BEFORE THE BOARD OF ENVIRONMENTAL REVIEW OF THE STATE OF MONTANA

BOARD MEETING )
December 7, 2018 )

TRANSCRIPT OF PROCEEDINGS

Heard at Room 111 of the Metcalf Building 1520 East Sixth Avenue

Helena, Montana
December 7, 2018 9:00 adm.

BEFORE CHAIR CHRIS DEVENY, BOARD MEMBER JOHN DEARMENT; and CHRIS TWEETEN, DEXTER BUSBY, TIM WARNER (By telephone)

PREPARED BY: LAURIE CRUTCHER, PR COURT REPORTER, NOTARY PUBLIC

CHAIR DEVENY: Welcome everybody. I'd like to call to order this meeting of the Board of Environmental Review. I'm Chris Deveny, Chair. And we'll have a roll call now. Lindsay.

MS. FORD: Chris Deveny.
CHAIR DEVENY: Present.
MS. FORD: John Felton.
(No response)
MS . FORD: Dexter Busby.
MR. BUSBY: I'm here.
MS. FORD: Hillary Hanson.
(No response)
MS. FORD: Tim Warner.
MR. WARNER: Here.
MS. FORD: John Dearment.
MR. DEARMENT: Here.
MS. FORD: Chris Tweeten.
(No response)
MS. FORD: I have four Board members present. That is a quorum.

CHAIR DEVENY: Thank you, Lindsay. Next I'd like to go around the room, and we'll start
here with Sarah.
MS. CLERGET: Sarah Clerget, attorney for the Board.

MR. MATHIEUS: George Mathieus, Board
liaison, Department liaison for the Board.
MS. FORD: Lindsay Ford, Board
secretary.
MS. SCHERER: Sandy Scherer, legal secretary, DEQ.

MR. HAYES: Ed Hayes, Acting Chief Legal Counsel for DEQ.

MR. LUCAS: Mark Lucas, DEQ staff attorney.

MS. BOWERS: Kirstin Bowers, DEQ attorney.

MR. FREELAND: Dan Freeland, compliance inspector, DEQ.

MS. McCARTHY: Mindy McCarthy, compliance, DEQ.

MR. PETTIS: Aaron Pettis, attorney, DEQ.

MS. CHRISTOPHERSON: Sarah
Christopherson, attorney, DEQ.
MR. MOSER: Kurt Moser, attorney, DEQ.
MR. SIVERS: Eric Sivers, DEQ Water

Protection Bureau.
MR. GARBER: Jason Garber, Water Protection Bureau, DEQ.

MR. DILLIARD: John Dilliard, DEQ,
Public Water Supply Bureau.
MS. CLARK: Rachel Clark, DEQ,
Engineering Bureau.
MS. BAWDEN: Susan Bawden, DEQ
Enforcement.
MR. ANDERSON: Chad Anderson, DEQ
Enforcement Program Manager.
MS. STEINMETZ: Amy Steinmetz, Waste Management and Remediation Division.

MS. KELLY: Myla Kelly, Water Quality Standards.

MR. DAVIS: Tim Davis, Water Quality Division.

MR. REGENSBURGER: Eric Regensburger, Water Quality Standards.

MR. STEER: Wade Steer (phonetic),
Western Energy Company.
MR. MARTIN: John Martin, Holland and
Hart, for Western Energy.
MR. LEEP: Lundy Leep with Copper Ridge Development.

MS. MARQUIS: Vicki Marquis with Holland and Hart representing Copper Ridge and Reflections at Copper Ridge.

MR. BRICE: Greg Brice (phonetic) with Hydrometrics.

MR. STORY: Steve Story with DNRC and the Board of Water Well Contractors.

MR. URBAN: Eric Urban, DEQ.
MR. KENNING: Jon Kenning, DEQ.
DR. SUPLEE: Mike Suplee, DEQ Water
Quality Standards and Modeling Section.
MS. MERKEL: Julie Merkel, DEQ, Air Quality Bureau.

MS. HARBAGE: Rebecca Harbage, DEQ, Air Quality.

MS. ULRICH: Liz Ulrich, DEQ Air Quality Bureau.

MR. WARNER: Ed Warner, DEQ, Air Quality Bureau.

MR. JUERS: Shawn Juers, DEQ, Air Quality Bureau.

MR. WHITAKER: Nick Whitaker, DEQ staff attorney.

MR. BARTON: Darryl Barton, DEQ.
MR. ANDERSON: Carl Anderson, DEQ, Air

Monitoring.
MS. McLAUGHLIN: Joanne McLaughlin, Water Protection Bureau.

MS. SIR: Haley Sir, DEQ.
MR. FLEMING: Derek Fleming, DEQ, Water Protection Bureau.

MR. TIETZ: John Tietz with Browning, Kaleczyc, Berry and Hoven for Columbia Falls Aluminum Company.

MR. THOMPSON: Brian Thompson at Browning, Kaleczyc, Berry and Hoven for Montana Contractors Association.

MR. COLEMAN: I'm Ed Coleman. I'm with the DEQ Coal and Opencut Mining Bureau.

CHAIR DEVENY: And we had two people that came in just recently. If you want to find a chair, and would us let know who you are, that would be good.

MR. KLEMP: David Klemp, DEQ, Air Quality Bureau.

MR. HERNANDEZ: Shiloh Hernandez with Western Environmental Law Center representing the Montana Environmental Information Center.

CHAIR DEVENY: There is a couple seats up here or somewhere in there, anyplace you can
find. Are there other people on the phone lines that are here to listen to or participate in this meeting today besides our two Board members?
(No response)
CHAIR DEVENY: Hearing none, welcome, Dexter, welcome, Tim. Thank you both for being on here. We do have a quorum. I'd like to just remind anybody that does call in on the phone to please mute your phones so that we don't have a lot of interference, and when you speak, to please identify yourself so that our Court Reporter can get all of the information into the record today.

So next we'll review the minutes from our October meeting. Do any Board members have any additions or corrections to the minutes?
(No response)
CHAIR DEVENY: Hearing none, are there any members of $D E Q$ or the public that have comments on the minutes?
(No response)
CHAIR DEVENY: Is there a motion to approve the minutes?

MR. DEARMENT: So moved.
CHAIR DEVENY: It's been moved. I'll
second it. It's been moved and seconded. All
those in favor, signify by saying aye.
(Response)
CHAIR DEVENY: Anybody opposed?
(No response)
CHAIR DEVENY: It looks like we have approved the minutes. Next the Board needs to review our 2019 meeting schedule which you should have in your packet. Was there any discussion on those dates, or do Board members agree that those are dates that will work for us?
(No response)
CHAIR DEVENY: Hearing none, would there be a motion to approve those meeting dates?

MR. DEARMENT: So moved.
CHAIR DEVENY: It's been moved. I'll
second it. Any public comments?
(No response)
CHAIR DEVENY: Hearing none, all those members in favor of the 2019 schedule, signify by saying aye.
(Response)
CHAIR DEVENY: Any opposed?
(No response)
CHAIR DEVENY: Okay. So the 2019
meeting schedule has been established.

And the next order of business are the briefing items, and I'll turn this over to our Board attorney Sarah Clerget.

MS. CLERGET: Hi, everybody. Sarah Clerget. I will just reiterate what's on the agenda for you, going through them one by one.

Briefing item II(A) (1) (a), CMG
Construction, technical experts in the case have met, and DEQ is in the process of reviewing CMG's scope of work in regard to the remediation. Once those technical details are worked out, it will be reduced to writing, and CMG will file a notice of dismissal. The last status report they filed was on November 23rd of 2018.

Fischer Land Development is Item (b). I just got an update from that on December 6th. DEQ filed a status report indicating that petitioner has signed and executed the order on consent, and a stipulation for dismissal should be filed shortly. So that's an oral update even from what's in the agenda.

MR. TWEETEN: Excuse me, Sarah. Can I break in just a second? This is Chris Tweeten. I finally brought the technology to its knees and I am on the call.

MS. CLERGET: Oh, good, Chris. Thank you.

CHAIR DEVENY: Welcome, Chris. Thank you for coming in.

MR. TWEETEN: It's great to be here.
CHAIR DEVENY: Before we continue, there have been some people that have come into the room. I'd like to ask them to each identify themselves.

MS. WEAVER: Christine Weaver with the MPDES Permitting Program.

MS. ERICH HOFFMAN: Emilee Erich Hoffman, MPDES program.

MS. HEDGES: Ann Hedges with MEIC.
CHAIR DEVENY: Thank you. Okay. Go ahead.

MS. CLERGET: And I apologize. I think I just switched these in my notes. Wagoner family is the one that $I$ just got the update on, on December 6th, so I apologize that the update I just gave you was Wagoner Family, which is Item (c).

Item (b) Fischer Land Development, the stay is still in place as they work on their settlement terms.

So moving on to Item (d), the Bob Weaver Pit, there is a scheduling order in place and the parties are proceeding accordingly.

Two of the nonenforcement cases,
Absaloka Mine, they are waiting on -- There is a stay in the underlying case pending the outcome of MEIC and Sierra Club v. DEQ and Western Energy, and there's still no decision on that case yet.

2(b), Signal Peak, I extended all pretrial motions pending an issue that's before the District Court right now regarding a subpoena. That issue has been resolved by the District Court substantially, but they are still working on attorneys fees, so that remains pending before the District Court and stayed in our action.

Item (c), the AM4 Western Energy, I have the proposed findings of fact and conclusions of law from the parties, and hope to get a decision out to you as soon as possible. The goal is to have that on the agenda for February. We will see if we can manage that. If not, it will be at the April meeting.

In Montanore, $I$ held a trial on that case Monday and Tuesday of this week, so the parties are now going to work on their proposed
findings of fact and conclusions of law, and get those submitted to me. I would expect that one to come before you sometime in the summer probably.

Item (e), the Laurel Refinery case, there is a six month stay in place until february $25 \mathrm{th}, 2019$.

Item (f), Golden West Properties, Wagner, and Weyer cases, as you remember, we dismissed the one, so only Mr. Weyer's appeal continues. And I've issued a scheduling order on September $20 t h$, and the parties are proceeding accordingly.

Columbia Falls Aluminum Company is not on the agenda. However, I note that the parties are present here. And my understanding is that essentially the agreement that was reached at the end of the last meeting they are continuing to work on, and there should be an update in February as originally stated.

And Item $3(a)$ is for $D E Q$ to update.
CHAIR DEVENY: Could we have an update from DEQ on the Western Energy permit.

MS. BOWERS: And Madam Chair, members of the Board, I'm Kirsten Bowers, DEQ attorney. And that case is before the Supreme Court, and really
the only update is that Western Energy filed an unopposed motion for an extension of the due date to file reply brief, and that was granted, so reply briefs are now due January 11th, 2019. So the matter is still being briefed before the Montana Supreme Court.

CHAIR DEVENY: Thank you. Anything else, Sarah?

MS. CLERGET: No, that completes the briefing items.

CHAIR DEVENY: We're ready to move on to our action items for the day. We have a lot on our agenda, so try to keep this meeting moving. Let's hear from DEQ. George, $I$ think I'll ask you to introduce your staff on the particular rulemaking that we're discussing today.

MR. MATHIEUS: Thanks, Madam Chair. We have four rulemaking items before you today. And our first one is DEQ Circular 7, I believe is Mike Suplee. So Dr. Mike Suplee is going to present for you this morning. It looks like you have a power point.

CHAIR DEVENY: Is this power point available to those who are on the phone?

MS. CLERGET: Yes. I mailed it to them
this morning, and it was posted to the Board website.

CHAIR DEVENY: So Dexter, Chris, and Tim, do you need a minute to get your power point up, or are you ready?

MR. BUSBY: I can't get it up because I have no internet.

CHAIR DEVENY: Tim and Chris, are you ready to proceed?

MR. TWEETEN: Yes, I think so.
DR. SUPLEE: Madam Chair, members of the Board, good morning. Again, my name is Dr. Michael Suplee. I'm with the Montana Department of Environmental Quality's Water Quality Modeling and Standards Section, and we are requesting initiation of rulemaking this morning.

This rule change is before both the Board and the Department because DEQ7, the circular in question, is referenced in both Board rules and Department rules. We're proposing six new groundwater human health criteria specifically for groundwater, and $I$ will walk you through these briefly.

The groundwater standards are going to be housed here in this. This is a page from DEQ7. They will be housed here under the groundwater section of the circular. All these criteria were derived using drinking water as the source only, so here are the six.

And the adoption is being driven primarily by requests from DEQ's Waste Management and Remediation Division, including their hazardous waste program. These standards will provide cleanup end points for remediation work that they are doing. So in brief, I'll give you just a real brief rundown on the six criteria since there's not many of them.

Dialliate, the first on the list, you can see there, is a carcinogen. This is an herbicide that's been used to control weeds and grasses in crops. High levels of it affect the central nervous system, and long term exposure can cause liver damage. That is the background on that.

Dioxane, 1,4 is an organic compound used as a solvent. It has affected groundwater in many areas in the United States, and it is highly soluble in water, and does not bind well with soils, and therefore it has found its way into groundwater. This is part of the reason that
remediation is seeking this in DEQ7 as a cleanup end point.

I'm going to jump over iron and manganese, and go to the last two, perfluorooctane sulfonate, or for short PFOS, and perfluorooctanoic acid, or PFOA.

These are compounds that have been around since the 1940's. They've been widely used for all kinds of purposes: As a resistant for stains, such as Scotchgard; they've been used in Teflon cookware; they are used for firefighting purposes.

And they have a very long life. They persist indefinitely in the environment. And in fact, it has been found that 98 percent of the general US population has these compounds in small levels in them.

So in 2002, under pressure from EPA, began to phase out the production of these compounds. Eight other companies that have produced these followed suit by 2015 , and they agreed to finish producing these. But they are commonly found in various areas in groundwater.

EPA studies show that it can cause developmental effects on human fetuses during
pregnancy, including low birth weight, skeletal variations. It can also reduce the chance of pregnancy; it interferes with the body's hormone systems; affects the immune system; a possible cancer risk. However, these have been derived as toxic criteria in this case.

So I'm going to now jump forward a little bit here on iron and manganese. Now, iron and manganese criteria are interesting, in that probably most of you in the room are familiar with the idea that some people take iron as a supplement, so why are we having criteria for this?

Both iron and manganese demonstrate what's known as a U-shaped adversity or health impact curve, so if you look at that, what you're seeing is that if you don't get enough of either of these compounds, you can have health effects, too low of iron, too low of manganese, and other micronutrients. So that would be there on the left side of the curve.

Then there is the area in the middle where most of us operate where we're getting enough of these. And then if you get too much on the other side, you start to get adverse health
impacts from too much of these compounds. For example, at a dosage of 200 to 300 milligrams per kilogram, iron is actually lethal.

Now manganese -- I'm going to jump back down to a previous slide. Manganese in excess levels causes neurobehavioral and neurocognitive impacts to infants. There has been a lot of work done just recently, and the collective evidence suggests that early manganese exposure at too high of levels may produce deficits in learning, memory, and attention.

And this brings me to the idea that there are special populations that some of these criteria have been derived for. Our standard assumption when we derive a drinking water based standard is that a person who weighs 80 kilograms, and they drink 2.4 liters of water per day during their lifetime.

However, some subpopulations are more vulnerable than others, and the criteria are derived to protect them. We have two criteria, actually three here, that are derived for specific subpopulations. PFOS and PFOA, which I mentioned earlier can affect pregnancy, etc.

Those have been derived to protect
lactating women, and they use the 90 percentile of their daily water intake and also lower assumed body weight than is normally used. Those were derived by EPA.

Manganese was derived by the Department with the assistance from EPA. This is derived to protect infants, and specifically the criteria were derived for zero to six month old infants, who do have a much lower body weight obviously, and a much larger percentage of water intake. The assumption is that up to 80 percent of their water is coming from the mixing of formula.

And just as an aside, both Canada and the State of Minnesota have derived criteria for manganese, and they basically came up with the same number we did, which is 100 micrograms per liter.

Additional details on the rulemaking. I'm almost finished. There is going to be a new Footnote 40. This is going to provide a means to cross reference the Montana administrative record, pages and date, in cases where the details of how DEQ derived a criteria or criteria is housed in the MAR.

You probably noticed that the MAR Notice
had a fair amount of technical information about how we went through and derived the criteria, so that we don't lose that linkage, or if people need to find out more about that in the future, they will be able to look at the footnote, and we will specifically link that MAR notice to the iron and manganese criteria.

There is a new Footnote 41. Essentially all that says is that the combination of PFOS and PFOA cannot exceed the .07 criterion shown up there on the board.

There is a stringency issue. We've looked at all these criteria relative to the federal, and we have one criterion that is currently more stringent than Federal manganese value. But the Department has provided, and will provide more as needed, all the information in order to meet the requirements of more stringent than Federal, which is at 75-5-203. Some of that information is already in the notice.

In the future -- this is now stepping away from the rulemaking that's immediately before us -- the Department is planning via the Public Water Supply Bureau, which will be probably approximately in the next year or so, to adopt
manganese as a drinking water standard.
But $I$ want to point out that today's rulemaking will not affect the drinking water rules. This is strictly for groundwater, groundwater cleanup, remediation, that sort of thing.

At that time, the drinking water standard will be developed in light of DEQ7's groundwater standard here, EPA recommendations, and other requirements that would be detailed in the drinking water program's rules. So that's something that you should probably expect to see coming into the future, but not today.

That's all $I$ have on the rulemaking. I'd be happy to answer any questions you may have.

CHAIR DEVENY: Thank you. And I'm sorry. I didn't get your name.

DR. SUPLEE: My name is Michael Suplee.
CHAIR DEVENY: Thank you for that presentation. Do Board members have questions of Dr. Suplee or any of the DEQ?
(No response)
CHAIR DEVENY: Questions from the Board?
(No response)
CHAIR DEVENY: I have a question on the
manganese. You mentioned $I$ believe Canada and Minnesota have similar concentration limits. Are those also for remediation, or are those for drinking water?

DR. SUPLEE: To be honest, I don't know the answer to that.

CHAIR DEVENY: And no other state has that number for -- those numbers for remediation at this time?

DR. SUPLEE: I'm not aware of other states that have them adopted in rule. I know that even the EPA has been looking at updating the number that they have proposed, which is 300 , based on older studies; but they are not in a position at this point to quite move forward on a national recommendation.

CHAIR DEVENY: So it sounds like these are some updates that are needed, it sounds like to me. Board members don't appear to have any questions or comments. So at this time, we'll take comments from the public if there are any. Is anybody here interested in speaking to these?

MR. BRICE: I would like to speak to those comments, please.

CHAIR DEVENY: If you could be sure to
give your name clearly for our Court Reporter.
MR. BRICE: Absolutely. My name is Greg Brice. I'm with Hydrometrics in Helena, Montana, and I'm a hydrogeologist. I'd like to, Madam Chair and Board, thank you for your time today.

I would like to request the Board to delay any decision on initiating rulemaking at this time for a few reasons.

The first reasoning is that many of our -- we represent many clients that these rules would affect, especially with respect to iron and manganese. Many of our clients did not know about this proposed change. We are unaware why they were not provided this information, as many of us at Hydrometrics are also on the list to be notified for such changes, and those were not provided to anybody in our group that was on those lists.

And then these changes, these rule changes, could adversely affect many of these based on -- many of these clients based on these standards, and that has been not been fully evaluated on by the Department.

The other thing is we have had only a small amount of time to actually review the data
that the Department provided, but we did find numerous technical issues that we think the Board should consider.

The technical issues that $I$ have identified in my preliminary review show that the addition of numeric criteria for iron and manganese is, we believe, unnecessary, as these parameters may be regulated under Montana's surface and groundwater rules that contain narrative standards.

The Department also notes that the reason for adding numeric standards for iron is that the standard is an important criterion to Wastewater Management Remediation Division as a cleanup end point.

The standards applied in DEQ7 have much wider impacts than just cleanup end points, and there are a variety of factors, including land use and site specific exposure assumptions that can be used by the Department in more site specific risk assessments, to establish cleanup criteria and end points.

It is hard for us to understand why the Department removed the narrative standards only a few years back, and now is coming back to add
numeric standards to both iron and manganese. The Department does not make a clear case on why additional standards are necessary to protect human health.

It should also be noted that both iron and manganese are essential dietary needs for human health, and any development of a numeric standard must take into account both the need for that constituent, and the toxicity, potential toxicity or harmfulness of that constituent.

More specifically with iron, the Department has identified iron as a toxic. However, it gives no reasoning to this designation. Currently iron is designated as a harmful in DEQ7, and the change from a toxic to a harmful has many effects with respect to nondegradation standards.

Circular DEQ7 provides trigger values for toxic parameters that determine whether a change in water quality is significant under nondeg rules. In this rulemaking proposal, DEQ has not identified a proposed trigger value for iron, thus the current proposal is incomplete.

Furthermore, the Department references that the iron criterion was calculated using an

RFD of 0.592 kilograms per -- and $I$ know I'm getting into the weeds here, but it is important -- based on EPA's provisional peer review toxicity value for iron compounds.

However, the actual document uses an RFD of 0.7. So the document, if you accept that document's RFD value, is higher than what the actual was in EPA's documentation.

Further, the reference documents had many disclaimers about the proper use of this data, some of which of these are concerning. I'll quote a few of them for you.

The first one states, "It is important to remember that provisional values alone tell very little about the adverse effects of a chemical, or the quality of evidence on which that value is based on."

It also notes in the documentation that EPA's health effect assessment summary table reported that data regarding iron were inadequate for quantitative risk assessments. The chemical assessment and related activities list provided by EPA includes a health effect assessment for iron and compounds that found no reliable quantitative oral toxicity data.

Lastly it states that the studies used to develop the provisional RFD's are based on durations of two weeks to approximately three months, and that no chronic exposure studies reporting gastrointestinal toxicity were identified, and the RFD that was developed in that documentation used data solely on the two weeks to approximately three months on gastrointestinal toxicity to develop that criteria.

The disclaimers in the document must be considered in determining if it is valid to use provisional RFD for establishing statewide numeric standards.

The referenced EPA document provided a provisional subchronic and chronic RFD value of 0.7 , as $I$ stated earlier. It is higher than used by the Department, and therefore the Department would be required under 75-5-203 to provide written findings that include information from the hearing records regarding the cost of the regulated community that are directly attributable to the proposed state standards requirement.

That was not provided in this proposed rulemaking, and it should be done prior to initiating rulemaking, because we know rulemaking
takes a lot of energy, time by the Department, by the Board, and by the regulated community, and is important to have this information before we start initiating rulemaking on these things.

With respect to manganese, a similar scenario is that Dr. Suplee noted that manganese, if they're proposing a standard that is lower than the actual federal standard. When that is done, the cost analysis needs to be done as to the -before, and this was not done, and therefore we would request that prior to initiating rulemaking, that this information be provided so it can be reviewed by the Board and the public.

One thing that we think the Department states in their rules is that at a municipal scale, dissolved manganese can be removed by several technologies. They give an example of oxidation and physical separation, which can achieve concentrations of 40 micrograms per liter. This statement is slightly misleading. I think Dr. Suplee correctly noted that these are standards for DEQ7. They do not apply to drinking water criteria, which would be able to meet -which is where the 40 micrograms per liter would come into play for that.

These standards will actually most likely be used for treatment technologies for cleanup sites, and more importantly, will be used to determine nondegradation criteria for discharge permits to the groundwater.

They also could be used for establishing nondeg criteria for MPDES permits for surface water because many MPDES permits are discharged to groundwater that are in connection to surface water, and therefore they need to meet groundwater nondeg criteria in those MPDES permits, as well as surface water, and those costs and feasibilities for municipalities and other industries to meet these nondeg criteria for discharges could be significant.

I thank you for your time. I ask you consider the information that I've provided, and delaying any determination or initiation of rulemaking. Thank you.

CHAIR DEVENY: Thank you. Would you stay for questions? Okay. Thank you. Do Board members have questions of Mr. Brice?
(No response)
CHAIR DEVENY: Dexter or Chris, any
questions?

MR. TWEETEN: I'd like to hear from -This is Chris. I'd like to hear from the Department in response.

CHAIR DEVENY: Absolutely, we will. I wanted to see if anybody had any questions first.
(No response)
CHAIR DEVENY: With that, could we hear from DEQ in response to $M r$. Brice's comments and concerns. And $I$ would particularly like to ask up front that you address his issue about the notice, no notice being given to him, or what you've done to engage any stakeholders up front if there has been that effort.

DR. SUPLEE: This is Mike Suplee with the Department. I can address some of these things. Some of these other issues may have to bump to other individuals in the Department.

Regarding the public notice, we have not outreached a great deal to stakeholders because that is a part of what the process is going forward.

What we have done quite extensively is internally met and discussed among the multiple groups within our Department that deal with groundwater -- so this would be remediation.

We have a groundwater working group who has been meeting off and on over the last couple of years, and they are fully aware of the implications of putting standard like this in place, and they're aware of the fact that in some areas, groundwater does have numbers far higher naturally, for example, than these numbers.

And there are elements of our law, for example 75-5-306, where you don't have to treat to purer than natural that come into play and are incorporated into the rules that we work under. So that is part of how we have looked at this.

There is no individual or group among the groundwater working group that again represents the full array of folks within the Department that deal with groundwater and groundwater remediation and treatment that have shown concern about us adopting these standards at this point. We've had many meetings with them.

But that's not outreach to the general public. Again, that is generally what we would do going forward with the 45 day public comment period that's coming, etc.

Regarding the reference dose that he referred to, our calculation is actually correct.

If you've read the document more closely, he would see that that reference dose is based on a 70 kilogram assumed body weight. That is what the assumed body weight was at the national scale, and was in Montana up to recently.

In more recent DEQ7's, it was updated to
80 kilograms. When you run back through those calculations, and readjust that reference dose, you will find that you come up with the number that we used.

Regarding having us remove iron and manganese more recently as narratives, that is correct. Those were removed. They were in DEQ7 in the 1990 as a full standards, then they moved to a footnote, and by 2012 they were actually removed from DEQ7 completely.

Those were based on national secondary standards for drinking water based on staining and esthetics in drinking water supply, so they really had never had a lot of direct usage for purposes of protection of human health.

In contrast, these two criteria that we're talking about here, and the numbers that are shown, are based on the protection of human health as we discussed. And I did again point out that

U-shaped curve. We're fully aware that you need these things in small quantities. These criteria are set at the other end of the spectrum where if it gets too high it's a problem.

Beyond that, $I$ think if there is any specific questions or further thing, there may be other people in the Department that may be better suited to answer those questions. That's all I have at the moment. Do you have any questions for me?

CHAIR DEVENY: John?
MR. DEARMENT: NO.
CHAIR DEVENY: Dexter or Chris?
MR. TWEETEN: Madam Chair, maybe a question for George. George, given the concerns that have been expressed -- I realize that many of these are questions that can't be addressed during the rulemaking process, and certainly $I$ think the timeliness of notice becomes less significant in light of the significant opportunities for comment and input that are provided to the stakeholders during a rulemaking process.

But $I$ guess my question is: Have you heard anything that might make you think that perhaps since these are not emergency rules, it
might not be wise to go back and look at some of these comments and questions in more detail before we initiate rulemaking, as opposed to taking them up on the back end after you conduct your hearing and receive the public input?

MR. MATHIEUS: Thanks, Chris. I would just say that personally $I$ didn't hear anything that $I$ thought couldn't be handled under a normal rulemaking, some of the statements that were made.

Just typically, and on the contrary to that, the Department goes through a great deal of effort $I$ think with all our rulemaking to try to determine the level of interest and controversy that may arise, and when we see ones that it is obvious, then we do slow down, we form work groups, and we work through that. I think we're known for that.

I would probably defer to Tim, or Eric, or someone in the management of the program to give a better perspective on that, but from what $I$ heard, a lot of the things I picked up on seemed to be normal processes that would occur during rulemaking.

CHAIR DEVENY: Chris, are you satisfied with that answer, or should we ask Tim Davis or
any other DEQ staff members to speak to that? MR. TWEETEN: Well, Madam Chair, I would be curious if anybody else within DEQ has anything to add to what George told us. I don't want to extend the discussion unnecessarily. But since this isn't an emergency rulemaking, $I$ think we do have the option of asking DEQ to take up some of these concerns now rather than rulemaking.

On the other hand, the rulemaking process is designed for extensive public input, both verbally and in writing. And I didn't hear anything -- I'm no expert -- but I didn't hear anything out of the ordinary for the kind of comments or discussion that would occur during the rulemaking process, so --

CHAIR DEVENY: I am going to ask Tim Davis just to speak to that, just very briefly.

MR. DAVIS: Madam Chair, members of the Board, Tim Davis, Water Quality Division Administrator at DEQ.

I agree. I concur with Mr. Mathieus that I think this could be taken -- the public comment process could address the comments that were raised. I would point out -- and I don't remember Mr. Suplee bringing this up -- but it did
go before WPCAC as well, so these rules -CHAIR DEVENY: Would you define WPCAC? MR. URBAN: Water Pollution Control Advisory Council.

MR. DAVIS: Water Pollution Control Advisory Council. I should know that. One too many acronyms on a Friday. So it went before WPCAC prior to coming to the Board, so there was an opportunity there for them to ask questions.

We would certainly take the comments that have been raised today, and work with the commenters during the public comment period as well, to be able to address those when it came back for adoption, Madam Chair.

CHAIR DEVENY: Thank you, Mr. Davis. Do Board members have any other comments or questions of DEQ?

MR. BUSBY: I've got a couple of comments. Usually before you start setting criteria, you go through all the stakeholders, but something like iron and manganese which are very much naturally occurring, and very much part of the environment, $I$ don't know that we know who all the stakeholders are involved in this.

And I'm a little concerned that when we
get a little bit ahead of ourselves with those two items. I'd be willing to make a motion we separate those out, let the other four other items proceed with rulemaking, and have a separate rulemaking for manganese and iron, simply because they are different breeds of cats and have wholly different set of stakeholders.

CHAIR DEVENY: Okay. There is a motion before the Board. Is there a second to that motion?
(No response)
CHAIR DEVENY: I don't hear a second to that motion so --

MR. TWEETEN: Madam Chair, this is
Chris. I'll second it for purposes of discussion. I'm not sure I'm going to vote for it or not, but I'd like to hear from the Department about the idea of segregating those two items.

CHAIR DEVENY: George, who would you like best from DEQ to address this issue that Dexter has just raised?

MR. MATHIEUS: Tim.
CHAIR DEVENY: Mr. Davis, you're back up here again, please.

MR. DAVIS: Madam Chair, members of the

Board, $I$ think it would be fine if the Board wanted to do that, I mean require multiple rulemaking processes, because we would propose to come back and bring iron and manganese at a separate rulemaking if what's what you chose to do.

I do think that dealing with PFOS, PFOA, the other parameters would be important to move forward with in the near term. Dr. Suplee could provide other criteria if there is other -- answer technical questions if you have about the manganese and iron as well.

But if that's what the Board chose to do, we would still propose to come back in the future to address those that you separated out, but that would just create a series of rulemakings if what's what you chose to do.

CHAIR DEVENY: Could you address how you will go about bringing stakeholders together during -- if we were to initiate rulemaking today, what would the process be that you would go to to ensure that folks that would be impacted by this would have an opportunity to bring their concerns before the Department?

MR. DAVIS: Madam Chair, members of the

Board, we would certainly -- we do have a number of stakeholder groups that we could pull together, and essentially offer to meet, sit and talk about some of the concerns or questions, technical questions that were raised today, give people an opportunity to have a discussion in a task force forum; also that would prepare us for response to comments if the Board would receive them later. CHAIR DEVENY: And Mr. Brice indicated that he was not aware that this was happening until $I$ believe he saw it on the agenda. Is Mr. Brice or are others that work with the consulting industry members of your stakeholders groups?

MR. DAVIS: Madam Chair, members of the Board. They're certainly on our interested parties list, and did go -- this was noticed, we went before WPCAC as well, but just don't ask me to spell out the acronym again. But we can certainly send out a request more broadly to make sure that if people have questions, concerns, comments they want to discuss, we can discuss those between now and the adoption and initiation. CHAIR DEVENY: Do Board members have any further questions of Mr. Davis?

MR. TWEETEN: Madam Chair, just a
followup on what Tim just said. Under MAPA, the rulemaking begins with publication of the notice of intent to adopt rules into the Montana Administrative Register, and certainly a sophisticated interested party or group would be following the Administrative Register, and would receive notice of the intent to make rules on this subject at that point.

In addition, anybody who is specifically interested in $D E Q$ business, and who has put their identifying information on the $D E Q$ mailing list, would receive a personal copy mailed and emailed from the DEQ of the notice of proposed rulemaking. So that would flesh out $I$ think the majority of the interested parties who had previously indicated some interest in DEQ's business.

You can never discount the possibility that some person or entity out there doesn't follow the Administrative Register, hasn't put their name on the list, and those folks would be on constructive notice of the proposed rulemaking, but wouldn't have actual notice.

That can't be avoided, and that's inherent in the rulemaking process, that we do our

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best to give notice to those people that we know of, and those people who are interested can always find it in the register, but there is a certain amount of responsibility that's placed on the interested parties to follow along with this stuff if they want to have a chance to comment.

And that's sort of the balance that MAPA strikes, so $I$ think anybody that's previously been identified as having an interest in this area would receive actual notice through the rulemaking process.

CHAIR DEVENY: Thank you, Chris, for reminding us of the MAPA process. And I think with that, $I$ 'm inclined to vote against the motion that's before the Board, because I do think initiating the rulemaking will allow for ample public input, and that the Board can -- or that the Department can move forward with that. Any other discussion on the motion before the Board? MR. DEARMENT: I would also add, Madam Chair that --

CHAIR DEVENY: John Dearment.
MR. DEARMENT: Thank you. And in terms of what Dexter had to say, with all due respect to Dexter, $I$ also disagree and inclined to vote
against it. I think that DEQ regulates a lot of parameters that are naturally occurring and essential to human health at low levels, like iron and manganese, become dangerous at more toxic levels. I just don't really see anything so special about them that would require us to call them out separately for a separate rulemaking. CHAIR DEVENY: Dexter, you had another comment?

MR. BUSBY: Just one quick question then. This is for the fellow from, $I$ believe it was Hydrometrics.

He mentioned that there was some criteria about cost analysis, and I could not hear most of what he said, and I'd like him to repeat that if possible.

CHAIR DEVENY: Yes. Mr. Brice from Hydrometrics.

MR. BRICE: Madam Chair and members of the Board. I was essentially talking to -- I can't remember the exact criteria off the top of my head now -- 75-5-203 I believe it is, that since manganese is a lower standard than federal, that the Department is proposing that a cost analysis must be evaluated by the Board and the

Department that evaluates the impacts to the regulated community.

And that was not done or provided at least in the proposed rules, and therefore we would ask that be provided by prior to initiating rulemaking.

CHAIR DEVENY: Could I have DEQ speak to that.

MR. MATHIEUS: Madam Chair, I can.
CHAIR DEVENY: George Mathieus.
MR. MATHIEUS: It is part of the rulemaking process to conduct that analysis.

CHAIR DEVENY: Dexter, did you hear that?

MR. BUSBY: I could hear parts of it. If $I$ understood that, it is supposed to be provided as part but not before the rulemaking process? Is that what $I$ understood?

MR. MATHIEUS: Dexter, this is George.
That's correct. It is a requirement of the rulemaking process, so we will conduct that analysis during rulemaking, should the Board decide to initiate rulemaking.

MR. BUSBY: Okay. I don't have any other questions.

MR. TWEETEN: Madam Chair, this is Chris. Just a quick one for George. Will that analysis be available to the public prior to the hearing on the rule?

MR. MATHIEUS: Chris, this is George.
We'll make sure that happens.
MR. TWEETEN: I think that's important.
MR. MATHIEUS: Okay.
MR. BUSBY: What's the timing on the hearing on this?

MS. CLERGET: This is Sarah Clerget.
And $I$ believe $I$ just discussed with Sandy that we would set this for January 11 th.

MR. BUSBY: That's a pretty short time period with the holidays in there, but --

MS. CLERGET: We can extend that out as needed. So $I$ can discuss that with $D E Q$ and we can set a further date out.

MR. BUSBY: Okay.
CHAIR DEVENY: There is a motion and a second before the Board. I'd like to call for the question on that. So all those in favor of the motion, please signify by saying aye.

MR. BUSBY: I'm going to say aye, since it is my motion.

CHAIR DEVENY: All those opposed, signify by saying nay.
(Response)
MR. TWEETEN: This is Chris. I'm a no as well.

CHAIR DEVENY: So that's I believe four nays and one aye, so the motion fails.

MR. DEARMENT: Madam Chair, this is John. I will move that we proceed to initiate rulemaking as requested by the Department, and with all due respect to Hydrometrics -- I appreciate their input here today, and look forward to hearing more from them and other stakeholders. But with the Department having already reached out to WPCAC and so forth, I think we can deal with this through the regular rulemaking process. So $I$ move that we initiate as requested.

CHAIR DEVENY: Mr. Dearment, would you agree to add on to your motion that we also appoint Sarah Clerget as the Hearing Officer for the purpose of holding the public hearing on this proposed rulemaking?

MR. DEARMENT: Yes, absolutely.
CHAIR DEVENY: Is everybody clear on
what the motion is?
(No response)
CHAIR DEVENY: Anybody unclear? I would second that motion. Is there any discussion on the motion?
(No response)
CHAIR DEVENY: All those in favor of the motion, please signify by saying aye.
(Response)
CHAIR DEVENY: All those opposed?
MR. BUSBY: Aye.
CHAIR DEVENY: Motion carries for the Department to initiate rulemaking, and for Sarah to serve as the Hearings Officer. Thank you very much.

Our next rulemaking initiation to discuss is with the Air Quality.

MR. MATHIEUS: Yes, Madam Chair. I believe the Board had a briefing on this, and Rebecca Harbage is going to present to the Board this morning.

CHAIR DEVENY: I think maybe we should take a break at this point. So let's reconvene in ten minutes.

> (Recess taken)
(Mr. Warner not present)
CHAIR DEVENY: We're going to reconvene
here. Lindsay, would you please take roll call.
MS. FORD: Chris Deveny.
CHAIR DEVENY: Present.
MS. FORD: Dexter Busby.
MR. BUSBY: I'm here.
MS. FORD: Tim Warner.
(No response)
MS. FORD: Tim Warner.
(No response)
CHAIR DEVENY: John Dearment.
MR. DEARMENT: Here.
MS. FORD: Chris Tweeten.
MR. TWEETEN: Present.
MS. FORD: Tim Warner.
(No response)
MS. FORD: We have four Board members now. It is still a quorum.

CHAIR DEVENY: We'll go ahead. We were getting ready to address the next rulemaking initiation, and DEQ.

MS. HARBAGE: Good morning, Madam Chair, members of the Board. My name is Rebecca Harbage, and I'm an Environmental Planner with the

Department's Air Quality Bureau. I'm also the project manager for the Bureau's efforts to develop a registration program for portable sources of emissions.

I have a great team working on that project as well, many of whom are here, so if you do have questions, we'll be here to answer them. Portable sources, before $I$ get into this, include crushing and screening plants, concrete batch plants, and asphalt plants. Today I'm here to request that the Board initiate rulemaking to begin the formal process of taking public comment on proposed new and amended Administrative Rules. CHAIR DEVENY: Chris and Dexter, and Tim if you come on, can you still hear us right now? MR. BUSBY: I cannot. I can hear you, but $I$ can't hear anybody else.

CHAIR DEVENY: Chris Tweeten, are you still on?

MR. TWEETEN: Yes, I am.
CHAIR DEVENY: Okay. Excuse us for the interruption.

MS. HARBAGE: No problem. At the Board meeting in October, $I$ presented an overview of this project that covered some of the background
as to why the Air Quality Bureau is deciding to move forward with a new registration program for portable sources at this time. I just want to give you a quick refresher before $I$ get any further into this project.

First of all, given the demands on our time and our limited resources, it's essential that we streamline the way we do our work, so we can redistribute staff time where they can have the most environmental benefit.

The bureau has been permitting portable sources like the ones we're talking about today for decades, and we've been doing it the same way. We've identified this as an area where we can improve our process, while maintaining equivalent or better protection of air quality.

A registration program, what that does is essentially adopt the operating requirements that are currently included as permit conditions into Administrative Rules that would apply generally to all eligible sources. In this way, the registration program wouldn't change the operating requirements themselves. They would change the way those requirements are applied to sources.

This type of approach is appropriate for portable sources because the operating requirements for those sources and their environmental impacts are nearly identical from one source to the next, and those haven't changed in many decades.

The Air Quality Bureau has been interested in this project, which is a portable source registration program, for about a decade, actually since before the Board adopted a similar registration program for oil and gas well facilities in 2006.

Montana's oil and gas well air quality registration program was one of the first registration programs in the country, and it was approved by the Environmental Protection Agency as part of Montana's State Implementation Plan.

In the years since 2006, many other registration type programs have been developed in other states for a variety of source categories, including the portable sources we're talking about today.

EPA also recognized the opportunity to streamline the regulation of these types of minor sources on tribal lands, and they implemented
general permits and permits by rule for these sources, the last of which were adopted in 2016 . Before $I$ get into the proposed rulemaking itself, $I$ do want to take just a minute to acknowledge that there were many stakeholders who worked with us to develop this program. When the Air Quality Bureau started planning to move forward with this project a couple years ago, we had a pretty good idea of where we wanted to go, but we also recognized that we couldn't develop a successful program in a vacuum. We would not be here today with draft rules if stakeholders hadn't taken the time to share their experiences and support this project along the way.

Over the course of a little more than a year, we've had many conversations and meetings with a variety of stakeholders, including our Clean Air Act Advisory Committee, the Opencut Section stakeholders, the Montana Contractors Association, environmental groups, county air quality programs, as well as the EPA.

From these conversations, we then formed a technical working group comprised of representatives from industry who could help us work on the details of how a registration program
might actually work for portable sources. Internally to the agency we've also coordinated with the Opencut Section, as well as our own Oil and Gas Services Section.

Along the way we've provided updates, we've shared draft rules, and we've had open conversations about potential concerns and how to address them. As a result of these conversations with stakeholders, and not hearing any significant concerns with the rules as proposed, we believe we're ready to move forward into the formal rulemaking process.

Of course, as you know, stakeholder input doesn't end with initiation of rulemaking. We do anticipate many more conversations as well as comments on the proposed draft rules. Should you decide to initiate rulemaking today, that will kick off a period during which interested parties may submit comments on the rules and the associated programmatic environmental assessments, which will be posted alongside the rules for public comment.

> In addition, the rulemaking process would eventually be followed by additional conversations with stakeholders regarding program
implementation, as well as then a process to submit these rules into the Montana State Implementation Plan.

So what $I$ want to do now is not give you as much detail as you have in your packets already, but walk through what I've been calling the main pillars of the program, and there are six of them.

So first, the main goal of this
registration program is really to streamline the process. What that means is that we've identified three types of sources for which case-by-case analysis does not provide substantial benefit. Therefore, part of the proposed new program is to eliminate the need for case specific applicability determinations by requiring that all sources of a certain type register with the Department. To be clear, this eliminates the lower applicability threshold that exists in permitting today.

The Department did assess the potential impact of this new program, and determined that it will not significantly and directly impact small businesses.

Second, we believe that major sources do continue to warrant the additional scrutiny that
comes with case-by-case permitting. Therefore, the proposed registration program is only applicable to sources that do not exceed set production limits in rule. These limits are essentially surrogates for emission limits, but we believe that these production limits are much easier for sources to track than emissions. Our project team carefully calculated the limits that are in rule for each different type of source that are covered by the rule to ensure that the registered sources stay well below 100 tons per year of the pollutant that is emitted in the greatest amount by that type of source.

This is the major source threshold at which additional permitting requirements would apply. A source that exceeds the production limit in rule would not be in compliance with the rules. We would require that that source either come back into compliance by getting below the production limit, or obtain the appropriate permit. To be clear, there are no portable sources that are currently permitted as major sources today. So this production limit also has the secondary effect of providing certainty to sources that if they remain registration eligible, no
additional air quality permitting conditions would be triggered.

Third, in developing this new program, we stand by the goal of providing meaningful public notice of the registration and location of all sources of emissions. To notify the public, the Department must be notified of each physical location of each type of source that is being registered or that is relocating around the state.

This also enables the Department to do our due diligence in performing site inspections that ensure emissions are appropriately controlled at each site.

The proposed new rules actually improve on the existing process because they require confirmation when a facility moves to a location or vacates a location. This goes beyond what is required today to ensure that the Department's record, and therefore the public record, are current.

That brings me to the fourth pillar, which is that the sources proposed to be covered by this program must control dust or particulate emissions from their operations. The control requirements you see in rule are essentially
transferred from existing permits to achieve that goal, and they ensure that this new program will be just as protective of air quality.

The proposed new program clarifies a point of confusion that exists in our current program by describing very clearly for both sources and for the Department inspectors at what point water or chemical dust suppression is required to be in use, and not just present at the site.

It is equally important to note that registration does not supersede any other applicable requirements, whether they be other requirements in the Clean Air Act of Montana, or other State, local, or Federal regulations. This new program is just one piece of Montana's Air Quality Program, and that is also just one piece of a broader regulatory universe for these sources. So it is important to note that air quality registration is not the only requirement for these sources to operate.

Finally, the sixth pillar. We learned from our own Oil and Gas Well Registration Program that we must provide a way for sources or the Department to essentially revoke a registration.

This is an important part of our permitting program today, and therefore it should carry forward into the registration program as well.

The proposed rules include a process for what we're calling deregistration, either by request of a source or by the Department, for violation of the Air Quality Rules. The rules also provide the same due process for that deregistration as is provided for Montana air quality permits today.

With that, Madam Chair, Board members, the Department does request that the Board initiate rulemaking, and designate a Hearings Officer for a public hearing to consider the proposed amendment and adoption of Administrative Rules. These rules will implement the new air quality registration program for certain portable sources of emissions.

Before I'm done, $I$ do have to note that in the draft notice that's in your packets, there is one error on Page 15 of the notice, and $I$ think it is Page 118 of your PDF.

In Paragraph 4 , we state a date that is the close of the public comment period. Currently that date is listed as January 16 th. We would
request that any motion to initiate rulemaking include a change of date from January 16 th to January $25 t h$ in order to provide the sufficient amount of time for comment and hearing.

So with that, I'm happy to answer any questions you may have. If you want to go into more details, $I$ do have the project team here as well, so $I$ would request the ability to defer anything to them.

CHAIR DEVENY: Thank you. Why don't you go ahead and stay up there. We've had to mute the phone, so the phone is now on mute. We figured out, Dexter, somehow it is happening from your phone, but we're going to deal with it on this end. So Dexter, Chris, and Tim, are you with us?

MR. BUSBY: I'm here.
MR. TWEETEN: I'm still here.
CHAIR DEVENY: Tim, have you come on yet?
(No response)
CHAIR DEVENY: Questions of DEQ from Board members?

MR. TWEETEN: Madam Chair, is there any commenters from the public?

CHAIR DEVENY: I haven't asked for them
yet. I was seeing if the Board members had any questions yet.

MR. TWEETEN: I have one. How many other examples exist of groups of emitters who have been placed under registration as opposed to permitting?

MS. HARBAGE: Madam Chair, Mr. Tweeten, are you talking just in Montana?

MR. TWEETEN: Yes, just in Montana.
MS. HARBAGE: Just in Montana, we have the Oil and Gas Well Registration Program, and that is the only other registration program currently for air quality.

MR. TWEETEN: Okay. And I guess I've noticed that the permission to go this route as opposed to permitting has been in effect since 2003. Why is it suddenly current to move in that direction for this particular group of emitters? MS. HARBAGE: Sure. That's a good question. Madam Chair, Mr. Tweeten, the Department has been thinking about additional registration programs since it was essentially allowed in Montana Code Annotated. We were considering this Gravel Crusher Registration Program at the same time as we brought the Oil and

Gas Well Registration Program before the Board. Unfortunately at that time we just had such an onslaught of new oil and gas development in the state that we had to move forward quickly to address the Oil and Gas Well Registration Program. We just didn't have the staff to deal with the number of permits that were coming in for oil and gas wells, and we had to put this program on hold.

It has come up again at this point because we're feeling the crunch in both resources and also staff, and so it has become really essential that we figure out a better way to deal with these minor sources that may not benefit from case-by-case permitting. Does that answer your question?

MR. TWEETEN: Yes, it does. Thank you.
CHAIR DEVENY: Any other questions from
Board members?
(No response)
CHAIR DEVENY: Any questions or comments from the public? Please state your name for the record.

MR. THOMPSON: Certainly. My name is Brian Thompson. I'm an attorney at Browning,

Kaleczyc, Berry and Hoven in Helena. I'm here representing the Montana Contractors Association. Madam Chair, members of the Board, the Montana Contractors Association appreciates the opportunity to comment on the request of $D E Q$ to initiate rulemaking on the Portable Source Registration Program. On behalf of the Contractors Association, we would like to express our thanks to the Department's Air Quality Management Bureau for their hard work and the outreach to stakeholders, including us.

MCA has participated in several meetings and information exchange with the bureau to develop the rule package that will streamline the permitting process, and improve air quality in the state of Montana.

We also understand that if these rules are adopted, that the contractors will need to continue to collaborate with the Department. We urge you to approve this rulemaking package, and we appreciate the opportunity. Thank you.

CHAIR DEVENY: Thank you, Mr. Thompson.
Any other comments from the public? (No response)

CHAIR DEVENY: Seeing none, $I$ would like
to ask for a motion on this particular issue. Are Board members ready?

MR. DEARMENT: I will move that we initiate rulemaking as requested by the Department, assign Sarah as the Hearing Examiner, and change the date as Rebecca requested in the notice.

CHAIR DEVENY: I would second that.
MR. BUSBY: I'll second that.
CHAIR DEVENY: We got a double second on that, so that's great. Thank you, Dexter. Any discussion by Board members?

MR. DEARMENT: Madam Chair, I would second the word of gratitude to $D E Q$, because I know it has been a long time and a lot of work for the Air Quality Bureau. It's a win for the environment, win for the regulated community, and a win for DEQ. Happy to move forward with initiation today.

CHAIR DEVENY: Thank you, John. I concur with that. The Department has done a good job in moving forward with something that's going to expedite things, and will be good for the regulated community as well as the environment. So all those in favor, please signify by saying
(Response)
CHAIR DEVENY: Any opposed, signify by saying nay.
(No response)
CHAIR DEVENY: Motion carries. Thank you.
(Mr. Warner present)
CHAIR DEVENY: Moving right along, our next rulemaking is water quality. Welcome, Tim. Thank you for coming back on.

We have a request from the Department for the Board to initiate rulemaking for proposed amendments to some rules and circulars regarding new community and non-community water wells and checklists. DEQ.

MR. REGENSBURGER: Good morning, Madam Chairwoman, members of the Board. My name is Eric Regensburger. I'm a hydrologist with the Department. And today --

CHAIR DEVENY: We have got another power point for those of you who are on the phone, if you wanted to bring it up on your end. Are Board members ready to proceed?

MR. TWEETEN: Madam Chair, I'm ready.

CHAIR DEVENY: Mr. Regensburger.
MR. REGENSBURGER: Thank you. So we're proposing a new rule regarding sewage lagoons and water well setbacks. First of all, I want to mention to the Board that this should be a fairly simple process for the Board since the rule is actually a DEQ rule, not a Board rule.

However as you can see from this slide, the new rule will have to be referenced in several Board rules listed there at the top of the slide. It also has to be listed in other DEQ rules, and also DNRC rules, which the Department has been talking and meeting with DNRC to set up those changes in their rules as well.

So although I'm going to discuss all the details of the rule, and the technicalities for the Board, it is merely adopting, citing this rule in their rules.

And as far as outreach, considering the some of the previous comments on some of the previous rules you've been looking at, the Department has been in front of WPCAC twice regarding this rule. We did one this spring, and we did one recently.

We have been talking with NRCS, which is
the Natural Resource Conservation Service, a Federal agency, as they help with the finance and technical issues on a lot of small sewage lagoons for agricultural uses, so they have interest in this. We've been talking to them for over a year and getting their feedback on the rule.

We've also met with one of the members of WPCAC personally down in Bozeman to discuss the rule. And we recently sent out the draft rule to several engineers that work with sewage lagoons, and haven't heard any feedback either way from them. But that's been the extent of our outreach outside of the Department.

So on to the rule. It is designed to protect wells, water wells, from pathogens, bacterial and viral pathogens. There was a previous setback in statute in the Water Quality Act of 500 feet. And in 2017 the Legislature passed House Bill 368 , which removed that set in stone 500 foot setback, and directed DEQ to establish new rules for these setbacks. Hence that's why we're here today.

Some of the things that the new rule does that the old rule or the old statute didn't do was it allows for variable setback conditions
for site specific conditions, instead of just one single setback. It prescribes that both new sewage lagoons and new water wells have to meet these setbacks. The previous rule just regulated the sewage lagoons, not wells, so there was kind of a little bit of a loophole there.

And then as $I$ said, we coordinated with DNRC to update the well drillers rules, so their rules will be comparable and the same as our rules. They'll actually cite our rule.

So we already went through this slide. So the technical summary of the rule is that the default setback is 1,000 feet. Without any other information, you have to have a 1,000 foot distance between the well and the lagoons.

And the minimum setback is always 100 feet. It can't be any closer than 100 feet no matter what anything else -- any other issues arise. So as $I$ said, the rule allows for site specific conditions that allow you to be less than the default setback of 1,000 feet, and those include, as are listed here on the slide, what we call hydraulic disconnection, where any wastewater that leaks from the lagoons cannot physically get to the water well due to groundwater flow or due
to geologic conditions. And I'll have some slides to kind of these describe these scenarios to give you a little better idea what this actually means.

The second method is providing what's called 4-log or 99.9 percent reduction in pathogens from the water that might leak from the lagoons before it gets to the well; and using those calculations, which are in the rule, the setback can be reduced anywhere from less than 1,000 feet to no less than 100 feet.

And then we also have a provision in the rule that allows the setback to be 200 feet if the well is a public well, and it is disinfected, or if the wastewater in the lagoons is disinfected to a certain level. And those details are in the rule as far as what the exact levels of disinfection are required.

One thing $I$ want to add is that these rules don't apply to existing lagoons or existing water wells unless that lagoon or well proposes to increase their capacity, or increase the size of the lagoon and the wastewater treated.

So I'm going to go through a couple examples here of what some of those exemptions, or what those methods are to reduce the default
setback. So one of them is when the groundwater won't allow any leakage from the lagoons to enter the well.

So what you see here is the lagoon is going to have some leakage. They're all allowed to have a certain amount of leakage out of them. And if the groundwater is flowing away from the well under pumping conditions, then they don't have to keep the 1,000 foot. They can reduce that distance to whatever distance is necessary to keep the groundwater flowing away from the well. So that's one of the scenarios where they can reduce it to less than 1,000 feet.

Another scenario where they can reduce distance to less than 1,000 feet is if the well is completed in what's called a confined aquifer. That's where the -- as you can see here -- where there is what we call an impervious geologic layer, usually some sort of glacial till or clay layer, where water that leaks from the lagoons can't physically get down to where the water well -- you can see the well is actually collecting water from down here below this impervious layer, so any wastewater from the lagoon can travel towards the well, but since the well is sealed, it
can't get into the water supply for that well. So in that case they could get their distance down to as close to 100 feet between the well and the lagoon.

And then the last more complicated method is what we call the $4-l o g$ reduction, which is used in other areas of the Department for determining the proper setbacks between wells and wastewater sources.

In this case, we're looking at a well that is down gradient of the lagoon, and the lagoon is leaking a certain amount of wastewater, and we have calculations to determine the amount of time it takes for the leaking wastewater to get to the water table. That's called a vertical travel time. And based on the amount of time it takes, there is a certain set log reduction of pathogens that occurs in that time. So we had that value.

And then we have a horizontal component, as the leakage flows towards the well in the aquifer, in the groundwater, and we can calculate the time it takes for that wastewater to migrate to the well, and then apply -- Again, we can determine the amount of log reduction based on
standard values from EPA.
And if the log reduction in the vertical
time plus the log reduction in the horizontal time of movement provides the $4-10 g$ removal, then that well and that lagoon can be whatever -- how many feet that calculation tells us is necessary to achieve the 4-log removal.

One thing to note here is with only several feet of -- depending on the type of soil, it could be a couple feet, it could be ten feet. In many cases the 4-log reduction can be achieved before the wastewater even hits the groundwater table. In that case the lagoon and the well can be as close as 100 feet together in those situations, or further if they want to be further, but they can go as close as 100 when you get enough reduction in the vertical movement of the wastewater.

So that's pretty much the nuts and bolts of the rule. And again, like $I$ said, this is a Department rule. It will be cited in Board rules. So hopefully this is a fairly simple process for the Board. With that, I'll take any questions.

CHAIR DEVENY: Thank you, Mr.
Regensburger. I have a few questions. Does this
rule apply to new lagoons, or to new wells that would be drilled near a lagoon, or both?

MR. REGENSBURGER: Madam Chairwoman, the rule applies to both new water wells -- which encompasses public wells, individual wells, stock wells, any type of water well -- and it applies to new lagoons as well.

CHAIR DEVENY: And who's responsible for the monitoring? I'm assuming you're putting in groundwater monitoring wells to determine groundwater flow, and existing conditions, that sort of thing. Who is responsible for that?

MR. REGENSBURGER: Madam Chairwoman, in the situations where groundwater monitoring is necessary -- and it may not be in some of the situations -- but for a lot of them, where they want to go less than 1,000 feet, it may be required.

We have three different ways of determining groundwater flow. One, as you mentioned, is putting in wells and actually measuring the groundwater, and determining the exact flow there. That would be the applicant's responsibility to do that.

Another method is some areas have
published reports of groundwater tables. We can use those. And then a third method we put in there, in the interest of finances for some of these smaller lagoons, is that they can estimate the groundwater flow, and it's a conservative estimate, using topography, using the topography between the lagoon and the well.

And that's a very simple way to do it, and very inexpensive. But it is conservative because it's generally going to over estimate the hydraulic gradient, which will provide a faster travel time, and less pathogen reduction in our calculations.

So in that respect it is inexpensive, but conservative. If it works, then great, then they don't have to spend a lot of money in putting in wells or doing monitoring, and we're still protecting the well from the wastewater.

CHAIR DEVENY: Would you say in your opinion is this rule more protective of public health than the existing rule?

MR. REGENSBURGER: It's better suited to the individual -- Madam Chairwoman, the new rule is better suited, so $I$ think it is better suited to the particular situation. So $I$ think it is as
protective or more protective in the large majority of cases.

CHAIR DEVENY: Do other Board members have questions of Mr . Regensburger?
(No response)
CHAIR DEVENY: Thank you very much. Are there any public comments on the proposed rule initiation?
(No response)
CHAIR DEVENY: Seeing none, what is the pleasure of our Board? Would anybody like to entertain a motion?

MR. TWEETEN: Madam Chair, this is Chris. I'll move to initiate rulemaking as requested by the Department.

CHAIR DEVENY: And also to appoint Sarah Clerget as the Hearing Officer?

MR. TWEETEN: And also to appoint Sarah as Hearing Officer, correct.

CHAIR DEVENY: Is everybody clear on the motion before the Board?
(No response)
CHAIR DEVENY: All those in favor, signify by saying aye.
(Response)

CHAIR DEVENY: Any opposed? (No response)

CHAIR DEVENY: Hearing none, this motion passes. Thank you very much. I believe we have one more rulemaking, and this has to do with 401 certification.

MR. GARBER: Thank you, Madam Chair. My name is Jason Garber, my last name is spelled G-A-R-B-E-R, and I'm the Section 401 coordinator for DEQ.

In August, the Department initiated rulemaking to update and amend the Administrative Rules for 401 certification. Just by way of background, under 401 of the Clean Water Act, states and tribes can review and approve, condition, or deny all Federal permits or licenses that might result in a discharge to state or tribal waters, including wetlands.

In Montana, the major Federal licenses and permits that we deal with are Section 404 dredge and fill permits administered by the US Army Corps of Engineers, and Federal Energy Regulatory Commission hydro power licenses for hydroelectric projects.

I'm just going to summarize what these
amendments did here. The proposed amendments will update and clarify the policies and procedures for State water quality certification for activities requiring federal permits under Section 401 of the Federal Clean Water Act, and they allow us more flexibility to coordinate with our federal partners and applicants during 401 reviews.

The agency went before WPCAC prior to coming before the Board to initiate rulemaking. We also had a 45 day public comment period whereby the agency did not receive any comments from the public. A hearing was held September 18th, 2018. The Department testified in support of the proposed amendments at the hearing. No written comments or oral testimony were received from the public.

So therefore, DEQ requests that the Board adopt these proposed amendments to the 401 certification rules for the Administrative Rules of Montana.

CHAIR DEVENY: Thank you, Mr. Garber. Do Board members have any questions of Mr. Garber? (No response)

CHAIR DEVENY: Hearing none, $I$ would like to move that -- I guess we need some public
comment first. Are there any members of the public that would like to comment on this rule adoption before the Board?
(No response)
CHAIR DEVENY: Seeing none and hearing none, $I$ will then move that we adopt the amendments to the Administrative Rules of Montana pertaining to 401 certification, and that we adopt them.

MR. DEARMENT: I'll second that.
CHAIR DEVENY: It's been moved and seconded. Any further discussion by Board members?
(No response)
CHAIR DEVENY: Hearing none, all those in favor of the motion, signify by saying aye.
(Response)
CHAIR DEVENY: Any opposed?
(No response)
CHAIR DEVENY: Motion carries. Thank you.

With that, our next item on our agenda is the case. And I'm wondering if we should take a break now. Would it be a good time or do we want to --

MS. CLERGET: I think just five minutes and let them set up.

CHAIR DEVENY: Could we take a five minute break and allow the parties to get ready for this case, and everybody else to get up and stretch.
(Oral argument on BER 2015-01 WQ and BER 2015-02 WQ bound separately and heard at 11:00 a.m.)

(Reconvened at 1:08 p.m.)
(Mr. Tweeten and Mr. Warner not present)

CHAIR DEVENY: Do You have a Board
Counsel update, Sarah?

MS. CLERGET: There are no remaining agenda items, there are no updates.

CHAIR DEVENY: Is there any public comment today on anything? You can't comment on contested cases, but you can comment on anything else.
(No response)

CHAIR DEVENY: I would move to adjourn this meeting.

MR. DEARMENT: I'll second.

CHAIR DEVENY: It's been moved and
(The proceedings were concluded

$$
\text { at } 1: 10 \text { P.M. ) }
$$

*     *         *             *                 * 

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 - 78 - 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 $\qquad$ day of $\qquad$ , 2018 .

LAURIE CRUTCHER, RPR

Court Reporter - Notary Public

My commission expires

March 9, 2020 .

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