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)

PREPARED BY: LAURIE CRUTCHER, RPR

COURT REPORTER, NOTARY PUBLIC

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

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

MR. MIRES: So moved.

CHAIRMAN RUSSELL: It's been moved by Larry.

MS. KAISER: I'd second.

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

(No response)

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

(Response)

CHAIRMAN RUSSELL: Opposed.

(No response)

CHAIRMAN RUSSELL: Motion carries unanimously.

MR. LIVERS: Mr. Chairman, real quickly,

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

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

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

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

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

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CHAIRMAN RUSSELL: On?

MR. WHALEN: On members present.

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

MR. WHALEN: Okay. Thank you.

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

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

MR. MIRES: On which one.

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

And I forgot to mention (c), which is

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

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

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

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

CHAIRMAN RUSSELL: All right. Thanks.

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

(No response)

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

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

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

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

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Permitting and Compliance Division.

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

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

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

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

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

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

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

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

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

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

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

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

CHAIRMAN RUSSELL: You probably want to

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

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

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

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

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

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

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

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

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

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

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

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

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

Sidney next week.

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

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

MS. KAISER: Second in command.

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

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

MS. KAISER: Any other questions?

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

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

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

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

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

MS. HANSON: Under.

MR. WHALEN: Under Oil and Gas or DEQ?

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

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

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

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

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

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

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

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

MR. WHALEN: Thank you.

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

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

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

MS. HANSON: Yes.

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

MR. MIRES: Madam Chair. So then who

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regulates after it's in operation?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MR. WHALEN: Judy, a question, if you

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

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

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

MS. KAISER: Go ahead.

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

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

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

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

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

MS. KAISER: Thanks, Judy. Any other

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questions?

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

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

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

MR. MIRES: Thank you.

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

MS. KAISER: Yes.

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

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

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

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

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

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

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

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

MR. WHALEN: Thank you.

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

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

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

MR. MILLER: Thank you.

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

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

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

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

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

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

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

MS. KAISER: Thank you.

CHAIRMAN RUSSELL: Heidi is still

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running this, so you know.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

And that's not directly to your point of

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

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

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

MR. MILLER: Thank you.

MS. KAISER: Any more questions?

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

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

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

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

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

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

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

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

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

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

Ed had asked if DEQ would take this on,

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

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

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

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

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

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

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

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

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recovery from the responsible party.

MR. WHALEN: Thank you.

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

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

MR. MILLER: Yes, thank you.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

CHAIRMAN RUSSELL: You can call me whatever you want.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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problem.

A couple of just small examples. Currently we're providing contract money for assistance for producers on nutrient best management practices for feeding operations. We've got a septic work group. That septic work group, internal work group, has developed a nutrient trading policy, which is something else you're going to hear about this morning.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

more as I go on.

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

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

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

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

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

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

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

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

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

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

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

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tolerant species: Scuds, mollusks, midges, etc. So these are the shifts we see with increasing nutrients and increasing algae levels.

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

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

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

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

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

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

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

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the state.

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

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

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

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

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

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

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

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

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

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

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

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

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generally occur out here relative to the reference site data.

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

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

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

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

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

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

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

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

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

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

Here is a table of our draft criteria.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

In contrast, benthic algae biomass is

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

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

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

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

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

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

There is a lot of stuff on this slide,

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

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

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

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

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

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

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

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

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

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

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

MR. SUPLEE: Absolutely.

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

MR. SUPLEE: 75-5-313.

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

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

So now I'm coming to the materials that

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

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

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

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

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

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

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

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

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

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

(Recess taken)

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

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

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

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

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

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

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

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

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

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

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

MR. SUPLEE: (Nods head)

CHAIRMAN RUSSELL: It appears to be.

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

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

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

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

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

CHAIRMAN RUSSELL: -- another river?

MR. SUPLEE: Another major river, right.

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

MR. SUPLEE: -- milligrams per liter.

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

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

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

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

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

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

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

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

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

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

MR. SUPLEE: Thank you.

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

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

CHAIRMAN RUSSELL: How does carbon figure into this?

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

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

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

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

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

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

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

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

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

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

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

CHAIRMAN RUSSELL: Any questions, more questions for Mike?

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

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

CHAIRMAN RUSSELL: Nice job. Either you or George.

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

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

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

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

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

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wastewater treatment and collection systems.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

In terms of reuse it's important,

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

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

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

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

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

CHAIRMAN RUSSELL: Did you actually say Whitefish?

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

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

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

CHAIRMAN RUSSELL: Kalispell certainly, and Columbia Falls.

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

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

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

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

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

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

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

MR. LIVERS: Thanks.

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

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

CHAIRMAN RUSSELL: That's not what they

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were designed to do originally.

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

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

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

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

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

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

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

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

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

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

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

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

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

MR. LaVIGNE: Absolutely.

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

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

MR. LaVIGNE: And this is kind of our

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

So if you have any questions on those,

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

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

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

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

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

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

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twelve months out of the year.

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

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

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

CHAIRMAN RUSSELL: And to Joe's point,

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

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

CHAIRMAN RUSSELL: Conservation is still a good thing.

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

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

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

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

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

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

MR. LaVIGNE: Sure.

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

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

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

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

CHAIRMAN RUSSELL: The groundwater is really shallow out there.

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

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

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

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

MR. LaVIGNE: Right.

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

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

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

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da-da-da-da-da.

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

MR. WHALEN: Thank you.

CHAIRMAN RUSSELL: Paul, thank you very much.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MR. TEEGARDEN: Very true.

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

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

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

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

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

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

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

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system.

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

MR. WHALEN: I'll wait and see.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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through this.

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

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

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

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

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

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

I might let Jenny Chambers chime in on this.

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

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

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

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

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

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

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

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centralized POTW's with better treatment.

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

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

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

CHAIRMAN RUSSELL: We're hopeful that it works.

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

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

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

MR. WHALEN: Thank you.

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

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

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in the rules.

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

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

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

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

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

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

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

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

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

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

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

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

MR. MILLER: There are several committees.

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

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

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

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

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

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

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

MR. MILLER: Thank you.

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

CHAIRMAN RUSSELL: Thanks, Todd.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

CHAIRMAN RUSSELL: Thanks, George. It

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

(Lunch recess taken)

(Mr. Anderson not present)

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

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

CHAIRMAN RUSSELL: Larry, are you there?

(No response)

CHAIRMAN RUSSELL: We still have a quorum.

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

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

Act.

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

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

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

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

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

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

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

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

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

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

CHAIRMAN RUSSELL: Thank you. Questions?

(No response)

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

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

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CHAIRMAN RUSSELL: So how do you control the process?

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

MS. KAISER: I need to recuse myself.

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

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

MR. MILLER: Thank you.

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

MR. MILLER: Okay.

MR. SMITH: Any other questions?

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(No response)

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

MS. ORR: Yes.

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

MR. LIVERS: Yes.

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

MS. ORR: Okay.

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

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

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

MR. MILLER: I'll second.

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

(No response)

CHAIRMAN RUSSELL: No one is jumping up,

so any further discussion?

(No response)

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

(Response)

CHAIRMAN RUSSELL: Opposed.

(No response)

CHAIRMAN RUSSELL: Motion carries. Thank you.

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

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

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

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

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

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

Other comments suggested changes that

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

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

CHAIRMAN RUSSELL: Questions?

(No response)

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

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

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

(No response)

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

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

MR. MIRES: So moved.

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

MR. WHALEN: I'll second.

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

(No response)

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

(Response)

CHAIRMAN RUSSELL: Opposed.

(No response)

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

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

MS. ORR: Mr. Chairman, members of the

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

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

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

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

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

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

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

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

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

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

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

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

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

MS. ORR: Yes.

CHAIRMAN RUSSELL: And the Department is represented.

MR. MADDEN: Yes.

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

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

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

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

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

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

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

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

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

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

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

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

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

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fairly brief.

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

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

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

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and that's really not the question.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

We did file a response to exceptions, a

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

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

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

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

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enough, we think, to establish a violation.

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

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

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

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

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

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

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

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

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

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

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

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

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

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established by an uncontested exhibit which was basically the report submitted by the Appellant's technical consultant after the spill occurred. So we submit that there is no problem with there being substantial evidence to support the two to four inches of fuel product on the groundwater.

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

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

CHAIRMAN RUSSELL: Questions for either party?

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

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

MR. MADDEN: That's correct.

MS. KAISER: -- standards left behind.

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

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

MR. MADDEN: I believe they were.

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

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

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

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

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

CHAIRMAN RUSSELL: Joe.

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

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

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

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

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

MR. BROWN: Yes. I apologize. What the

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record says is accurate.

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

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

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

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

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

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

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

MR. WHALEN: Thank you, Mr. Chairman.

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

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

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

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

MR. MILLER: Thank you.

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

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

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

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

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

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

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ten miles an hour.

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

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

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

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

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

CHAIRMAN RUSSELL: But they over-filled the tank.

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

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

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

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

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

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

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

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

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

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

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

So the argument I'm trying to make is

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

MR. MIRES: Does aviation fuel contain benzine?

MR. BROWN: I have no idea.

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

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

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

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

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

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

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

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

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

CHAIRMAN RUSSELL: Yes.

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

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

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

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

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

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

CHAIRMAN RUSSELL: Thanks for reeling us back in.

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

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

MS. ORR: Right.

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

MS. ORR: Yes.

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CHAIRMAN RUSSELL: Other questions on the record?

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

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

CHAIRMAN RUSSELL: And it's Finding 14.

MR. WHALEN: Thank you, Mr. Chairman.

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

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

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

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

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

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

MS. ORR: Well, it is an interesting

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

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

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

MS. ORR: Right.

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

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

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

(No response)

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

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

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

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

MR. WHALEN: Mr. Chairman, I guess in

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

CHAIRMAN RUSSELL: Does that capture everything that --

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

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

MR. MILLER: I'll second it.

CHAIRMAN RUSSELL: Any further discussion?

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

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

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

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

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

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

(No response)

CHAIRMAN RUSSELL: Comfortable?

MR. MIRES: Obviously comfortable.

CHAIRMAN RUSSELL: As much as you're

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

(Response)

CHAIRMAN RUSSELL: Opposed.

(No response)

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

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

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

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

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

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

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

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

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

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

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

MS. ORR: Yes.

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

MS. KAISER: So moved.

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

MR. MIRES: Second.

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

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

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

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

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

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

MS. ORR: Yes.

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

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would suggest a motivation for that request?

MS. ORR: Well, I think there was anxiety on the part of the Appellant regarding accountability of the Department for their decisions concerning analysis on the ground, so the Department came forward and said, "Well, look. We'll stand by this with our Director's involvement."

MR. WHALEN: This was an accommodation in that case to the Appellant's request.

MS. ORR: Exactly.

MR. WHALEN: Thank you, Mr. Chairman.

MR. MILLER: Just a comment. Weren't we supposed to ask for public comment?

CHAIRMAN RUSSELL: Not on a contested case. I know that part.

MR. MILLER: Thank you.

CHAIRMAN RUSSELL: There is a motion, and it's been seconded. Any further discussion?

(No response)

CHAIRMAN RUSSELL: Hearing none, all those in favor of authorizing the Chair to sign, signify by saying aye.

(Response)

CHAIRMAN RUSSELL: Opposed.

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(No response)

CHAIRMAN RUSSELL: Motion carries. Onward. In the matter of violations of the Open Cut Mining Act by Deer Lodge Asphalt, Inc., at the Olsen Pit.

MS. ORR: Mr. Chairman, members of the Board. We're at this same posture with respect to the proposed findings of fact and conclusions of law that were drafted by me.

The Appellant did not file exceptions. The Department filed a clarification and an exception, and the Department in its filing requested that Finding of Fact No. 11 be altered.

And again, in order to do that, the Board would have to evaluate the record itself, and I would submit that finding of fact, the alterations to the proposed Finding of Fact No. 11 were adequately addressed in the findings of fact that was made in my proposed findings of fact in Finding of Fact No. 6.

The issue is the Department wanted to make clear that storing or stockpiling of materials at this pit -- this is an open cut mine -- for the purpose of sale or use was one of the violations, and I had in essence affirmed that in

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Finding of Fact No. 6, itemizing many activities that constituted open cut mining activities without a permit, and that includes what the Department is attempting to say. So I would submit that there is really not a reason to alter that finding of fact. You may want to hear from the Department representative.

And then the other thing that the Department Counsel points out is that there is a case now that went to the Montana Supreme Court, that we all have to take seriously, that says that these finding orders should refer to the fact that, or proposed orders should refer to the fact that parties may file exceptions, and if they don't, that may impede their ability to go up on judicial review. That case is arguably not applicable, but it's arguably applicable, so --

CHAIRMAN RUSSELL: What did you say?

MS. ORR: It's not applicable because it's a DNRC case, which I think has very, very specific facts associated with it. It's arguably not applicable to our orders, but just to err on the side of caution, it is a good idea, and the Department points it out, to make reference to this case, and make reference to the fact, just to

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err on the side of caution, that parties should be aware that if they don't file exceptions, that may have an impact to their ability to go up on judicial review. Just a notice.

So the Department wanted to make sure that's in the record, and that's what the Department included in its document; and I think that's a point well taken, and the proposed order for the Board acknowledges that. So --

CHAIRMAN RUSSELL: And it does.

MS. ORR: Yes.

CHAIRMAN RUSSELL: I see that about midway down the second page.

MS. ORR: Let me distill this out a little bit. The Department is wanting an alteration of Finding of Fact 11. I think another finding of fact that was made by me in Finding of Fact 6 addresses that point. There is really no need, I don't think, to change that Finding of Fact 11 because it's really referenced in Finding of Fact 6, and it was a good point that the Department made regarding notice and the impact of filing exceptions.

And I don't know if you want to hear from the Department Counsel on her filing, or

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John, or --

MR. NORTH: Mr. Chairman, members of the Board, John North, Chief Legal Counsel. I've quickly discussed this matter based on Katherine's clarification, and the Department hereby withdraws its objection and requests for clarification.

MS. ORR: I assume it's withdrawing that as to Finding of Fact 11, but not the reference to the case that says that you can file exceptions.

MS. AMDAHL: Correct. Thank you.

CHAIRMAN RUSSELL: This order is still an order then?

MS. ORR: Yes, it is.

CHAIRMAN RUSSELL: With that, I would entertain a motion to authorize the Board Chair to sign the newly drafted order in my hands.

MR. MIRES: So moved.

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

MR. MILLER: I'll second.

CHAIRMAN RUSSELL: It's been seconded by Marv. Is there any further discussion?

(No response)

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

(Response)

CHAIRMAN RUSSELL: Opposed.

(No response)

CHAIRMAN RUSSELL: Motion carries unanimously.

We are on to request for hearing by Frank Gruber, Broadwater Estates, regarding DEQ's denial of a modification to groundwater permit.

MS. ORR: Mr. Chairman, normally I prepare a nice summary of these cases, but let me look at the files here. And Gruber Estates is a case -- Well, that's not the entire caption. In the matter of the request for hearing by Frank Gruber, Broadwater Estates, regarding the DEQ's denial of permit modification to groundwater permit No. MTX000157, BER 2011-22 WQ.

This is a discharge permit, a challenge to a Montana groundwater pollution discharge permit, and the parties apparently reached settlement, and are proposing for the Board's approval their motion to dismiss.

CHAIRMAN RUSSELL: Thank you. So I do have an order dismissing the appeal of Case No. BER 2011-22 WQ, and I am looking for a motion to authorize the Board Chair to sign.

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MR. MILLER: So moved.

CHAIRMAN RUSSELL: It's been moved by Marv. Is there a second?

MS. KAISER: Second.

CHAIRMAN RUSSELL: It's been seconded by Heidi. Further discussion.

(No response)

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

(Response)

CHAIRMAN RUSSELL: Opposed.

(No response)

CHAIRMAN RUSSELL: Motion carries unanimously.

The next item is violations of the Open Cut Mining Act by Emerald Hills Development Company at the Emerald Hills Pit, Yellowstone County.

MS. ORR: Mr. Chairman, this is the same posture. You have before you a stipulation and order to dismiss under 41(a). This is an open cut mining case. The violations were conducting open cut mining operations in a non-permitted area, failure to protect stockpiled soils, failure to mark permit boundary, and unapproved storage of

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asphalt. And the administrative penalty that was requested was $6,300, and I don't know what's in the proposed order.

CHAIRMAN RUSSELL: $4,200.

MS. ORR: So that's the difference.

CHAIRMAN RUSSELL: Okay. Thank you. And I do have an order of dismissal for BER 2011-25 OC, and I would look for authorization for the Board Chair to sign, and a motion.

MR. MIRES: So moved.

CHAIRMAN RUSSELL: It's been moved. Is there a second?

MS. KAISER: Second.

CHAIRMAN RUSSELL: It's been seconded by Heidi. Further discussion.

(No response)

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

(Response)

CHAIRMAN RUSSELL: Opposed.

(No response)

CHAIRMAN RUSSELL: Motion carries unanimously.

We have a new case; is that right?

MS. ORR: That's correct.

CHAIRMAN RUSSELL: We have a new case on appeal, Case No. BER 2012-02 SM. Katherine, do you have anything on that?

MS. ORR: Mr. Chairman, this is a case coming out of Big Horn County. A notice of violation and administrative penalty order was issued regarding Westmoreland under the Montana Strip and Underground Mine Reclamation Act. The violation is failure to monitor water levels, and the Department is seeking an administrative penalty of $2,600.

CHAIRMAN RUSSELL: Any questions for Katherine before we take action on signing this, or not?

MS. KAISER: I just have one comment. I need to recuse myself from taking action.

CHAIRMAN RUSSELL: It will be noted that Heidi is recusing herself from further action on this. No questions coming up, I would entertain a motion to assign Katherine the permanent Hearing Examiner on this matter.

MR. WHALEN: So moved.

CHAIRMAN RUSSELL: Moved by Joe.

MR. MILLER: I'll second it.

CHAIRMAN RUSSELL: It's been moved and

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seconded. Any further discussion?

(No response)

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

(Response)

CHAIRMAN RUSSELL: Opposed.

(No response)

CHAIRMAN RUSSELL: Motion carries unanimously. Tom, before I take the last section, is there anything else?

MR. LIVERS: Just a reminder. The next meeting is Friday May 18. At this point, I think we'll have maybe not as long an agenda as we did today, but one that's worth an in-person meeting. So we'll confirm that as it gets closer, but if you would just anticipate that at this point, May 18th.

CHAIRMAN RUSSELL: I appreciate you sending those out on Alpha.

Is there anyone out there that would like to speak to the Board on the matters that the Board has jurisdiction?

(No response)

CHAIRMAN RUSSELL: Or if you just wanted to make comments about Tom or John. Hearing none,

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I would entertain a motion to adjourn.

MR. MILLER: So moved.

CHAIRMAN RUSSELL: It's been moved by Marvin. Is there a second?

MR. WHALEN: I'll second.

CHAIRMAN RUSSELL: Seconded by Joe. Further discussion.

(No response)

CHAIRMAN RUSSELL: Good meeting today. All those in favor, signify by saying aye.

(Response)

CHAIRMAN RUSSELL: Opposed.

(No response)

(The proceedings were concluded 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.

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