one of the systems in the world
18 actually that has probably the lowest total
19 phosphorus concentrations, or one of, from purely
20 biological treatment, so it's a very well run
21 facility up there.

22 Obviously with the water quality
23 standards, we're going to see a lot more of these
24 types of systems, so we thought it was important
25 to do our part to make sure some sort of standards

1 were there to help the consultants, and to allow
2 us a method to consistently review these
3 proposals.

4 MR. LIVERS: A quick question if I
5 could, Paul. Do all of those new systems require
6 certified operators?

7 MR. LaVIGNE: Yes, certainly, and that's
8 a whole issue in itself. It's potentially a
9 crisis coming this way; nationally, too, I would
10 say.

11 MR. LIVERS: I don't know. I haven't
12 followed this for quite some time, but don't some
13 of the sequencing batch reactors, aren't they
14 relatively scale or scalable?

15 MR. LaVIGNE: Yes, some are very small,
16 onsite. Yes.

17 MR. LIVERS: Thanks.

18 CHAIRMAN RUSSELL: They weren't
19 designed, but they do a pretty good job with
20 nitrogen reduction.

21 MR. LaVIGNE: Yes, they can, and it
22 depends on how they're run. Obviously the more
23 sophisticated these plants become, the more
24 critical operations become.

25 CHAIRMAN RUSSELL: That's not what they

1 were designed to do originally.

2 MR. LaVIGNE: Yes. Maybe not. I don't
3 know.

4 So moving on to reuse, and this is in
5 the back of -- I think it's Appendix B in the
6 Circular DEQ2. I think those slides I gave you
7 copies of are maybe updated since then, that might
8 have that information in it.

9 But we've been looking at reuse for
10 awhile. Obviously we have the spray irrigation
11 thing going on, and that's been going on for
12 awhile, but there are other uses that can be done.
13 A lot of other states have actually adopted reuse
14 standards. Even Idaho, and we're behind Idaho, so
15 we thought we'd better do something.

16 So the last legislative session, Terry
17 Campbell, one of our engineers, worked with
18 Claudia to try to get this going, to figure out
19 whatever authority we needed in terms of law. And
20 so we had House Bill 52, and it gives the Board
21 authority to adopt reuse rules and standards. It
22 defines reclaimed wastewater.

23 The other thing it did is the water
24 rights issue of taking your discharge out of a
25 stream, and using it to spray irrigate, we've had

1 like one kind of ruling on it that seemed like it
2 was okay, and in talking with DNRC, it's okay; but
3 obviously it's a concern for senior water right
4 holders.

5 And so in this bill and during
6 negotiations that always happen during the
7 formation or adoption of a bill, there was
8 language put in there that required DNRC to have
9 approval of water rights before this community or
10 whatever it took out of the stream and used it in
11 other ways.

12 We've worked with them, and we now have
13 a Memorandum of Understanding with DNRC for this
14 process, so we kind of got that lined out.

15 CHAIRMAN RUSSELL: Paul, can we stop
16 there and talk a little bit about: What do you
17 feel is a reuse of wastewater?

18 MR. LaVIGNE: Well, technically I guess,
19 Joe, it would be anything other than discharging
20 it into the groundwater or surface water, some
21 sort of benefit. We've got a laundry list of
22 items that -- it could be industrial use, it could
23 be dust suppression for roads, fire fighting.

24 It is really broad, and that was one of
25 the tough parts of developing standards for these,

1 is that we really don't know what's going to come
2 in the door. We know what other states have done
3 for standards and that. Even groundwater
4 injection for recharge, if it is treated to a
5 certain level. So it's pretty broad.

6 CHAIRMAN RUSSELL: The only thing I
7 bring it up is California does a lot around reuse
8 of wastewater for ag practices, and Tom brings up
9 this whole concept of operators. These are
10 intense operational when you start to reuse
11 wastewater.

12 MR. LaVIGNE: Absolutely.

13 CHAIRMAN RUSSELL: And I think that's
14 going to be the biggest limitation is where your
15 costs are so marginalized, where you can't
16 actually afford someone to go out there and do the
17 testing that is necessary. I can tell you that
18 there has most likely been some flu borne
19 outbreaks associated with ag crops that may have
20 had some reuse of wastewater.

21 I think it's a great idea, but it really
22 does need to be regulated. I see some head
23 shaking. I would be real concerned without good
24 strong regulation around this.

25 MR. LaVIGNE: And this is kind of our

1 attempt to do that. It really does -- These reuse
2 standards that you'll see in Appendix B, sampling,
3 monitoring, testing requirements for all -- Joe,
4 honestly, I think other than just spray irrigation
5 -- which hopefully we're addressing by tightening
6 that up -- and food crops, it is pretty well
7 segmented what you can and can't do related to
8 crops.

9 But we see the more -- the bigger
10 plants, more sophisticated plants, are the ones
11 that are going to be doing these options that may
12 be more -- have a higher opportunity for the
13 public health, and so very highly treated
14 wastewater in these facilities.

15 MR. LIVERS: I would just be curious
16 maybe, for an example, if we had an industrial
17 use, then also I wonder if there is any experience
18 with the use of fracking, or if that's been
19 considered and rejected, or anyone has done --

20 MR. LaVIGNE: We haven't looked at the
21 fracking thing, but it is a question that I'm told
22 has been asked to even operators of lagoon
23 systems, "Can we buy your water to use for
24 injection and fracking process?" And it's
25 something that we need to explore. It was kind of

1 like -- that kind of happened at the tail end of
2 developing these, so it's something that we need
3 to look at further.

4 But cooling water would be an example of
5 industrial waste; process water for other things
6 that doesn't require -- these remaining pollutants
7 don't create an impact, and I don't have an
8 example of that. Terry, I don't know if -- Terry
9 mentioned the ASME plant outside of Butte has
10 potential interest for that. It seemed to me like
11 maybe that would have to be more pure than what
12 we're dealing with here.

13 It is like a nonpoint source. It's like
14 there is so many types of it out there that we
15 don't really have a handle on it yet, so we'll try
16 to write something. We may come back to you later
17 and have to revise it if some new uses come up,
18 but we've tried to structure it around what other
19 states have done, and they vary a little bit, but
20 generally they're pretty consistent.

21 I'll explain one area where there is a
22 divergence, where states do and some states don't
23 allow this. Well, and here we are right there.

24 MR. WHALEN: A quick question for you,
25 Paul, if you wouldn't mind. The water rights push

1 back that you alluded to a little bit earlier is
2 coming from senior water rights holders upstream
3 of municipalities that would be considering reuse
4 of effluent?

5 MR. LaVIGNE: No, generally down stream.
6 So this community "A" has been discharging for 80
7 years at a million gallons a day, let's say, and
8 now they're going to take water out of the stream,
9 and apply it to the land, and there is no general
10 recharge to that area, so the downstream water
11 user is worried about not having his water. We
12 haven't had anybody fighting for the stuff yet,
13 but you never know.

14 So as far as talking about the proposed
15 changes to the rules that we'd be dealing with
16 there, the rules to the Water Quality Act and
17 rules associated with Public Water Supply Act. So
18 for the Water Quality Act, we're proposing
19 definitions for reclaimed wastewater, unrestricted
20 reclaimed wastewater -- which is the key element
21 that I think would be probably most controversial
22 here.

23 It adopts Circular DEQ2 by reference.
24 DEQ2 is already adopted by reference under the
25 Public Water Supply Water Act, not the Water

1 Quality Act, and it clarifies existing permit
2 exclusion for spray irrigation, and defines
3 agronomic rates as a condition of approval.

4 Then there is just -- and this is a key
5 here -- new exclusions for unrestricted reclaimed
6 wastewater from groundwater permit with monitoring
7 and reporting requirements. There are certain
8 limitations to that restriction, but essentially
9 this classification that would allow this use is
10 called A-1, and you're oxidizing it, coagulating
11 it, filtering it, and disinfecting it, and you're
12 treating to total nitrogen less than five. So it
13 already meets nondegradation before it goes out
14 there, so some states are allowing this approach,
15 and some states are not.

16 Then under the Public Water Supply Act,
17 the rules there, just some minor clean-up related
18 to definition. And there is language in there
19 that just makes sure that our approval requires
20 compliance with the treatments, monitoring,
21 reporting, etc. It mentions the DNRC approval
22 regarding water rights. There is two
23 prohibitions. One is you have to properly use the
24 water, and the other is you have to properly treat
25 it before you use it.

1 The reuse standards in DEQ2 Appendix B,
2 they list all the classifications and all of the
3 allowable uses; they list all the monitoring and
4 O&M requirements, reporting requirements, and that
5 sort of thing, very clearly stated in table form,
6 and then text form, paragraph form below that.

7 So our proposal here is that we've got
8 this thing online. We realize it's a pretty
9 lengthy document. I've tried to focus your
10 attention where I think the critical areas are,
11 but it's there for your use, and one of the back
12 pages, that's kind of hard to read on the handout,
13 so I've got a full sheet that shows the web
14 location there.

15 But it gives you guys time to look at
16 it. We plan to request authority for rulemaking
17 at the next meeting on this issue. And here is
18 our contact information. I hire really good
19 people. I don't really know what you think. But
20 Terry Campbell has been involved in the reuse
21 stuff; he I would suggest would be the primary
22 contact. And then Mike Abrahamson -- those are
23 our senior engineers here -- has been dealing with
24 DEQ2.

25 So if you have any questions on those,

1 you can call me, but I'll probably defer to them
2 anyway, so if you don't want to waste anyone's
3 time, yours especially, just contact those guys
4 directly.

5 CHAIRMAN RUSSELL: You must be doing
6 something right because you've been around for a
7 long time. Is this longer than DEQ4?

8 MR. LaVIGNE: Yes. It is like that
9 thick. (Indicating) That's why I tried to
10 highlight the important things. A lot of it is
11 just minor clean-up, but the spray irrigation
12 stuff I think is -- obviously you're interested in
13 that, and then the whole reuse stuff, and that
14 reuse is 18 pages I think.

15 MR. WHALEN: Las Vegas is often
16 referenced as a model for municipal water reuse.
17 Do you have some other models that you would
18 suggest that we would look into before we --

19 MR. LaVIGNE: Arizona is one that has
20 unrestricted reuse, so their standard's pretty
21 good. And then obviously we use California,
22 Florida.

23 CHAIRMAN RUSSELL: And just to follow up
24 on that, the only challenge I have with those is
25 the evapotranspiration rates are always positive,

1 twelve months out of the year.

2 MR. LaVIGNE: We don't -- Actually our
3 design criteria for these are pretty conservative.
4 So we essentially assume that for spray irrigation
5 you have a five month growing season, and then
6 seven months storage unless you have another way
7 to discharge.

8 CHAIRMAN RUSSELL: The only reason I
9 bring it up is when we started to deal with gray
10 water at the legislative level, there were a lot
11 of people that wanted us to use Arizona's gray
12 water rules, and that's just not practical in
13 Montana. So that's the only thing I would
14 caution, is at the legislative level we dealt with
15 that. When it certainly came to rulemaking, DEQ
16 was all over it, but it was a little spooky
17 because people thought we could just apply these
18 Arizona type rules in Montana.

19 MR. LaVIGNE: I agree with you. And so
20 we had to wade through those other states, and
21 some of the stuff that they wanted to do was
22 impractical. You kind of want to give people
23 options as a way to reduce nutrients to the
24 stream, but they need to be applicable in Montana.

25 CHAIRMAN RUSSELL: And to Joe's point,

1 again, I really encourage reuse where it's
2 applicable. I think we do a really poor job.
3 We're very myopic about, "There is a stream.
4 Let's just dump it right there," where this is lot
5 of other things we could be doing that pose much
6 greater benefit than just dumping it in the river.

7 MR. LaVIGNE: Absolutely. And a lot of
8 the -- California, a lot of reuse is driven by
9 water shortage, and we have that issue here, but
10 nutrient standards can actually kind of do the
11 same thing. The only problem is we don't have the
12 demand for the water. We have the demand to try
13 to keep it from going into the stream, but we
14 don't have the other side of it unlike California.

15 CHAIRMAN RUSSELL: Conservation is still
16 a good thing.

17 MR. MILLER: Paul, I noticed with all
18 the wastewater treatment, there's really been a
19 big emphasis on the nutrient removal reduction and
20 all of this. But what about the effectiveness of
21 these new plants on removal of pharmaceuticals,
22 metals, and one in particular, arsenic? How
23 effective?

24 MR. LaVIGNE: Well, I can't say that I
25 really know. Pharmaceuticals and the treatment of

1 those is right really in the forefront of research
2 right now, but what I understand is some of the
3 process is more sophisticated plants generally
4 help with those things, all of them, metals,
5 arsenic included, and pharmaceuticals; but whether
6 these can treat down to whatever new standards may
7 come about in the future, we just don't know. I
8 don't think anybody knows that.

9 MR. MILLER: Follow-up. You know,
10 we're finding in the Gallatin valley, Helena
11 valley, and so forth, pharmaceuticals down in
12 wells 300 feet deep. It is a little bit scary
13 when we start -- and then all of a sudden now as
14 we need a lot of aquifer recharge, we're
15 considering options to recharge our basins and so
16 forth. And so I think we have to be a little
17 careful.

18 Arsenic is really quite concerning. The
19 bulk of it is coming out of Yellowstone Park, and
20 they've already diverted over the last 80 years in
21 the Madison valley, and virtually the entire
22 valley is loaded with arsenic, and that's coming
23 out in the Missouri. Even here in the Helena
24 valley, the big irrigation project takes water
25 from the Missouri, which is loaded with arsenic.

1 So it seems like to me we need a major
2 removal system near the edge of Yellowstone Park,
3 and they'll handle most of the arsenic problems in
4 Montana. So these are a real concern at this
5 point coming out.

6 MR. LaVIGNE: Sure.

7 CHAIRMAN RUSSELL: You had mentioned
8 Belgrade's building a new treatment plan.

9 MR. LaVIGNE: It's actually River Rock.
10 It's a big subdivision kind of southwest of there.

11 CHAIRMAN RUSSELL: Are they going to be
12 picking up some of this commercial stuff on that
13 side of the highway?

14 MR. LaVIGNE: I think Belgrade already
15 does. They have their collection system south of
16 the interstate there, and picking up some of that
17 right in that area. I'm not positive of that.
18 Belgrade has its issues. It's a relatively new
19 plant. But they may have to do something else,
20 too, in the future.

21 CHAIRMAN RUSSELL: The groundwater is
22 really shallow out there.

23 MR. LaVIGNE: Yes. Those are the two
24 systems since I've been around, that new
25 infiltration IPC cells, they've been put in, and

1 mainly it is hydraulics that let you do it. There
2 is so much water going through there, even though
3 it's shallow, there's so much water, for those
4 systems to be built.

5 CHAIRMAN RUSSELL: The solution to
6 pollution is dilution. I thought that only worked
7 with air.

8 MR. WHALEN: Just a quick question,
9 Paul. You used the term "agronomic rate," and I
10 want to get clarity on that. As I understand it,
11 it relates to spray irrigation. That's the rate
12 at which there is no net loss into the groundwater
13 supply; is that right?

14 MR. LaVIGNE: Right.

15 MR. WHALEN: It's all uptaken by the
16 roots and leaves.

17 MR. LaVIGNE: Correct. That's why we
18 only assume a five month growing season. The rest
19 of the time the crops aren't growing, and there's
20 no uptake in those.

21 One of the things we did, too, we went
22 another step further in the operations part of the
23 thing, and generally the way we've looked at it is
24 on a month by month basis, so generally crops are
25 growing at their fastest in the spring, and

1 da-da-da-da-da.

2 But the problem that we saw, or
3 potential problem, was that people could apply too
4 much at once. So we kind of restricted that a
5 little further by saying that, at least in the
6 design stuff, and hopefully the operations, is
7 that you can't exceed the water holding capacity
8 within the root zone, so you're not flushing stuff
9 down by -- over-apply one time every so often.

10 MR. WHALEN: Thank you.

11 CHAIRMAN RUSSELL: Paul, thank you very
12 much.

13 MR. TEEGARDEN: Mr. Chairman, members of
14 the Board, for the record, I'm Todd Teegarden,
15 Bureau Chief, Technical and Financial Assistance.
16 I'm here to give you a quick overview of nutrient
17 trading and the draft nutrient policy that the
18 Department has been developing in the last couple
19 years, and some of that is tied to looking
20 nationally at what's done, and certainly, as
21 George mentioned and Mike, in the Senate Bills,
22 and the options that are available for
23 communities.

24 Again, the background is we're
25 developing those numeric nutrient standards. This

1 nutrient trading will be a tool that is an
2 optional tool for anyone to use to try to reduce
3 nutrients, whether they be point source or
4 nonpoint source. As we continue to develop TMDL's
5 load allocations, this will be an option for
6 communities and watersheds to look at.

7 Trading is a market based approach to
8 improve water quality, and supported by EPA by a
9 policy that they have on nutrient trading to meet
10 TMDL load allocations. It can be conducted in
11 different ways, with buyers, sellers, and
12 sometimes through centralized brokers or bankers.

13 Nationally trading has, and world wide,
14 been on multiple parameters here. Our policy,
15 kind of like the nutrient standards Mike
16 mentioned, are strictly to address nitrogen,
17 phosphorus, with the option someday of maybe
18 expanding it if it's a decent policy for other
19 parameters. But it is just strictly for nitrogen
20 and phosphorus.

21 Who may participate in trading,
22 certainly point sources through permits over
23 non-permits. Nonpoint sources. I just threw out
24 a few of the examples here. We have a whole list
25 in our 319 management plan: Onsite systems,

1 septic systems, logging, ag, animal feed
2 operations, storm water, etc.

3 Depending on which program, and there is
4 a lot of programs nationally, you sometimes have
5 this local government involved through statute, or
6 as just an information or approval mechanism,
7 which is kind of what we're proposing. You can
8 also have it be market based, like I say, with
9 aggregators or private marketers.

10 Our draft trading policy allows point
11 source to point source trading within kind of the
12 parameters of the watershed, point source to
13 nonpoint source trading, and nonpoint source to
14 nonpoint source trading. We anticipate
15 incorporating all point source trading if there is
16 a permit via the permit.

17 Trading ratios will be instituted. We
18 don't specify them in the policy. We have some
19 guidance on how to determine the trading policy,
20 and some references to other states for nitrogen
21 and phosphorus; but we will ensure that there is a
22 net water quality benefit from the trade.

23 So if there is a point source to
24 nonpoint source trade, the nonpoint source will
25 have to demonstrate -- or the point source will

1 have to demonstrate that the nonpoint source
2 activities are reducing below what their load
3 allocation is, plus what the plant performs at.

4 MR. LIVERS: Mr. Chairman, thank you.
5 Todd, just a quick question for my benefit. Is
6 that trading directional? In other words, on the
7 point source to nonpoint source, can you also
8 trade nonpoint to point source?

9 MR. TEEGARDEN: Yes, either direction
10 between. Typically it's an economic driven thing
11 via a discharge or a local, and I've got a few
12 examples of how the Chesapeake has worked in the
13 Miami/Ohio examples, but it can go either way,
14 certainly, for whoever wants to reduce nutrients.

15 CHAIRMAN RUSSELL: I think that's great,
16 but nonpoint sources are regulated not often by
17 the same people that regulate point sources,
18 right?

19 MR. TEEGARDEN: Very true.

20 CHAIRMAN RUSSELL: This seems maybe to
21 cause a little dilemma.

22 MR. TEEGARDEN: It does, and I think
23 that's why states that have incorporated trades,
24 or as Montana looks to them, we're going to have
25 trading ratios that quantify what that nonpoint

1 source load is, as defined in the TMDL if there is
2 TMDL development, with a net improvement. So
3 there is going to be conservatisms in your trading
4 ratios to provide that net benefit in the long
5 run.

6 And then there will be stipulations
7 within -- if it's a point source to nonpoint
8 source, the permit will have annual requirements
9 that will require, "Hey, justify that the nonpoint
10 source is still in place," and providing that
11 tradable parameter or number.

12 MR. WHALEN: How are nonpoint source
13 contributions to the waste stream measured
14 currently? How do you anticipate that they will
15 be at some point down the line when you are able
16 to establish some ratios?

17 MR. TEEGARDEN: That's a good question,
18 and it depends on what parameter of the nonpoint
19 source. Again, I've got an example, if I could go
20 through a couple slides, and maybe get back to
21 your question.

22 The TMDL quantifies your nonpoint
23 sources as certain pies of the load allocation for
24 the watershed, and they are getting more specific
25 with onsite or septic, the piece that's an onsite

1 system.

2 To quantify, you're going to have to do
3 some sort of modeling, and when they're developing
4 the TMDL -- and the TMDL folks can speak to that a
5 lot better than us or I -- as to how do you
6 quantify the nonpoint source; and then when we put
7 in a best management practice, how those numbers
8 drive, because other states are doing it. And
9 again, you have a factor of safety or an
10 uncertainty ratio that we will add to provide
11 hopefully protection on that trade number.

12 MR. WHALEN: I'll wait and see.

13 MR. TEEGARDEN: I'll get back to that,
14 or ask some TMDL folks to tell you about that.

15 I just threw up here some of the notable
16 US trading programs that have been kind of leaders
17 in this, and we've based a lot of our discussions
18 and our policy based on these. And as you can
19 see, there is a variety of point source/nonpoint
20 source, or point source/point source trading,
21 depending on the parameters that are paired in
22 those watersheds.

23 A typical driver in a trading program
24 that even makes it viable is dollars, and
25 oftentimes it is very expensive to reduce "N" and

1 "P" to these lower numbers from the municipal or
2 urban settings, and it can be a lot more
3 economical to address your nonpoint source
4 fraction of the load allocations.

5 Here is an example that they project in
6 the Miami, greater Miami River Basin in Ohio.
7 They estimate the treatment plants upgrade to get
8 to the numbers they want in their load allocations
9 and waste load allocations cost over \$400 million.
10 Via trading, they can get those same reductions
11 approximately \$46 million. So there is a huge
12 savings economically there.

13 Now that's Ohio, which is a lot more
14 populated, a lot more point sources, but this is
15 really what drives a trading program, is if there
16 is load allocations that communities look at and
17 say, "Hey, there may be a cheaper way to try to
18 make these same types of nutrient reductions in
19 total."

20 Here is kind of that pie chart, Mr.
21 Whalen, that I was referencing. This is again the
22 -- This is the Gulf of Mexico, but you can see the
23 variation of nonpoint sources that are divvied up
24 in terms of the load that is causing the
25 impairment and the hypoxia down in the Gulf.

1 Again, they throw a cost benefit
2 estimate in their literature that says it costs
3 \$280 to \$2,000 plus dollars per pound of nitrogen
4 removed. You can have ag practices reduced from a
5 buck fifty to four-fifty. And again, a lot of
6 their impacts are ag related due to mainly
7 cropping. A lot of crops are grown in there, so
8 there is a lot more probably options for the ag
9 community to be reduced. But certainly in Montana
10 a lot of our loadings are nonpoint sources.

11 I threw this out just as an example of
12 load variations where you can have a nonpoint
13 source being the majority of the load allocation,
14 along with the natural load or treatment plant
15 percentages, and then these numbers vary all over
16 the board depending on the watershed; or it can be
17 the other way around where the treatment plants
18 are the major nutrient addition. And thus the
19 focus for watersheds really changes, depending on
20 where you're at, your population, and the nonpoint
21 source factors in the area.

22 Based on a lot of this discussion with
23 the Department, we were told to basically develop
24 a trading policy. We did some research, and we
25 patterned it after Maryland's policy. That was

1 kind of the core that we took it out and we,
2 through the process of discussing this at the
3 Nutrient Work Group meetings, formed a nutrient
4 trading policy or -- excuse me -- Nutrient Trading
5 Work Group -- that anybody was available to be on.

6 We've had meetings; we held a policy
7 workshop; we solicited informal comments; got
8 comments from three different entities on our
9 original draft a couple years ago, a year and a
10 half ago; and we've got all of this linked on the
11 nutrient website. That's where you can go to
12 access the trading, our response to comments, and
13 the comments we received.

14 Our timeline. We presented this to
15 WPCAC last month, this introduction today, and
16 then we will hold a subcommittee meeting, and do
17 our final adjustments to the policy in draft form
18 to bring to the Board in April. Our hope is to
19 hit the July deadline, and maybe in tandem with
20 the nutrient standards, because there certainly is
21 a correlation to the need and the standards are
22 part of the reason we're developing the nutrient
23 trading policy.

24 Legal interpretation of the policy. As
25 I mentioned, there is current authority to

1 implement the policy and put it in trades. We're
2 actually having discussions with two communities
3 now, the City of Helena and the City of Missoula,
4 about possible trades via their permit renewals.

5 We do not have the authority to adopt
6 the trading policy, and we're guided by Legal to
7 bring -- it will be a simple reference in one of
8 our rules to reference the policy. And then we're
9 still deciding where that's going to lie, but it
10 will be a simple rule revision that references the
11 policy.

12 And these are the five core people that
13 have been involved. We've worked with Permitting
14 and Planning, the different groups to kind of put
15 this together, be a part of all of the discussions
16 we've had with the public, and we certainly are
17 open to comments. The draft is posted, and you
18 could call any of us, because we've all been
19 involved with it, but I've just been kind of
20 taking the lead with that. With that, I'm
21 available for comments.

22 CHAIRMAN RUSSELL: So Todd, this is kind
23 of a hot issue up in the Flathead. If trading is
24 going to work, and just as an example -- and maybe
25 slap me back if I'm wrong. I just want to go

1 through this.

2 Most of the trading is going to be of
3 benefit to the POTW's by taking some other waste
4 stream and eliminating it, like septic systems
5 that have higher nutrient contribution or waste
6 load allocation, to some receiving body. So there
7 is going to be a trade that says, "If you take ten
8 septic systems off here, that's going to be a
9 benefit to maybe adding thirty homes to a
10 wastewater treatment plant."

11 MR. TEEGARDEN: Mr. Chairman, I guess I
12 would say the economic benefit may be to the point
13 source dischargers, but the benefit will be to
14 water quality on the net watershed basis.
15 Otherwise trade isn't viable.

16 CHAIRMAN RUSSELL: I understand that
17 point, but the thing that's driving the TMDL from
18 our perspective in the Flathead is what the POTW's
19 are putting out there. They want to start to
20 assess some contribution of septic tanks to the
21 waste; but if that never happens, then what are
22 you trading?

23 And then the example with ag that you
24 put up there, I'm guessing that if this was kind
25 of an EPA trading policy, you could go to the ag

1 people and say, "If you reduce your nitrogen by 80
2 percent, we'll pay for that, if we can have the
3 benefit at the wastewater treatment plant."

4 MR. TEEGARDEN: That's where the trade
5 could be viable, correct, because you have a load
6 allocation at your plant, and you have a load
7 allocation that's out there for a dairy or
8 something like that.

9 I might let Jenny Chambers chime in on
10 this.

11 MS. CHAMBERS: Mr. Chairman, members of
12 the Board. For the record, my name is Jenny
13 Chambers. I'm the Bureau Chief of the Water
14 Protection Bureau working on these discharge
15 permits.

16 So just to back up a little bit and
17 answer, hopefully answer some questions that Joe
18 had. The idea that it's within a Flathead Lake
19 TMDL or other watershed based TMDL's, they're
20 using some contribution for septic loading or
21 nonpoint source contribution to that watershed.

22 So what you could do is we have a
23 modeling and information from our TMDL shop that
24 basically lets us provide a ratio of distance to
25 where that septic tank would be within a watershed

1 area, and what that load would be to whatever the
2 receiving water we're trying to protect is.

3 And so we could provide a net benefit on
4 that reduction, using the information from what
5 that septic tank is going to get, the distance to
6 the receiving stream, and then also taking into
7 the factor of how that current POTW is performing,
8 and giving that ratio of what that trade credit is
9 good for.

10 And so yes, the idea with Helena and
11 Missoula we're currently looking at is to provide
12 some kind of strategy in the MPDES permit that
13 states, "If you hook up additional 100 septic
14 tanks, or 50 septic tanks, that would be
15 equivalent to 'X' amount of pounds per day."

16 That load would then be contributed to
17 your final permit limit, and that's the permit
18 limit that you would have to meet, with some
19 satisfactory reporting to us that they did indeed
20 hook up "X" number of communities, septic tanks,
21 and that they're continuing to annex off the area,
22 so we don't continue to have urbanized sprawl up
23 in Montana, which might have folks hooked up to
24 our regional central sewer system; try to promote
25 the fact of growth and development, and to have

1 centralized POTW's with better treatment.

2 And the ag component is a similar type
3 of activity. There is a BMP's with the United
4 States Department of Agriculture, that says if you
5 take a farmer's cows out of the stream, put up
6 fencing or barriers, or put up a riparian buffer
7 zone on that stream bank, that would equate to "X"
8 amount of pounds reduction, so we'll just do that
9 same factor associated with that.

10 CHAIRMAN RUSSELL: The big issue is
11 creating the baseline, I'm guessing, that says,
12 "Okay, this is the nutrient that you're going to
13 reduce."

14 MS. CHAMBERS: Correct. And Chairman,
15 that TMDL would establish what that baseline is,
16 or what that watershed scale reduction would be to
17 both point source and nonpoint sources for that
18 area.

19 CHAIRMAN RUSSELL: We're hopeful that it
20 works.

21 MR. WHALEN: Assuming that we go
22 forward, say you present this policy to us, and we
23 want to green light everything -- this may be a
24 question for Legal. Is a legislative package
25 complete in order to make that happen, or are you

1 anticipating that it would come to the Board, we
2 would approve what it is that you want to do, and
3 then design some legislation for the next session?

4 MR. TEEGARDEN: Mr. Whalen, members of
5 the Board. My understanding is that no, there is
6 no legislative requirement needed. There is a
7 rule amendment needed with the Board's approval
8 for us to adopt the policy and incorporate it, and
9 that's what we would propose. So no, the rule
10 would suffice.

11 MR. WHALEN: Thank you.

12 MS. CHAMBERS: Mr. Chairman, members of
13 the Board. We currently have authority in our
14 Montana Water Quality Act to allow trades now, so
15 the trading policy is just going to provide our
16 framework of how we're going to implement that
17 trade. So even prior to going into the summer or
18 fall, we may have a permit go out the door for
19 public notice that may have a trade incorporated
20 currently.

21 So I don't want to get any confusion
22 that we may roll out the door with some trading
23 component in a permit that's based upon our draft
24 policy, but the Board hasn't yet adopted, or we
25 haven't incorporated that actual policy language

1 in the rules.

2 CHAIRMAN RUSSELL: So will this be
3 narrative, or -- this won't be a narrative type
4 environment, will it? We're going to just parade
5 every one up. The next is going to be --

6 MS. MASSMAN: Mr. Chairman, members of
7 the Board. I think you were asking whether the
8 rule was going to be narrative or the policy?

9 CHAIRMAN RUSSELL: Well, I think it's
10 going to be difficult to -- It seems like it's
11 going to be difficult when you look at, let's say,
12 septic systems, or we brought up ag earlier, and
13 there is this agronomic uptake that says, "Okay.
14 Now we don't have any 'N' or 'P' going past that
15 root zone." It's going to be hard to put a
16 numeric standard to that, where --

17 It seems like it's going to have to be
18 more narrative in approach, that you're going to
19 have to determine a number case-by-case, and trade
20 a number case-by-case. You're not going to have
21 some B-2 out there that you're going to be able to
22 go to. You're going to have to -- literally it's
23 going to have to be a narrative approach.

24 MS. MASSMAN: You're right. Our trading
25 policy is pretty basic, bare bones. We set up a

1 few principles and things you have to adhere to;
2 but then we refer, in the back of the policy,
3 other guidance from other states on how you
4 calculate the nonpoint source reductions from ag.
5 We've got our own calculations for how to assess
6 reductions from septic systems. Eric Regensburger
7 of the Department has come up with some guidance
8 for that.

9 So it's up to the persons who want to
10 trade to come and convince us of the amount of
11 load reductions, and we take a look at that, and
12 sign on off it. It will never be the same number
13 probably in any given situation. So it is kind of
14 a case-by-case analysis.

15 MR. LIVERS: Mr. Chairman, just for the
16 record, Claudia Massman is our Chief Water
17 Attorney here in the Department.

18 CHAIRMAN RUSSELL: I knew that. You
19 just didn't tell anyone else that.

20 MR. MILLER: Todd, for maybe just kind
21 of follow up, I have a comment. It seems like to
22 me to avoid a lot of legislative turmoil, it would
23 really be good to give kind of this presentation
24 or similar to what you've done to the
25 Environmental Quality Council, which has a number

1 of legislators, both parties, and so forth, to
2 kind of update them on what everything is going
3 on, and avoid maybe a big hassle at the
4 Legislature. Just as a comment.

5 MR. LIVERS: Mr. Chairman, Mr. Miller.
6 That's a good suggestion, I think, and I don't
7 know if we've -- I know we haven't gone to EQC,
8 and there would be some value there. I'm not sure
9 if any of this has even gone to the Water Policy
10 Interim Committee, though, probably not, but there
11 are a couple of --

12 MR. MILLER: There are several
13 committees.

14 MR. LIVERS: -- in the interim that
15 would be a productive discussion, I think. I'll
16 take that suggestion back. Thank you.

17 MR. MILLER: I guess one other comment,
18 follow up. It seems like, Joe, following yours,
19 is to my knowledge, all nonpoint source work,
20 TMDL's, so forth, is all voluntary; whereas point
21 source is regulatory. So it seems like to me
22 that's going to be quite a problem in dealing with
23 voluntary versus regulatory. Am I --

24 MR. TEEGARDEN: Chairman Russell, Mr.
25 Miller. Yes, and that's something we hear

1 frequently from those that are regulated and have
2 permits, is "The chunk of this problem is nonpoint
3 source, it's non-regulated. How come you're not
4 doing anything to force them, and what is that
5 regulatory driver?," and that's a challenge for
6 trying to address TMDL's, is you've got a piece of
7 it that is regulated, and some that's not.

8 There is a lot of efforts, as George
9 mentioned, and Mike, in the nonpoint source
10 realms, projects, funding, that are going out and
11 doing buffer projects or fencing to make those
12 reductions.

13 And so I think there is a lot of
14 population in Montana that, given issues of water
15 quality, will come to the table per se through
16 watershed groups, that type of entity, to look at
17 the TMDL loads and say, "Hey, how do we come to
18 together in the watershed to make improvements,
19 come back to the water quality standards?"

20 So it is a big challenge that is out
21 there. We hear from the League of Cities and
22 Town, MACO, and everyone on, "Let's start to
23 address all of the other nonpoint sources," but
24 that is unenforceable currently.

25 MR. MILLER: Thank you.

1 MR. LIVERS: Mr. Chairman, before we
2 leave this overall briefing item, I think George
3 has some kind of summary closing comments when
4 we're done with questions for Todd.

5 CHAIRMAN RUSSELL: Thanks, Todd.

6 MR. MATHEIUS: Mr. Chairman, members of
7 the committee, again, for the record, my name is
8 George Matheius, and I'm Administrator of the
9 Planning Division.

10 First, I'd just like to thank the folks
11 that spoke today. Like Paul LaVigne said, he
12 hires smart people, as do I, even though that bar
13 is not very high. The folks did an excellent job
14 today and I appreciate it.

15 CHAIRMAN RUSSELL: I think you have most
16 of the Ph.D.'s.

17 MR. MATHEIUS: I think we do. They're
18 good folks, and they've done a nice job, and I
19 hope the Board -- I'm sure you have by all these
20 presentations we gave you -- seen the magnitude.
21 I think it came up earlier, the coal bed methane.
22 I think this is way bigger than coal bed methane,
23 and primarily because it touches every corner of
24 the state. It's going to impact communities from
25 Froid to Monida. So it is a big issue, and we do

1 take it seriously, and we've been working on it a
2 long time.

3 Montana is still a rural state, and I
4 think the potential of financial impact on
5 communities is great with all of this, and the
6 advent of adoption of these criteria. So really
7 the message I think is not only how is all this
8 related, but the fact that we're grappling with
9 the cost of these expensive treatment facilities,
10 and we're trying to develop tools. It is as
11 simple as that.

12 They're not always the catch-all,
13 they're not the silver bullet in all cases, but
14 we're trying to provide as many tools and options
15 as we can for these communities.

16 If I could just address a couple of
17 questions that have been occurring in the last few
18 minutes that just reiterate some things that folks
19 say.

20 Yes, in fact nonpoint source is
21 voluntary. I think as Todd said, the Department
22 has had a pretty significant program for several
23 years to work with those nonpoint source
24 communities. So I would say that even just in my
25 tenure with this agency, those partnerships have

1 increased, and become much more successful than
2 they have been in the past. So I think that's
3 good. I think we're moving in the right
4 direction.

5 It's correct we have not spoken directly
6 to the EQC and the Water Policy Interim committee
7 on these topics, but there has been legislative
8 discussion, if you will. There was talk around
9 trading and things of that nature because of
10 Senate Bill 367. We put some additional language
11 in there to deal with this. So it's not going to
12 be a complete surprise, and we discussed all these
13 types of things during the testimony of those
14 bills, but it still would be a good idea. So I
15 just wanted to throw that out there.

16 Finally, back to Mr. Whalen's questions
17 about how our nonpoint source is measured, they're
18 measured lots of ways. If I could just -- three
19 specific areas that we deal with here in the
20 agency, and there is many more, but just kind of
21 some generalizations.

22 We do have a nonpoint source management
23 plan, and I believe Todd mentioned it. It's a
24 five year plan, and that's a plan that is
25 administered through the 319 program under Section

1 319 of the Clean Water Act. And so that's really
2 a big collaborative effort that works with small
3 watershed communities, private ranchers, things of
4 that nature; and we also work with other entities,
5 like -- I was going to say the Soil Conservation
6 Service -- but NRCS and other state agencies as
7 well.

8 We also have a statewide monitoring
9 program in our division, and that program is
10 primarily charged with going out and looking at
11 pollutants across the state, and subsequently
12 that's where the 303D list comes from. Then comes
13 the TMDL program.

14 So we have a pretty good mechanism in
15 place whereby we're measuring both those nonpoint
16 sources and point sources to determine whether or
17 not the standards are being met, the beneficial
18 uses are being protected. If they're not, the
19 TMDL program kicks in, and it allocates. So TMDL
20 is required to address all significant sources,
21 both point and nonpoint.

22 So with that, I'd again like to thank
23 the folks that spoke today, and say good job, and
24 thanks to the Board.

25 CHAIRMAN RUSSELL: Thanks, George. It

1 is noon. We're going to take a break. I think
2 our lunches are here. So we'll break. Stay
3 close, and try to start again at 12:30.

4 (Lunch recess taken)

5 (Mr. Anderson not present)

6 CHAIRMAN RUSSELL: We'll go ahead and
7 get started. I believe the next item on the
8 agenda is the executive summary for rulemaking
9 proposal, Agenda Item III(A)(1).

10 MR. LIVERS: I was just wondering, and
11 want to make sure Larry Anderson is still --

12 CHAIRMAN RUSSELL: Larry, are you there?

13 (No response)

14 CHAIRMAN RUSSELL: We still have a
15 quorum.

16 MR. LIVERS: I think we can go ahead
17 with the rulemaking, and I think Bob Smith from
18 our Industrial Energy Minerals Bureau is here to
19 present on this.

20 MR. SMITH: Mr. Chairman, members of the
21 Board, my name is Bob Smith, and I'm the permit
22 coordinator for the Department's Coal and Uranium
23 Program. Today I'm requesting the initiation of
24 rulemaking to amend the rules that implement the
25 Montana Strip and Underground Mining Reclamation

1 Act.

2 As proposed, the rulemaking level will
3 include an addition to ARM Title 17 Chapter 24
4 Subchapter 9, which are the rules under which the
5 Department regulates underground coal and uranium
6 mining. The proposed rule falls into the general
7 category of implementing legislative change.

8 This rulemaking is required by Senate
9 Bill 292, which was passed in the 2011 legislative
10 session. Senate Bill 292 in part requires the
11 Board of Environmental Review to adopt rules by
12 October 1st, 2012 that are necessary to regulate
13 underground mining using in situ coal
14 gasification.

15 Senate Bill 292 also provides that those
16 rules may not be more stringent than the
17 comparable federal regulations or guidelines.
18 Currently there are two rules that specifically
19 regulate in situ coal gasification. ARM 17.24.902
20 provides permit application requirements, and ARM
21 17.24.903 provides performance standards for in
22 situ coal gasification.

23 Both of those rules provide that
24 appropriate provisions of Subchapter 3 through 8,
25 and 10 through 13 are applicable to in situ coal

1 permit applications and operations. ARM 17.24.902
2 and 903 are substantially similar to the
3 comparable federal regulations which are contained
4 in 30 CFR 785 22 and 30 CFR part 828.

5 Following the passage of Senate Bill
6 292, the Department of Environmental Quality
7 reviewed Subchapters 3 through 8, and 10 through
8 13, to identify which rules within those chapters
9 apply to in situ operations. After conducting the
10 review, the Department determined that most rules
11 relating to underground coal mining would apply to
12 those operations.

13 Rather than adopting rules that
14 duplicate existing rules, the Department is
15 proposing the Board adopt a new rule that lists
16 those rules that would not apply to in situ
17 operations. By adopting of New Rule I, the Board
18 would identify those rules that do not apply to in
19 situ coal mining operations, and thereby also
20 identify the rules that do apply.

21 A quick description of in situ coal
22 gasification is simply two holes that get drilled
23 into a coal seam, one that we drop heat and oxygen
24 into and start coal on fire, and one that extracts
25 the gases out the other side.

1 At the time there is no current active
2 in situ coal gasification mines in the United
3 States, and nothing currently proposed in Montana.
4 At this time, the Office of Surface Mining and the
5 western states, including Montana, are working on
6 developing a guideline for this process, as it's
7 very new.

8 I realize my summary is very short, but
9 the proposed rule is not lengthy, and does not
10 propose any significant changes, and I believe it
11 is clearly written. Thank you for your time, and
12 if there is any questions, feel frequently to
13 holler.

14 CHAIRMAN RUSSELL: Thank you.
15 Questions?

16 (No response)

17 CHAIRMAN RUSSELL: So none of this is
18 going on in the United States. Is it going on
19 anywhere?

20 MR. SMITH: Currently there is a
21 proposed test burn in Wyoming. It's proposed at
22 this point by a company out of Australia. They
23 were hoping to come in with a permit application a
24 year ago, and they're not there yet. It is done
25 in Australia now.

1 CHAIRMAN RUSSELL: So how do you control
2 the process?

3 MR. SMITH: Hydrostatic pressure. You
4 need to keep a negative hydrostatic pressure
5 inside your seam. Once you allow water to go back
6 into your seam, it just immediately loses its
7 ability to burn, and it shuts off. Other
8 questions?

9 MS. KAISER: I need to recuse myself.

10 MR. MILLER: One question. If it's not
11 occurring anywhere, why are we initiating rules?
12 Just to be ahead of the game?

13 MR. SMITH: We're putting these rules in
14 I guess to be ahead of the game. We had a company
15 that proposed this legislation, to make sure that
16 we had rules in place, and that they were able to
17 get a permit if they ever wanted to do that in the
18 future.

19 MR. MILLER: Thank you.

20 MR. LIVERS: Mr. Chairman, just to
21 elaborate. Bob is right. Once the Legislature
22 passed the bill that requires rulemaking, we
23 really don't have a choice but to follow through.

24 MR. MILLER: Okay.

25 MR. SMITH: Any other questions?

1 (No response)

2 CHAIRMAN RUSSELL: All right. Thank
3 you. And with that, I would entertain a motion to
4 initiate rulemaking and post the MAR. Katherine,
5 you're available?

6 MS. ORR: Yes.

7 CHAIRMAN RUSSELL: This wasn't the one
8 that no hearing was contemplated, is it?

9 MR. LIVERS: Yes.

10 CHAIRMAN RUSSELL: So there is no
11 hearing contemplated on this one, so I guess you
12 don't need to be available.

13 MS. ORR: Okay.

14 CHAIRMAN RUSSELL: So we're just going
15 to initiate rulemaking and get the notice posted.

16 MR. WHALEN: I would so move, Mr.
17 Chairman.

18 CHAIRMAN RUSSELL: It's been moved by
19 Joe Whalen. Is there a second?

20 MR. MILLER: I'll second.

21 CHAIRMAN RUSSELL: And is there anyone
22 in the audience that would like to speak to this
23 matter before the Board takes action?

24 (No response)

25 CHAIRMAN RUSSELL: No one is jumping up,

1 so any further discussion?

2 (No response)

3 CHAIRMAN RUSSELL: And move forward,
4 we'll actually, with Larry not on, we'll have to
5 have a unanimous vote of the remaining Board. So
6 all those in favor, signify by saying aye.

7 (Response)

8 CHAIRMAN RUSSELL: Opposed.

9 (No response)

10 CHAIRMAN RUSSELL: Motion carries.

11 Thank you.

12 The next item on the agenda is executive
13 summary for rulemaking, and the list of affected
14 rules are ARM 17 Chapter 24 Subchapters 3, 4, 5,
15 6, 7, 8, 9, 10, 11, and 12.

16 MR. URBAN: Mr. Chairman, members of the
17 Board, my name is Eric Urban. I'm the technical
18 coordinator for the Department's Coal and Uranium
19 Program, requesting final adoption of rulemaking
20 to amend the rules that implement the Montana
21 Strip and Underground Mine Reclamation Act.

22 As proposed, the rulemaking includes
23 modifications to nine subchapters within ARM Title
24 17, Chapter 24, which are the rules under which
25 the Department regulates coal and uranium mining.

1 The proposed revisions fall into the
2 following general categories: One, implementing
3 legislative changes; two, adopting provisions of
4 federal regulations that govern the applicant
5 violator system and ownership and control
6 requirements; three, addressing conditional
7 approvals and disapprovals from the Federal Office
8 of Surface Mining; four, making substantive
9 changes to existing rules recommended by the
10 Department's Coal and Uranium Program; five,
11 correcting grammatical errors; and six, correcting
12 reference citations.

13 A public hearing was held on January
14 18th, 2012, and comments were received through
15 January 23rd, 2012. A relatively small number of
16 comments were received. Some comments identified
17 typographical and grammatical errors. Also a
18 comment suggested a citation to the statute as
19 opposed to the addition of parallel language in
20 the rule.

21 The Department is proposing that these
22 comments be accepted, and corrections are included
23 in the revision to the proposed notice of adoption
24 in your packet.

25 Other comments suggested changes that

1 the Department recommends not be made. The
2 reasons for those recommendations are laid out in
3 the proposed notice.

4 And I would be happy to answer any
5 questions you might have. The Department
6 appreciates the Board's consideration of this
7 matter, and recommends that the Board adopt the
8 amendments with the revisions contained in the
9 proposed notice of adoption.

10 CHAIRMAN RUSSELL: Questions?

11 (No response)

12 CHAIRMAN RUSSELL: It looks like you're
13 off the hook.

14 MS. KAISER: I need to recuse myself
15 from this item also.

16 CHAIRMAN RUSSELL: Eric, thank you. I
17 think everything is in order. I'll take comments
18 right now before I craft a motion. Is there
19 anyone who would like to speak to this matter?

20 (No response)

21 CHAIRMAN RUSSELL: Okay. Now you're
22 really off the hook. With all that said, I will
23 entertain a motion to adopt the amendments to
24 17.24 and subchapters as mentioned, the 311
25 analysis; 521 is not applicable; the Department's

1 responses to comments; and the revisions to the
2 amendment as noticed in the agenda. Do I have a
3 motion?

4 MR. MIRES: So moved.

5 CHAIRMAN RUSSELL: It's been moved by
6 Larry. Is there a second?

7 MR. WHALEN: I'll second.

8 CHAIRMAN RUSSELL: It's been seconded by
9 Joe. Any further discussion?

10 (No response)

11 CHAIRMAN RUSSELL: Hearing none, all
12 those in favor, signify by saying aye.

13 (Response)

14 CHAIRMAN RUSSELL: Opposed.

15 (No response)

16 CHAIRMAN RUSSELL: Motion carries with
17 the remainder of the Board.

18 Okay. So we are now into the final
19 action on contested cases, and there is going to
20 be some interesting discussion coming up. So the
21 first case is in the matter of violations of the
22 Montana Water Quality Act by North Star Aviation,
23 Inc., at Ravalli County Airport, Ravalli County,
24 Montana.

25 MS. ORR: Mr. Chairman, members of the

1 Board, you have in your packet the decision, the
2 proposed decision that I issued, and you also have
3 exceptions that were filed by Counsel for the
4 Appellant and also by the Department.

5 And today the decision for the Board is
6 whether to accept, reject, or modify the proposed
7 findings of fact and conclusions of law. And the
8 guidelines for the Board are contained in MAPA in
9 this circumstance.

10 You will hear from Counsel from the
11 Appellant, but basically Counsel is objecting to
12 two findings of fact and one conclusion of law.
13 And I read MAPA 2-4-621 to require the Board to
14 review the complete record if it chooses to modify
15 a finding of fact, and the Board may well want to
16 do that. The Board may decide that the findings
17 of fact that Appellant's Counsel will be talking
18 about were not based upon competent substantial
19 evidence.

20 It happens that the two findings of fact
21 at issue -- and Counsel can expand upon this --
22 are contained or referenced in two exhibits that
23 were attached to the record, and I have copies of
24 those exhibits. One is a violation letter, and
25 one is a report regarding levels in monitoring

1 wells. So I would suggest you don't have to -- In
2 order to resolve this question, you can look at
3 those exhibits, and determine whether or not the
4 two findings of fact were supported by substantial
5 evidence.

6 The Department is in essence in its
7 exceptions arguing that there was competent
8 substantial evidence to back up the findings of
9 fact -- I believe they're 12 and 11, although I
10 may be wrong on that. Yes, 11 and 12 -- that
11 these exhibits constitute competent substantial
12 evidence of the findings in 11 and 12. So either
13 you will agree with that; or you will not agree
14 with that and want to open the record and alter
15 those findings of fact based on argument of
16 Counsel.

17 The other issue that is being brought up
18 by Appellant's Counsel in his exceptions is that
19 there is a conclusion of law that was improperly
20 set forth, and that conclusion of law is
21 Conclusion of Law No. 7 regarding whether or not
22 there is a causation requirement in the penalty
23 section in the Montana Water Quality Act.

24 And the conclusion of law that was made
25 in the proposed findings was to this effect -- and

1 again we're looking at Conclusion of Law No. 7 --
2 that causation, negligence, intentionality are not
3 implied by the statutory language; that in fact,
4 the statutory language is clear that if there is a
5 violation, there is a penalty.

6 But even if you were to conclude, as
7 presented in the proposed findings of fact, that
8 causation was an element that is not set forth,
9 but even if you were, there is causation because
10 the owner/operator failed to close valves on two
11 hoses that then in turn caused a leak.

12 And Appellant very forcefully argued,
13 and may today, that there were extenuating
14 circumstances of weather, and he panicked, and
15 there were a lot of things to distract his
16 attention, and those are the causative elements,
17 and he basically can't be held responsible for
18 that.

19 So that is sort of the entre to this,
20 and if you would like me to back up and give kind
21 of a factual background of this case, I can. It's
22 contained in I believe the stipulated fact No. 7,
23 the uncontested fact No. 7 here. If you wanted to
24 look at that quickly, that gives you sort of the
25 factual background for this case.

1 CHAIRMAN RUSSELL: All right. Thank
2 you. So just to kind of get an idea, the
3 Appellant is represented?

4 MS. ORR: Yes.

5 CHAIRMAN RUSSELL: And the Department is
6 represented.

7 MR. MADDEN: Yes.

8 CHAIRMAN RUSSELL: Do you plan on --
9 Jim, do you have something, or are you just --

10 MR. MADDEN: I think Appellant's Counsel
11 would like to make some remarks, and then I would
12 like to respond.

13 CHAIRMAN RUSSELL: That would be fine.
14 Let's get started. Let's try to not to drag this
15 on all afternoon if we can.

16 MR. BROWN: I think it will only take
17 ten minutes or so. So Mr. Chairman, members of
18 the Board, my name is Stephen Brown. I'm an
19 attorney with the Garlington firm in Missoula, and
20 our firm represents North Star Aviation.

21 And I think the facts have been laid
22 out, but basically this case arises out of an
23 accident occurred in the summer of 2008 at the
24 Ravalli County Airport. North Star is the entity
25 that gets fuels to the airplanes. That's what it

1 does. And the only way to get fuel to the
2 airplanes is by taking the fuel to airplanes.
3 Airplanes can't pull up to the pump like a car
4 can.

5 So they have a special kind of piece of
6 equipment that they use. It's not a highway truck
7 or anything like that, it's just equipment that
8 shuttles fuel out to the airplanes. And so they
9 have bulk tanks; they fill up with refueling
10 equipment; and then that shuttles the fuel to the
11 airplane.

12 In June of 2008, they were filling up
13 this piece of equipment, and the facility was
14 fully in compliance. There was no issue in this
15 case about it being out of compliance with any
16 kind of equipment it was supposed to have, or the
17 way it was operating the facility, or anything
18 like that.

19 But what happened was there was a
20 violent storm that came up while this equipment
21 was being refilled. The operator believed he had
22 the valve turned off, ran for shelter, took about
23 40 minutes because it was an extremely violent
24 storm, and those facts are not disputed. It
25 turned out that when he went back out when the

1 storm passed, that for some reason the valve did
2 not engage, and there was a spill of aviation
3 fuel, and that's what led to this whole thing.

4 They spent about \$250,000 in response.
5 The response, there is no question about the
6 adequacy of the response. DEQ has been satisfied
7 with it. There has been no issue. It did take
8 some time. But they spent a whole bunch of money
9 on it; went to the Petro Board; they were denied
10 at the Petro Board because this kind of an event
11 does not fit within what the Petro Board provides
12 reimbursement for, and so they were out the whole
13 \$250,000 or so it cost to respond to this spill.

14 As part of this, the Department also
15 issued a fine, and that's what's being challenged
16 here, is the fine on top of the response costs
17 that were incurred. The fine is \$8,500, which in
18 the grand scheme of things may not sound like a
19 lot, but to this company it was. The guy who owns
20 the company had to sell his company because he
21 couldn't afford the clean up costs, and it's now
22 owned by a successor set of individuals.

23 We have essentially raised three issues,
24 and they're kind of related, and we tried to frame
25 them in the exceptions, and I think they can be

1 fairly brief.

2 The issues in this case are first the
3 issue of whether this was something that violated
4 the statute; the second issue is whether the
5 Department -- this is sort of related to the first
6 one -- whether this was something that the
7 Department should have imposed a fine for under
8 the policies that it follows; and then the third
9 issue is whether the fine was calculated
10 appropriately.

11 So as to the first ones, what the
12 statute requires -- and this is 75-5-605 -- is
13 someone only violates the Water Quality Act if it
14 causes pollution. Just the fact that there is
15 pollution isn't the violation, someone has to
16 cause the pollution. And the causation element is
17 not defined in Montana statute. It doesn't say
18 what that has to be.

19 And because the facility was fully
20 compliant with everything that it needed to do --
21 it had an SPCC plan, it was regularly inspected,
22 it had all the equipment, whatever, there was no
23 problem with the refueling equipment -- it was
24 strictly the fact that the storm came up, and but
25 for this storm, this never would have happened,

1 and that's really not the question.

2 And the reason we raise that issue is
3 two fold: One, Montana recognizes what causation
4 is. You have to cause something. It doesn't mean
5 -- it isn't really a question of strict liability,
6 it's a question of someone has to cause the
7 pollution in order to be liable for it. This
8 storm was of an intervening cause. That is really
9 what led to the pollution event happening.

10 But related to that is where the
11 Department applies its penalty enforcement policy.
12 There are a number of situations, and these came
13 up when we had our contested case hearing, where
14 there have been fuel spills where the Department
15 has elected not to take any enforcement action at
16 all. But in this case, the Department did take
17 enforcement action.

18 And when we looked at those cases where
19 the Department hasn't taken enforcement action, a
20 lot of it has been weather related events, and
21 they have been spills of some kind, and they've
22 been spills related to weather related events.

23 For example, during the flooding last
24 year, there were several treatment plants that had
25 spills because of a weather related event. Two

1 winters ago there was a large tanker truck that
2 flipped out in Valley County, and had a large fuel
3 spill, and the Department elected not to take
4 enforcement action there. So those were events
5 where the spill -- there was some cause related to
6 weather that caused the fuel spill, and the
7 Department elected not to take enforcement action.

8 The Department does not have a specific
9 written policy about when it takes enforcement
10 action and when it doesn't. All we really have to
11 work with are other situations that involve fuel
12 spills.

13 So our first position in this case is
14 that there shouldn't be an enforcement action at
15 all because this is more similar to cases where
16 the Department has not chosen to take enforcement
17 action, given a weather related accident, when
18 someone else is otherwise fully in compliance with
19 the rules that apply to them. So that's sort of
20 part one, and that relates to the causal part that
21 we challenged in the conclusion of law.

22 The second argument that we are making
23 is even if this facility should be fined, or what
24 -- the fine was not calculated appropriately. So
25 the Department does have a penalty matrix that it

1 applies when there is -- and I'm sure you're well
2 familiar with that -- but basically the way the
3 penalty matrix works is you start with a \$10,000
4 per day fine, which they did here, and then you
5 apply the various factors.

6 Well, when you look -- and the two main
7 scales there are looking at the extent of the harm
8 to the environment, and then the gravity element,
9 and both of those have three parts to them. So
10 you essentially have a nine part matrix with
11 various multipliers within that. Well, this spill
12 was given the highest possible set of penalty
13 factors, basically major in extent and major in
14 gravity. We believe both of those are erroneous
15 based upon the evidence that was presented.

16 So the first one is the extent of the
17 harm to the environment, and when you look at
18 exhibits, the extent of the harm was based on the
19 assumption that benzine had been released to the
20 environment. Well, there were no test results
21 introduced at the hearing; there was no expert
22 witness that was called; nobody testified; and
23 there is nothing in the record that says aviation
24 fuel contains benzine. It's not gasoline.

25 Now, whether it does or doesn't isn't

1 really the issue. The issue was what evidence was
2 presented at the hearing, and there was no
3 evidence presented at the hearing in terms of
4 whether there is benzene in aviation fuel. So
5 it's impossible to base the major category in
6 terms of the extent of the harm on the presence of
7 benzene when there is no evidence of benzene. It
8 simply can't happen. So our position there is the
9 extent of harm should be minor because there isn't
10 any evidence that it was anything but being minor.

11 And then the second part is the gravity
12 component. The gravity factor depends upon the
13 risk to the environment, and the Department used
14 the fact that aviation fuel did get to
15 groundwater. The groundwater was relatively
16 shallow, but the only wells that were in the area
17 were 60 and 70 feet deep, and there was no
18 evidence presented the aviation fuel presented any
19 risk to those wells at the levels that they draw
20 from.

21 All the test results from the wells have
22 been nondetect all along; there has never been a
23 detection of aviation fuel in any of the
24 groundwater that was taken from these wells; and
25 there was no evidence presented at the hearing

1 that the presence of the aviation fuel basically
2 floating on top of the groundwater posed a threat
3 to those wells that were off the property or
4 adjacent to the property.

5 And in fact, the response was extremely
6 quick. The fuel was removed very quickly, and
7 then a pump and treat system was put in place, and
8 it worked exactly as it should have; and so those
9 wells were never threatened, and there was no
10 witness that testified that they were threatened.

11 Mr. Arrigo did testify at the hearing in
12 his capacity as the Administrator. He was not
13 asked to be an expert witness. So there was no
14 hydrologist that was called as a witness, or
15 hydrogeologist, or any other scientist that said,
16 "Yes, because this fuel was on the surface of the
17 groundwater, 70 feet above where the wells were
18 screened, that somehow the wells were threatened."

19 So it's our position on that, that that
20 also should have been a minor factor instead of a
21 major factor, and the penalty multipliers should
22 have produced a \$2,500 fine instead of an \$8,500
23 fine, and you apply then.

24 And then there were some adjustments for
25 good faith, and the fact that they did after this

1 spill spend money on a device that would prevent
2 this from happening in the future. Even though
3 that wasn't required by any regulations, they did
4 go ahead and buy that equipment after this
5 happened to allow these things to shut off
6 automatically. That is not a regulatory
7 requirement, that's something they did
8 voluntarily. They spent a couple hundred dollars
9 on that.

10 So if there is going to be a fine, we
11 believe the penalty should be modified so that the
12 fine is no more than \$2,000, that's \$2,500 based
13 on penalty with the adjustment for good faith and
14 the amounts that they've expended.

15 So that's our position in a nutshell,
16 I'm happy to either let Jim talk, or if you have
17 any questions, I'm happy to answer questions also.

18 CHAIRMAN RUSSELL: I guess I'd rather
19 have the Department speak, and then we can ask
20 questions at that point.

21 MR. MADDEN: Mr. Chairman, members of
22 the Board, for the record, my name is Jim Madden,
23 and I'm the attorney for the Department in this
24 matter.

25 We did file a response to exceptions, a

1 written response. We didn't ourselves file
2 exceptions to the Board's decision. So our
3 request is that -- or to the proposed decision.
4 We are requesting that the full Board uphold the
5 proposal for decision.

6 Probably everything I would say here is
7 contained in my written response to the
8 exceptions.

9 On the question of causality, I think
10 that Hearing Examiner's proposal handled it
11 correctly. I think the Hearing Examiner pointed
12 out that the Water Quality Act is a strict
13 liability statute. That's a liability without
14 fault. So if there is a discharge that places
15 waste, that pollutes or may pollute State waters,
16 there is a violation, assuming you're responsible
17 for the source of the discharge, in the sense that
18 you own the discharge source, which is what
19 occurred here.

20 The Hearing Examiner went on to conclude
21 there was an affirmative act on the part of the
22 Appellant that caused the discharge attempting to
23 shut off the switch. I believe they were in a big
24 hurry, and they were under duress, but there was
25 at least a physical action that failed. That's

1 enough, we think, to establish a violation.

2 The Department recognizes that this was
3 an accident, and that there was little or no
4 culpability on the part of the operator. In our
5 penalty assessment, we did assess -- we proposed
6 that the Hearing Examiner assess culpability for
7 the failure to correctly turn off the switch.

8 The Hearing Examiner did not accept that
9 argument, and instead looked at -- I guess it was
10 a similar contemporaneous event right around the
11 same date where they had loss of some fuel from a
12 fuel pipe that was culpably laid down on the
13 ground, and released some fuel.

14 So the culpability factors are addressed
15 in any event after the violation is established.
16 We look at the circumstances of the violation, we
17 look at the good faith and cooperation afterwards;
18 we gave them credit for that.

19 As far as whether or not the Department
20 has assessed penalties in cases like this, Mr.
21 Brown mentioned there were a number where we have
22 not. We discussed half a dozen or so on the
23 record in our testimony. Our general policy, as
24 testified by Mr. Arrigo, is that regardless of
25 fault, regardless of whether it's a spill,

1 regardless of what the circumstances are, under
2 the Water Quality Act, if there is a release that
3 results in a significant impact to State waters,
4 we will assess a penalty.

5 And there are some cases where we have
6 not done so for truck spills. In one of those we
7 were involved in looking at a situation on the
8 Flathead Reservation that was a significant spill
9 a few years ago, but we had no jurisdiction to
10 assess a penalty in that case.

11 There was another truck spill out in
12 eastern Montana that we had looked at, and did not
13 assess a penalty in that case. As we explained on
14 the record, there was no significant impact to
15 State waters.

16 So we tried to address in the hearing as
17 to why we thought we were being consistent in this
18 case. We do assess penalties for accidental
19 spills where there is a significant impact to
20 State water.

21 As far as the calculation of the penalty
22 being in error, Mr. Brown is -- he's challenging
23 both the gravity and the extent. He addressed
24 them in the reverse order. But basically the
25 gravity and extent of this violation were

1 established at the highest levels, based primarily
2 on the presence of the fuel floating on the
3 groundwater. Basically there was two to four
4 inches of free product floating on the
5 groundwater.

6 So that was the primary basis for our
7 determining that there was, in terms of gravity of
8 impact to the resource, a potential impact to
9 drinking water. We concede we did not find any
10 evidence of contamination in the drinking water
11 wells that were down gradient, but we assessed the
12 highest gravity for the harm to the resource
13 itself, and to the potential harm to the drinking
14 water in the area.

15 Again, the extent determination was
16 based on the same two to four inches of free
17 product floating on the groundwater. It was a
18 substantial amount of fuel, and we gave it the
19 highest extent rating.

20 As far as the specific challenges to the
21 Findings 11 and 12 in my written responses that
22 the key facts in Findings 11 and 12 are going
23 towards the question of gravity of the violation;
24 and the key facts are the two to four inches of
25 free product on the groundwater, and those are

1 established by an uncontested exhibit which was
2 basically the report submitted by the Appellant's
3 technical consultant after the spill occurred.

4 So we submit that there is no problem with there
5 being substantial evidence to support the two to
6 four inches of fuel product on the groundwater.

7 I think that's it in a nutshell. Our
8 response to the exceptions were that Findings of
9 Fact 11 and 12 are supported by substantial
10 evidence, and I can go through my written response
11 to show exactly where that evidence is.

12 We then argue that conclusion of law is
13 legally sound because it does address causation,
14 and there's adequate evidence in the record to
15 show that there was causation in this case. And
16 then we would submit that assessment of the
17 penalty in this case is not fundamentally unfair,
18 given the strict liability nature of the statute,
19 and given what the Department has done in other
20 cases.

21 CHAIRMAN RUSSELL: Questions for either
22 party?

23 MS. KAISER: I have questions. Either
24 party could answer them. What I read, it sounds
25 like the impacts to soil and groundwater were

1 clean-up, so are there any impacts that exceeds --

2 MR. MADDEN: That's correct.

3 MS. KAISER: -- standards left behind.

4 MR. MADDEN: All the record shows is
5 that clean-up was adequate. We don't have
6 detailed information in the record as to exactly
7 what the levels were after the clean-up, to my
8 knowledge. So the Department agrees that the
9 clean-up was adequate. The clean-up was overseen
10 by the Department.

11 MS. KAISER: So it sounds like there
12 were three monitoring wells where the free product
13 was observed after the spill. They were completed
14 in that shallow ground water, that four feet?

15 MR. MADDEN: I believe they were.

16 MS. KAISER: Do we know, were those
17 drinking water wells, the two drinking water wells
18 nearby, how deep they were completed?

19 MR. MADDEN: The record shows I think,
20 but I can't remember that number off the top of my
21 head.

22 MR. BROWN: It was 60 to 70 feet. One
23 was 70 feet deep, and one was 60 feet deep.

24 MR. MADDEN: That's correct. I just
25 checked. That's correct.

1 MS. KAISER: That's about all of the
2 questions I have.

3 CHAIRMAN RUSSELL: Joe.

4 MR. WHALEN: Thank you, Mr. Chairman.
5 Question for Mr. Brown.

6 Mr. Brown, to the issue of causation, I
7 believe you testified that the leak occurred at
8 the aircraft as it was being refueled; is that
9 accurate?

10 MR. BROWN: Mr. Chairman, Mr. Whalen,
11 that is not quite accurate. It wasn't at the
12 aircraft, it was the piece of equipment that
13 shuttles fuel from the bulk tank to the aircraft,
14 so it was at the bulk tank.

15 What happened was there is a line that
16 leads from the bulk tank into this piece of
17 equipment, and that line didn't shut off, and so
18 it continued to fill past the point that the
19 equipment -- past the capacity of the equipment,
20 and then over-filled.

21 MR. WHALEN: Thank you. I wanted to be
22 clear on that, because the record alludes to what
23 you've just described, as opposed to what I
24 thought I heard you testify to.

25 MR. BROWN: Yes. I apologize. What the

1 record says is accurate.

2 MR. WHALEN: The second question that I
3 have is: Who typically is responsible for tying
4 down aircraft in a taxiway? I'm sorry, on the
5 tarmac, not a taxiway.

6 MR. BROWN: That's one of the things
7 that this company does. North Star does have to
8 go out, and make sure that aircraft are tied down,
9 and so that's one of the services that they
10 provide. What the Ravalli County Airport is is a
11 lot of private aircraft, and they come out, and so
12 when they contract with a company like North Star,
13 one of the services they provide is tying down the
14 wings so when a storm does come up, the aircraft
15 -- which are obviously very expensive -- aren't
16 damaged.

17 MR. WHALEN: So typically it would be a
18 pilot's responsibility, but in this case because
19 North Star offers that service, it was a liability
20 that North Star took upon itself?

21 MR. BROWN: That's probably not in the
22 record, and that's my recollection from Mr.
23 Walters' deposition during the Petro Board
24 proceedings. I don't know if that's -- that
25 didn't come up in the hearing in this matter. Mr.

1 Walters, who is the owner, did testify, and I
2 don't believe that came up. That's outside the
3 record. What I'm telling you is my recollection
4 of what he said. But I seem to recall that that
5 is a service that they provide to aircraft.

6 MR. WHALEN: One final follow-up, Mr.
7 Chairman. Typically airport managers and airport
8 staff, who are under the supervision of airport
9 managers, get weather briefings ahead of the day.
10 Did the airport manager advise Mr. Walters of
11 gusts that were anticipated that afternoon or that
12 morning, whenever --

13 MR. BROWN: There is no record of that.
14 And just so we're clear, North Star is not the
15 operator of the airport, they just operate this
16 one service at the airport. So there was nothing
17 in the record to suggest that they had prior
18 warning of the storm or anything like that.

19 MR. WHALEN: Thank you, Mr. Chairman.

20 MR. MILLER: Mr. Chairman. I'm not sure
21 exactly, but Mr. Brown, I'll start. In the
22 uncontested facts it listed there was 4,500
23 gallons of fuel spilled, and one of the other
24 uncontested facts was that approximately 800
25 gallons was actually recovered, so there is still

1 3,700 gallons out here. What happened to it?

2 MR. BROWN: I believe what that refers
3 to is just the free product that was initially
4 recovered. There was a treatment system that was
5 put in place and operated for a couple years after
6 that that did treat what was in the soil, in the
7 ground. There was also a lot of soil that was
8 taken off site. It was taken to the landfill in
9 Missoula. And as you know, it is difficult to
10 calculate what fuel is actually in the soil when
11 the soil is hauled off site.

12 I believe what that refers to is just
13 pure free product that was recovered, and then the
14 rest of it was just done as part of the clean-up
15 process. But the clean-up has been -- there isn't
16 any dispute in this case that the clean-up has
17 been successful, and I believe all that's
18 happening now is just monitoring. There isn't any
19 additional clean-up work being done.

20 MR. MILLER: Thank you.

21 CHAIRMAN RUSSELL: One of the things
22 that -- However this happened, the clean-up would
23 have been required. Who you represent was the
24 responsible party.

25 MR. BROWN: That's correct, and we are

1 not disputing that. One of the things that did
2 come up in the hearing is the purpose of the
3 penalty, one of the purposes of the penalty is
4 deterrence. And so when you have a situation
5 where somebody hasn't really paid anything for a
6 clean-up, a penalty probably is appropriate; but
7 in this situation where someone had to pay
8 \$250,000 for clean-up, plus --

9 And I know this isn't this Board's
10 responsibility, but the fact that the Petro Fund
11 does not address this kind of incident. It falls
12 somewhere in Never Never Land, so it's not
13 something that's reimburseable. That is money
14 that they were not reimbursed for. So there was a
15 significant deterrent effect just by the fact that
16 they had to spend all this money to clean it up.
17 And it's not like they were skimping on compliance
18 or something like that.

19 So that's why they don't believe that
20 the penalty is fair in this situation, or at least
21 certainly not the extent of the penalty is fair.

22 CHAIRMAN RUSSELL: But there appears to
23 be some readily available technology that would
24 have precluded this accident from happening,
25 whether the wind was blowing 80 miles an hour or

1 ten miles an hour.

2 MR. BROWN: The technology continues to
3 evolve. That's true.

4 CHAIRMAN RUSSELL: But to stop the leak
5 at the tank.

6 MR. BROWN: I do know that after this
7 incident occurred, they were able to find that
8 technology. That technology is not required by
9 any rules. There are rules about what you do have
10 to have. That is not something, when you look at
11 the rules, that apply to something like this, that
12 they were required to have. That was something
13 they did voluntarily put on later on, but it was
14 certainly not because of a regulatory requirement.

15 CHAIRMAN RUSSELL: In the underground
16 storage tank rules realm, it is pretty clear that
17 -- you're right. It's evolved. But those types
18 of mechanisms are readily available to make sure
19 that you don't blow petroleum out a vent or
20 something like that, so --

21 MR. BROWN: Correct, and this did
22 involve -- There was no underground tank involved
23 here. The above ground tanks did have secondary
24 containment, and they were fully in compliance
25 with the secondary containment requirements.

1 CHAIRMAN RUSSELL: But they over-filled
2 the tank.

3 MR. BROWN: They over-filled the
4 equipment, correct, or I mean that's what
5 ultimately happened, is the equipment was
6 over-filled.

7 CHAIRMAN RUSSELL: And caused 4,500
8 gallons of av. fuel to be released.

9 MR. BROWN: Yes. That part is not
10 disputed, how it happened, and the volume is not
11 disputed. But again, they went through, and they
12 did have consultants working with them even prior
13 to this spill to make sure they were in compliance
14 with what was required; they had spent a whole
15 bunch of money on an SPCC plan, secondary
16 containment, and things like that. More than
17 likely if that would have been required by the
18 rules, it would have been put on, but it wasn't.

19 MR. MIRES: Mr. Chairman, I've got a
20 couple questions. The Petro Board, what's the
21 Petro Board? What relevance does that have with a
22 spill?

23 MR. BROWN: The relevance that it has is
24 there are a number of situations involving gas
25 stations where there are over-fills and things

1 like that, where there's Petro Board money
2 available for clean-ups; and that's what's
3 happened at a lot of gas stations, is they may be
4 in compliance, but because of people not shutting
5 off, for whatever reason you have, you have
6 over-fills from cars or things like that, there is
7 Petro Board money available.

8 The reason the Petro Board denies this
9 is it was their position that this refueling
10 vehicle looked more like a tanker truck that
11 drives up and down the highway, which are not part
12 of the Petro Board funding process. So it was
13 denied on that basis, strictly based on the way
14 the rules are written.

15 But the relevance of it is every dollar
16 that was spent on the clean-up was a dollar out of
17 the pocket of a private party. There was no State
18 money, or no fuel tax money spent on this
19 clean-up. So it is relevant to the extent it was
20 a significant deterrent, and to the extent the
21 penalty policy is addressing deterrents, the fact
22 that there is not Petro Board funding available,
23 that the cost of something like this is borne
24 entirely by the operator, does address the
25 deterrent effect.

1 CHAIRMAN RUSSELL: So was this truck
2 actually -- It has been a long time since I've
3 dealt with the Petro Board, underground storage,
4 all involved with underground storage tank, the
5 tag, the fact that you were actually paying into
6 this. Was this truck ever paying -- and I don't
7 want to argue the Petro Board issue. Was it even
8 -- It wasn't even eligible for Petro Board funding
9 most likely. That's what the Petro Board said,
10 right?

11 It seems like you're using your argument
12 that we should feel bad that the Petro Board
13 didn't help, and it probably fell outside of that
14 insurance realm that the Petro Board was built to
15 do.

16 MR. BROWN: I'm not trying to reargue
17 the Petro Board issue here. The only reason I'm
18 bringing this up is just to show where the
19 financial impact was, or what the financial impact
20 was. They do not pay -- it is not a street legal
21 vehicle that pays fuel tax, and drives up to a gas
22 station, and fills itself up. It is something
23 that only operates as part of the refueling
24 equipment.

25 So the argument I'm trying to make is

1 not a sympathy argument. It is just a realistic
2 argument in terms of the financial impact to this
3 operator, and that's it. So I don't want to
4 suggest that I'm going any further than that with
5 it.

6 MR. MIRES: Does aviation fuel contain
7 benzine?

8 MR. BROWN: I have no idea.

9 MR. MIRES: Can somebody answer that
10 question for me? I guess it is relevant. That's
11 a technicality what I'm seeing here, splitting
12 hairs.

13 CHAIRMAN RUSSELL: Is it more refined or
14 less refined than regular gas?

15 MR. BROWN: Number one, I'm an attorney,
16 not a scientist. And the burden of proof in these
17 cases is on the Department; and under the
18 evidentiary rules that attorneys follow, if
19 somebody is going to prove a fact, they have the
20 burden of proof to produce evidence to prove that
21 fact, and until that fact is proven, the violation
22 is not established.

23 And so if aviation fuel contains
24 benzine, presumably it would be a relatively
25 simple test to produce that evidence, introduce it

1 into the record, and then that evidence is before
2 the Board. There is no evidence in the record
3 right now that aviation fuel contains benzine, and
4 just in terms of what the record is in this case,
5 it is not in the record, and that's the
6 Department's burden.

7 So maybe it is splitting hairs, but
8 those are the Rules of Evidence that we have to
9 follow.

10 CHAIRMAN RUSSELL: Does this fall under
11 the "duh" factor? Of course it does. It's a
12 fuel, it's refined, and it probably has other
13 aeromatic compounds other than benzene in it also.
14 I wonder -- There is some rules in the Clean Water
15 Act about product hitting the groundwater, and if
16 it is --

17 And I just wonder if this is an argument
18 that really bears a lot of weight when you're
19 dealing with a fuel that we know contains
20 aeromatic compounds, and benzine is just one of
21 them -- xylene, ethylbenzine, toluene being others
22 that are commonly found in fuels that are
23 associated with internal combustion engines.

24 MS. ORR: Mr. Chairman, may I interject?

25 CHAIRMAN RUSSELL: Yes.

1 MS. ORR: There is an impulse to ask
2 questions about the factual part of this case,
3 what was put in by way of facts, and what are the
4 disposition of the questions regarding the facts.
5 But really the Board may not solicit information
6 and make decisions based on testimony today, and
7 based on your factual questions, that is not in
8 the record.

9 And unless you want to open these
10 questions to a full blown hearing, and reevaluate
11 the evidence yourself, I would point out that in
12 Finding of Fact 12, there was a statement that
13 said that there were no analytical results that
14 have been produced in this record to suggest that
15 benzene was in the groundwater, or a constituent
16 of av. gas or jet "A" fuel.

17 So that's an acknowledgment that that
18 question is still open, whether this gas had
19 benzene in it; but then it goes on to say
20 notwithstanding whether it did or not -- benzene
21 admittedly has harmful hazardous components -- but
22 notwithstanding whether it was in there or not, it
23 goes on to say, "The fact that there was fuel on
24 the water table caused actual harm to the
25 groundwater resource."

1 So the finding of major impact is -- in
2 the way this is drafted anyway -- is the fact that
3 there was fuel sitting on the groundwater. I hope
4 that clarifies.

5 CHAIRMAN RUSSELL: But your statement
6 then -- and this is directed to you -- there is a
7 presumption of harm based on the fact that it's a
8 fuel.

9 MS. ORR: I don't even say that, but --
10 Well, yes. To have fuel sitting on the
11 groundwater is an indication of harm, no matter
12 what the constituents are.

13 CHAIRMAN RUSSELL: Thanks for reeling us
14 back in.

15 MS. ORR: I know there is a real impulse
16 to dig into what happened, and the background
17 activities, and parts of the evidence; but I think
18 you have to first decide to open the record to do
19 that.

20 CHAIRMAN RUSSELL: We gave this to you,
21 and you gave us your findings and conclusions.

22 MS. ORR: Right.

23 CHAIRMAN RUSSELL: So we do need to
24 stick with those.

25 MS. ORR: Yes.

1 CHAIRMAN RUSSELL: Other questions on
2 the record?

3 MR. WHALEN: I may have one more, Mr.
4 Chairman, with respect to the cost incurred by
5 North Star Aviation. I thought I had read in here
6 that the cost was closer to \$100,000 in
7 reclamation as opposed to \$250,000. Is that in
8 the record convenient for you, Mr. Brown, the
9 estimate of the cost of clean-up?

10 MR. BROWN: In our post hearing brief,
11 we cited the transcript at page 79 lines 25
12 through page 80 line 2, where Mr. Walters
13 testified that the cost to North Star was more
14 than \$250,000, and so that is where that figure
15 came from.

16 CHAIRMAN RUSSELL: And it's Finding 14.

17 MR. WHALEN: Thank you, Mr. Chairman.

18 CHAIRMAN RUSSELL: Thank you. And
19 you'll stick around as we deliberate on this, I'm
20 guessing. I guess I'm intrigued, and I want to --
21 It was brought up by Jim, and this whole thought
22 that this was an accident, but it still happened.
23 Can you elucidate on that.

24 MS. ORR: Mr. Chairman, the statute
25 basically says if pollution is caused, there is

1 liability, and it doesn't say how, or what
2 quarter. It doesn't go into the background
3 causation factors. An accident, not an accident,
4 the statute doesn't address that.

5 CHAIRMAN RUSSELL: My daughter just had
6 a fender-bender, and I'm paying for it. It was an
7 accident. She keeps telling me that.

8 MS. ORR: That I would point out is a
9 matter of common law tort, and these environmental
10 statutes I would submit don't incorporate common
11 law tort principles as a general matter. There
12 are some that have been drafted into the Federal
13 Superfund Act, but as a general matter, that's not
14 true. And I did cite a case involving an
15 interpretation of that point vis-a-vis the Federal
16 Clean Water Act.

17 CHAIRMAN RUSSELL: Not to seem
18 offensive, but the body of law out there is
19 probably greater than the case you've cited, but
20 since I don't know how you do your voodoo, is it
21 pretty clear that by looking at one Water Quality
22 Act interpretation that parallels what we're doing
23 here, that you're pretty comfortable with that as
24 a conclusion?

25 MS. ORR: Well, it is an interesting

1 situation, because really the body of juris
2 prudence exists in the federal case law, not in
3 Montana case law. So then what I resorted to was
4 strict statutory construction, and I think that's
5 pointed out in Conclusions of Law No. 7, that just
6 interpreting the statute, there is no language
7 that goes to intentionality, or foreseeability, or
8 causation in the tort sense.

9 And also the finding of fact goes
10 further to say if there is somehow a causation
11 concept here, this was an owner/operator who
12 caused this event to happen, not because he wanted
13 to or through any fault, but he's the one that
14 neglected to turn the valve off.

15 CHAIRMAN RUSSELL: And in your
16 deliberative process, you felt that there was
17 cause to reduce the fine that the Department
18 originally came up with?

19 MS. ORR: Right.

20 CHAIRMAN RUSSELL: And that was based on
21 their intention of putting something on there that
22 would make sure that this would not happen again.

23 MS. ORR: That's correct, and I gave
24 them \$1,000 of credit for that, which the
25 Department had not done.

1 CHAIRMAN RUSSELL: All right. Any
2 further questions of Katherine?

3 (No response)

4 CHAIRMAN RUSSELL: We're going to have
5 to take -- Literally I have no order in front of
6 me.

7 MS. ORR: Right, and I'm sorry for that.
8 I didn't know. I thought this was complicated
9 enough so that I couldn't predict what the Board
10 was going to say, and therefore I couldn't draft
11 the order, but basically the order --

12 Let's say if you were intending to adopt
13 the proposed findings would say that, that they're
14 incorporated by reference, and that the notices
15 were given for filing exceptions, and the
16 significance of that.

17 And also it would say something to the
18 effect that the Board has decided not to reopen
19 the record to alter Findings of Fact 10 and 11,
20 because there is substantial evidence to support
21 those findings, and that would be in these
22 exhibits, and that the conclusion of law was
23 correct. Those are the determinations that the
24 Board needs to make.

25 MR. WHALEN: Mr. Chairman, I guess in

1 that event, I would move to uphold the proposed
2 findings of fact and conclusions of law and order
3 in this case, if that's in order.

4 CHAIRMAN RUSSELL: Does that capture
5 everything that --

6 MS. ORR: I think it does essentially,
7 and then I could, if you wanted, then draft around
8 the fact that the notice provisions are adequately
9 given, and that -- Well, it assumes that the Board
10 is not going to alter the proposed findings of
11 fact or the conclusions of law, so I think it
12 does.

13 CHAIRMAN RUSSELL: So it's been moved.
14 Is there a second?

15 MR. MILLER: I'll second it.

16 CHAIRMAN RUSSELL: Any further
17 discussion?

18 MR. WHALEN: I would like just to
19 comment to Mr. Brown. Mr. Brown, obviously this
20 is an unfortunate incident. Everybody feels bad
21 about it all the way around, and in fact I'm sure
22 that you probably do as well.

23 The basis of my motion to uphold this
24 fact finding and this conclusion of law has to do
25 with that issue of causation. I don't necessarily

1 buy the fact that Mr. Walter is not responsible
2 for the spill. I'm a flight student, my father is
3 a pilot, owns an airplane. I know what happens
4 when you pull up to an airport and you request
5 fuel.

6 I understand that North Star has a
7 different arrangement where those planes are tied
8 down. And these weather briefings are something
9 that pilots, as well as airport managers and their
10 staff, are familiar with well in advance. They
11 know what sort of gusts to expect. There are no
12 surprises.

13 So it's very difficult for me to feel
14 comfortable with the argument that causality has
15 not been proven in the Department's decision. I
16 just wanted to clear the record with you. Thank
17 you for your testimony and your appearance. Thank
18 you, Mr. Chairman.

19 CHAIRMAN RUSSELL: Any further
20 discussions between the Board before we take
21 action?

22 (No response)

23 CHAIRMAN RUSSELL: Comfortable?

24 MR. MIREs: Obviously comfortable.

25 CHAIRMAN RUSSELL: As much as you're

1 going to. We have a motion and it has been
2 seconded. All those in favor, signify by saying
3 aye.

4 (Response)

5 CHAIRMAN RUSSELL: Opposed.

6 (No response)

7 CHAIRMAN RUSSELL: Motion carries
8 unanimously. Thanks for your time.

9 The next one. In the matter of the
10 appeal and request for hearing by Meagher Farms,
11 Inc., Somerfeld & Sons Land and Livestock, LLC,
12 and Jerry McRae, regarding the Department of
13 Environmental Quality's final decision on the MATL
14 certificate.

15 MS. ORR: Mr. Chairman, members of the
16 Board, we're at the same posture here. This is an
17 action under the Administrative Procedure Act
18 basically for the Board to determine whether it
19 wants to adopt the proposed findings of fact and
20 conclusions of law.

21 In this situation, we did not have any
22 exceptions filed. An adoption of proposed
23 decision as final order was submitted by the
24 Department. I wrote an order for the Board which
25 the Chairman has. That's a tiny bit more

1 all-inclusive, but basically the same as the
2 proposed order that the Department submitted.
3 And so the decision of the Board would be to find
4 that my proposed findings of fact and conclusions
5 of law should be adopted.

6 What that means is this is a situation
7 where there was a challenge under the Major
8 Facilities Siting Act to the process and decision
9 associated with an amended certificate of
10 compliance.

11 And after I think an exhaustive record
12 and lots of testimony and evidence, it was clear
13 that the Department followed the procedures under
14 the Major Facilities Siting Act, and that their
15 decision in allowing the amended certificate was,
16 quote, "reasonable under the statute," and that
17 the Department followed all of the other standards
18 for analysis.

19 And those are contained in the order,
20 the references to those sections. Basically the
21 order that I drafted for the Board today
22 references that the Department acted reasonably,
23 and that the evidence demonstrates that the
24 Department followed all of the requirements of
25 Montana Code 75-20-219, 75-20-223, 75-20-301, and

1 Administrative Rule 17.20.1804. And I know that's
2 Greek to you, but it is set out in the order.

3 So it is a little bit easier now for the
4 Board because there is no opposition to the
5 proposed findings of fact and conclusions of law.

6 CHAIRMAN RUSSELL: So I have an order in
7 front of me. I thought we might have had more
8 work to do on this, but can we just take action on
9 the order?

10 MS. ORR: Yes.

11 CHAIRMAN RUSSELL: I do have an order in
12 front of me for Case No. BER 2010-16 MFS, and the
13 order is titled "Order of the Board Adopting
14 Proposed Findings of Fact and Conclusions of Law,"
15 and I would ask for a motion to authorize the
16 Board Chair to sign.

17 MS. KAISER: So moved.

18 CHAIRMAN RUSSELL: It's been moved by
19 Heidi. Is there a second?

20 MR. MIRES: Second.

21 CHAIRMAN RUSSELL: Seconded by Larry.
22 Is there any further discussion?

23 MR. WHALEN: Just a question for
24 Katherine, Mr. Chairman. Katherine, there is
25 reference to the transcript with respect to a

1 couple of these amendments, whereas the Appellant
2 is quoted as, for example, "being the one to
3 request that the Department Director as opposed to
4 the State inspector do the final sign off on the
5 project."

6 Was it a direct request by the Appellant
7 that led to that amendment, or was that removed
8 from the transcript in an indirect way? Do you
9 recall?

10 MS. ORR: I think what happened was one
11 of the Appellants said by way of comment that --
12 Well, I think the Department offered upon a
13 comment regarding the Appellants' objection to on
14 the ground investigation, and what that would look
15 like; and then the Department offered up the
16 Director of the Department's involvement, and put
17 that in as a resolution. That's how that
18 happened.

19 MR. WHALEN: So this was not a direct
20 request from MATL, this was a request from the
21 Appellant to ensure that the Department Director
22 had final sign off?

23 MS. ORR: Yes.

24 MR. WHALEN: Is it appropriate to ask?
25 Was there anything else in the transcript that

1 would suggest a motivation for that request?

2 MS. ORR: Well, I think there was
3 anxiety on the part of the Appellant regarding
4 accountability of the Department for their
5 decisions concerning analysis on the ground, so
6 the Department came forward and said, "Well, look.
7 We'll stand by this with our Director's
8 involvement."

9 MR. WHALEN: This was an accommodation
10 in that case to the Appellant's request.

11 MS. ORR: Exactly.

12 MR. WHALEN: Thank you, Mr. Chairman.

13 MR. MILLER: Just a comment. Weren't we
14 supposed to ask for public comment?

15 CHAIRMAN RUSSELL: Not on a contested
16 case. I know that part.

17 MR. MILLER: Thank you.

18 CHAIRMAN RUSSELL: There is a motion,
19 and it's been seconded. Any further discussion?

20 (No response)

21 CHAIRMAN RUSSELL: Hearing none, all
22 those in favor of authorizing the Chair to sign,
23 signify by saying aye.

24 (Response)

25 CHAIRMAN RUSSELL: Opposed.

1 (No response)

2 CHAIRMAN RUSSELL: Motion carries.

3 Onward. In the matter of violations of the Open
4 Cut Mining Act by Deer Lodge Asphalt, Inc., at the
5 Olsen Pit.

6 MS. ORR: Mr. Chairman, members of the
7 Board. We're at this same posture with respect to
8 the proposed findings of fact and conclusions of
9 law that were drafted by me.

10 The Appellant did not file exceptions.
11 The Department filed a clarification and an
12 exception, and the Department in its filing
13 requested that Finding of Fact No. 11 be altered.

14 And again, in order to do that, the
15 Board would have to evaluate the record itself,
16 and I would submit that finding of fact, the
17 alterations to the proposed Finding of Fact No. 11
18 were adequately addressed in the findings of fact
19 that was made in my proposed findings of fact in
20 Finding of Fact No. 6.

21 The issue is the Department wanted to
22 make clear that storing or stockpiling of
23 materials at this pit -- this is an open cut mine
24 -- for the purpose of sale or use was one of the
25 violations, and I had in essence affirmed that in

1 Finding of Fact No. 6, itemizing many activities
2 that constituted open cut mining activities
3 without a permit, and that includes what the
4 Department is attempting to say. So I would
5 submit that there is really not a reason to alter
6 that finding of fact. You may want to hear from
7 the Department representative.

8 And then the other thing that the
9 Department Counsel points out is that there is a
10 case now that went to the Montana Supreme Court,
11 that we all have to take seriously, that says that
12 these finding orders should refer to the fact
13 that, or proposed orders should refer to the fact
14 that parties may file exceptions, and if they
15 don't, that may impede their ability to go up on
16 judicial review. That case is arguably not
17 applicable, but it's arguably applicable, so --

18 CHAIRMAN RUSSELL: What did you say?

19 MS. ORR: It's not applicable because
20 it's a DNRC case, which I think has very, very
21 specific facts associated with it. It's arguably
22 not applicable to our orders, but just to err on
23 the side of caution, it is a good idea, and the
24 Department points it out, to make reference to
25 this case, and make reference to the fact, just to

1 err on the side of caution, that parties should be
2 aware that if they don't file exceptions, that may
3 have an impact to their ability to go up on
4 judicial review. Just a notice.

5 So the Department wanted to make sure
6 that's in the record, and that's what the
7 Department included in its document; and I think
8 that's a point well taken, and the proposed order
9 for the Board acknowledges that. So --

10 CHAIRMAN RUSSELL: And it does.

11 MS. ORR: Yes.

12 CHAIRMAN RUSSELL: I see that about
13 midway down the second page.

14 MS. ORR: Let me distill this out a
15 little bit. The Department is wanting an
16 alteration of Finding of Fact 11. I think another
17 finding of fact that was made by me in Finding of
18 Fact 6 addresses that point. There is really no
19 need, I don't think, to change that Finding of
20 Fact 11 because it's really referenced in Finding
21 of Fact 6, and it was a good point that the
22 Department made regarding notice and the impact of
23 filing exceptions.

24 And I don't know if you want to hear
25 from the Department Counsel on her filing, or

1 John, or --

2 MR. NORTH: Mr. Chairman, members of the
3 Board, John North, Chief Legal Counsel. I've
4 quickly discussed this matter based on Katherine's
5 clarification, and the Department hereby withdraws
6 its objection and requests for clarification.

7 MS. ORR: I assume it's withdrawing that
8 as to Finding of Fact 11, but not the reference to
9 the case that says that you can file exceptions.

10 MS. AMDAHL: Correct. Thank you.

11 CHAIRMAN RUSSELL: This order is still
12 an order then?

13 MS. ORR: Yes, it is.

14 CHAIRMAN RUSSELL: With that, I would
15 entertain a motion to authorize the Board Chair to
16 sign the newly drafted order in my hands.

17 MR. MIRES: So moved.

18 CHAIRMAN RUSSELL: It's been moved by
19 Larry. Is there a second?

20 MR. MILLER: I'll second.

21 CHAIRMAN RUSSELL: It's been seconded by
22 Marv. Is there any further discussion?

23 (No response)

24 CHAIRMAN RUSSELL: Hearing none, all
25 those in favor, signify by saying aye.

1 (Response)

2 CHAIRMAN RUSSELL: Opposed.

3 (No response)

4 CHAIRMAN RUSSELL: Motion carries
5 unanimately.

6 We are on to request for hearing by
7 Frank Gruber, Broadwater Estates, regarding DEQ's
8 denial of a modification to groundwater permit.

9 MS. ORR: Mr. Chairman, normally I
10 prepare a nice summary of these cases, but let me
11 look at the files here. And Gruber Estates is a
12 case -- Well, that's not the entire caption. In
13 the matter of the request for hearing by Frank
14 Gruber, Broadwater Estates, regarding the DEQ's
15 denial of permit modification to groundwater
16 permit No. MTX000157, BER 2011-22 WQ.

17 This is a discharge permit, a challenge
18 to a Montana groundwater pollution discharge
19 permit, and the parties apparently reached
20 settlement, and are proposing for the Board's
21 approval their motion to dismiss.

22 CHAIRMAN RUSSELL: Thank you. So I do
23 have an order dismissing the appeal of Case No.
24 BER 2011-22 WQ, and I am looking for a motion to
25 authorize the Board Chair to sign.

1 MR. MILLER: So moved.

2 CHAIRMAN RUSSELL: It's been moved by
3 Marv. Is there a second?

4 MS. KAISER: Second.

5 CHAIRMAN RUSSELL: It's been seconded by
6 Heidi. Further discussion.

7 (No response)

8 CHAIRMAN RUSSELL: Hearing none, all
9 those in favor, signify by saying aye.

10 (Response)

11 CHAIRMAN RUSSELL: Opposed.

12 (No response)

13 CHAIRMAN RUSSELL: Motion carries
14 unanimously.

15 The next item is violations of the Open
16 Cut Mining Act by Emerald Hills Development
17 Company at the Emerald Hills Pit, Yellowstone
18 County.

19 MS. ORR: Mr. Chairman, this is the same
20 posture. You have before you a stipulation and
21 order to dismiss under 41(a). This is an open cut
22 mining case. The violations were conducting open
23 cut mining operations in a non-permitted area,
24 failure to protect stockpiled soils, failure to
25 mark permit boundary, and unapproved storage of

1 asphalt. And the administrative penalty that was
2 requested was \$6,300, and I don't know what's in
3 the proposed order.

4 CHAIRMAN RUSSELL: \$4,200.

5 MS. ORR: So that's the difference.

6 CHAIRMAN RUSSELL: Okay. Thank you.

7 And I do have an order of dismissal for BER
8 2011-25 OC, and I would look for authorization for
9 the Board Chair to sign, and a motion.

10 MR. MIRES: So moved.

11 CHAIRMAN RUSSELL: It's been moved. Is
12 there a second?

13 MS. KAISER: Second.

14 CHAIRMAN RUSSELL: It's been seconded by
15 Heidi. Further discussion.

16 (No response)

17 CHAIRMAN RUSSELL: Hearing none, all
18 those in favor, signify by saying aye.

19 (Response)

20 CHAIRMAN RUSSELL: Opposed.

21 (No response)

22 CHAIRMAN RUSSELL: Motion carries
23 unanimously.

24 We have a new case; is that right?

25 MS. ORR: That's correct.

1 CHAIRMAN RUSSELL: We have a new case on
2 appeal, Case No. BER 2012-02 SM. Katherine, do
3 you have anything on that?

4 MS. ORR: Mr. Chairman, this is a case
5 coming out of Big Horn County. A notice of
6 violation and administrative penalty order was
7 issued regarding Westmoreland under the Montana
8 Strip and Underground Mine Reclamation Act. The
9 violation is failure to monitor water levels, and
10 the Department is seeking an administrative
11 penalty of \$2,600.

12 CHAIRMAN RUSSELL: Any questions for
13 Katherine before we take action on signing this,
14 or not?

15 MS. KAISER: I just have one comment. I
16 need to recuse myself from taking action.

17 CHAIRMAN RUSSELL: It will be noted that
18 Heidi is recusing herself from further action on
19 this. No questions coming up, I would entertain a
20 motion to assign Katherine the permanent Hearing
21 Examiner on this matter.

22 MR. WHALEN: So moved.

23 CHAIRMAN RUSSELL: Moved by Joe.

24 MR. MILLER: I'll second it.

25 CHAIRMAN RUSSELL: It's been moved and

1 seconded. Any further discussion?

2 (No response)

3 CHAIRMAN RUSSELL: Hearing none, all
4 those in favor, signify by saying aye.

5 (Response)

6 CHAIRMAN RUSSELL: Opposed.

7 (No response)

8 CHAIRMAN RUSSELL: Motion carries
9 unanimously. Tom, before I take the last section,
10 is there anything else?

11 MR. LIVERS: Just a reminder. The next
12 meeting is Friday May 18. At this point, I think
13 we'll have maybe not as long an agenda as we did
14 today, but one that's worth an in-person meeting.
15 So we'll confirm that as it gets closer, but if
16 you would just anticipate that at this point, May
17 18th.

18 CHAIRMAN RUSSELL: I appreciate you
19 sending those out on Alpha.

20 Is there anyone out there that would
21 like to speak to the Board on the matters that the
22 Board has jurisdiction?

23 (No response)

24 CHAIRMAN RUSSELL: Or if you just wanted
25 to make comments about Tom or John. Hearing none,

1 I would entertain a motion to adjourn.

2 MR. MILLER: So moved.

3 CHAIRMAN RUSSELL: It's been moved by
4 Marvin. Is there a second?

5 MR. WHALEN: I'll second.

6 CHAIRMAN RUSSELL: Seconded by Joe.

7 Further discussion.

8 (No response)

9 CHAIRMAN RUSSELL: Good meeting today.

10 All those in favor, signify by saying aye.

11 (Response)

12 CHAIRMAN RUSSELL: Opposed.

13 (No response)

14 (The proceedings were concluded

15 at 2:03 p.m.)

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C E R T I F I C A T E

STATE OF MONTANA)

: SS.

COUNTY OF LEWIS & CLARK)

I, LAURIE CRUTCHER, RPR, Court Reporter,
Notary Public in and for the County of Lewis &
Clark, State of Montana, do hereby certify:

That the proceedings were taken before me at
the time and place herein named; that the
proceedings were reported by me in shorthand and
transcribed using computer-aided transcription,
and that the foregoing - 188 - pages contain a
true record of the proceedings to the best of my
ability.

IN WITNESS WHEREOF, I have hereunto set my
hand and affixed my notarial seal
this day of , 2012.

LAURIE CRUTCHER, RPR
Court Reporter - Notary Public
My commission expires
March 12, 2016.

LAURIE CRUTCHER, RPR
406-442-8262