

DRAFT MEETING MINUTES
WATER POLLUTION CONTROL ADVISORY COUNCIL
Friday, September 9th, 2016
Metcalfe Building
1520 E. Sixth Ave, Helena, MT 59620

PRESENT

Council Members Present:

Trevor Selch

Craig Workman standing in for Keith Smith

Bob Morrison standing in for Karen Sanchez

Earl Salley

Michael Wendland

Mitchell Leu (by phone)

Mike Jacobson (by phone)

Kathleen Williams (by phone)

Council Members Absent:

Mack Cole

Dude Tyler

Stevie Neuman

Montana Department of Environmental Quality Staff Members Present:

Jon Kenning

Eric Urban

Myla Kelly

Timmie Smart

Amy Steinmetz

CALL TO ORDER

Chairperson Trevor Selch called the meeting to order at 10:03 a.m.

APPROVAL OF AGENDA

Chairperson Selch moved to approve the agenda. There was no opposition; the motion carried.

APPROVAL OF MINUTES

Mr. Michael Wendland moved to accept the May 13th, 2016 meeting minutes as distributed; Mr. Earl Salley seconded. There was no opposition; the motion carried.

BREIFING ITEMS

Montana Surety bonds given by Mr. Eric Urban, Water Quality Planning Bureau Chief for DEQ

Mr. Urban began by saying there was a question asking how Montana bonds their mining programs. Mr. Urban worked in the mining program and is familiar with it. He said that fundamentally the question comes from a lot of issues that have occurred in the past and most recently with Wyoming, so he wanted to first give a little bit of background. He explained that with mining bonds, it's the state's requirement to hold enough financial security in place so if something happens to that company, the state isn't left holding that liability. So every 3 to 5 years and depending on the program, DEQ looks at permit renewals and the existing condition of the projects and the amount of money it would take to

make their reclamation plan. So how do we assure that the State isn't the one holding the liability. Wyoming's problem was that they allowed self-bonding. This means that the company comes to the state and says "don't worry, we're good for it" and demonstrate their assets that shows them as a very valuable company; so valuable that they can cover anything. So the state of Wyoming accepted self-bonding as a method of liability. Then there was a dramatic decline nationally in the coal markets which took a valuable company and made them not valuable. They ended up in bankruptcy and it's a multiple entity. When you're self-bonded and every one of your companies end up bankrupt, Wyoming ends up getting in line with the bankruptcy courts and looking for settlements. Mr. Urban said he believes that Wyoming even made some settlement agreements with different companies, so where they had a 600 million dollar liability on the ground, the State was proposing to settle for 50 million, or 10 cents on the dollar. Someone in Wyoming is still looking to pick up the rest of that deficit. It's very much newsworthy and Mr. Urban believes the federal oversight is going to accept that approach. Mr. Urban said the good news is that in Montana, self-bonding in both the hard rock and the coal program is not accepted. It is black and white in Montana's regulations; that no company will be allowed to self-bond.

Mr. Urban explained that there are a couple approaches Montana does allow, the most common being the surety-bond. Mr. Urban used an analogy of an insurance, where the company has an x amount of liability and they go out to a surety-bonding agency and request an insurance package. They pay an annual premium, not the full amount, and that protects Montana as our agreement for the bond is with the surety agent. If something happens to that company, it doesn't affect Montana's ability to get access to the full bond amount.

Mr. Urban moved onto the other, less popular approach, considered a letter of credit. Mr. Urban called this cash on hand, where you go to your banking entity and literally make an account or a cash amount and that cash amount is untouchable by anybody but the state as long as that permit is operating. Mr. Urban said that since he came from the coal program, he wanted to give a couple of quick numbers. All of the coal-mining permits, the cost to the state if the companies are no longer viable and the State had to take on reclamation of those facilities, Montana holds \$471 million in surety bonds and \$1.7 million in a letter of credit. He said this number isn't constant, but changing as reclamation and new mining occurs. So the program reviews this to make sure the State isn't left with a large liability. Montana also has a coal prospecting program, which is really bore holes which the State bonds for also in much smaller dollar amounts. Mr. Urban wanted to point out that Montana is not like the other states that are seen in the national headlines and that he believes the legislature and the rule makers had really good vision into outlawing bonding in the State of Montana. Mr. Urban opened the floor for questions.

Mr. Michael Wendland asked that the surety bonds are 100%, so if they figure it's going to cost a million to recover, then the bond is for a million dollars? Mr. Urban said yes, but better than that. If there is a million dollar hole in the ground and to fill it based on labor rates and operator equipment, etc., The State looks at that cost and add on a cost for the state to hire a third party to do it. So the State will take the physical cost of filling the hole and add on a management oversight cost to perform the work.

Mr. Bob Morrison asked who estimates the costs. Mr. Urban said the costs are estimated from two different angles; first the company proposes the cost, which obviously is somewhat controversial. But to counter that, the department has a requirement to review it, which they take very seriously. All the mining programs have an engineer or multiple positions that are fully capable of reviewing this (proposed cost). Mr. Urban added that because he came from the coal program (and knows the process) that the company reviews the bond, proposes it, the state reviews the bond and in addition to that

Montana's federal oversight reviews the bond to make certain that the historic problems that many states have had aren't occurring again.

Mr. Earl Salley asked what happens if the company holding the bond goes bankrupt. Mr. Urban said that if the insurance company goes bankrupt, it's a different scenario. Montana's requirement for the permit to operate is to have a viable bond. If that scenario happened where their surety agent went under there would not be a very long grace period before the permit wouldn't be active. Mechanisms would trigger very quickly so you can't operate a mine or have a permit without a viable surety bond or viable bonding entity.

Mr. Bob Morrison added that it's very similar to a construction performance-type bond. Mr. Urban agreed, adding that bonding, because of historic issues across the nation, has become one of the most important factors for mine operation as far as overhead and cost of operation. The last he had heard the surety agencies were getting a bit gun shy because a lot of scenarios have happened where the companies have gone bankrupt and they're left paying that money. So premium prices upfront, cash down is really high, so you might be asking for a 200 million dollar bond, but the insurance company might be asking for a 20 million dollar annual premium, making bonding very important for both the state and the company operating and thus it's really important for both the State and the company to get the bond accurate, not over estimate or under estimate.

Mr. Workman said that often cities and municipalities will have issues with, for example, subdivisions will have a letter of credit that typically has an expiration date. Does DEQ have a policy on expiration dates on letters of credit that auto-renew? Mr. Urban said he was not familiar with that level of specifics, but said that there is no letter of credit, no permit. If there is some twist to the letter of credit where it expires, it wouldn't be acceptable to the program in the period that it's covering.

Mr. Selch asked how long DEQ has been using the surety bonds letter of credit approach. Mr. Urban said he was not certain when the regulations were revised.

Ms. Kathleen Williams said that she thought this topic emanated from a question she had sent to Ms. Amy Steinmetz after the reading the situation in Wyoming where even when the State is in line, the reclamation doesn't even rank with which creditors the judges are putting first and the ability to clean up for water quality issues seems like a big problem. Ms. Williams said that she is really relieved to hear that Montana is not in the same boat. She appreciates Mr. Urban for being available to answer this question, which she thought might be one of the few yes or no questions. Does Montana self-bond? The answer is no, so that's great. Mr. Urban said that he had to be honest, that when he read about Wyoming's situation, it took his breath away. It's a pretty tough deal for the State and for the environment down there. He thinks the good news for Wyoming is that they aren't settled yet, that the Federal programs have a lot of concern and he thinks there is more to come. He said that this is one of the questions that he volunteered to answer because it's one of the few questions where he can say yes or no.

Mr. Urban asked for any other questions. Ms. Williams said that Wyoming is also having problems not just hard rock and coal, but also with plugging oil and gas wells that have been self-bonded. She wondered if that was the same for Montana. Mr. Urban said that his knowledge was limited, but his understanding is that Wyoming did not require bonding for some of those activities and a lot of that goes back to holding ponds for CBM. Wyoming's approach for water management for CBM development was most commonly a holding pond for their excess water. Without the forethought to self-bond those

when the industry and economics changed and most of those wells stopped producing, the State woke up one morning with thousands of small CBM ponds with no money to reclaim them and little to no recourse to tying them back to the entity. As far as Montana's approach, we haven't seen that but he said that he was not sure what the regulations would be.

Mr. Selch next moved the meeting to the Action Items, with Ms. Steinmetz and Montana's Triennial Review of Water Quality Standards and proposed amendments that DEQ would like to take to the Board.

Ms. Steinmetz started by saying there is a lot of information covering a lot of topics, but DEQ doesn't believe there is anything controversial. She continued with a recap of what most of the group had seen in January, explaining that the Triennial Review is a statute required activity that the Water Quality Standards program has to conduct. Per MCA 75-5-301 the BER has to review Montana's water quality standards at least every three years, and revise them as appropriate and necessary. That's also paralleled in federal regulation. The last Triennial review ended in October 2012, DEQ began their process in January of this year, very close to the 3-year deadline.

Ms. Steinmetz continued, saying the standards open to comment include everything on the slide, the mixing zone rule, the administrative rules of Montana, title 17, chapter 30, subchapter 5, surface water quality standards subchapter 6, nondegradation rules subchapter 7, groundwater rules subchapter 10. There is a compliance schedule authorizing provision in the permitting rules at 1730-1350. Also included are the numeric water quality criteria that are contained in DEQ 7 and DEQ 12 a and b, which are the Montana numeric water quality criteria and the Montana base numeric nutrient standard and nutrient standards variance. Ms. Steinmetz said that DEQ put all of the above items out for comment, but did not receive comments on all of them. Ms. Myla Kelly will talk about this later in the meeting about the comments received.

Next she moved onto the timeline for the Triennial Review

- January DEQ spoke to the group about the triennial review, explained the process, asked for comments and the approval to move forward to the board.
- February the Board voted to open the triennial review by requesting public comment on the water quality standards.
- March DEQ briefed the group on some of the items DEQ thought they'd be proposing for changes in the water quality standards. These were mostly in response to federal updates and needs the department. There was lots of conversation with other bureaus and divisions, as well as with other agencies in the States. DEQ tries to do a really comprehensive outreach.
- June the 60-day public comment period closed. DEQ published the notice in 8 different newspapers across the state, sent 500 hard-copy letters to interested parties, and also sent emails to DEQ listservs, which includes about 200 people. DEQ also posted the notice on its website. The Board held a public hearing on June 3rd.

Ms. Steinmetz moved onto today, talking about the changes that DEQ is proposing and welcoming comments and looking for approval to move forward to the Board on September 30th, hoping that they will vote to initiate rulemaking on the proposed changes. DEQ is hoping to have another public comment period specific to the rules they are proposing if the BER does vote to initiate this rule. The public comment period would be 45 days. DEQ would respond to those comments and hopefully go back to the Board on December 9th and hope that they will adopt the changes. If they do, then DEQ will submit the package to EPA for their approval.

Ms. Williams asked if anyone showed up at the public hearing. Ms. Steinmetz said no. She said that 3 different parties did show up to see what would be commented on, but there were not comments.

Ms. Steinmetz moved onto the proposed rule amendments. Most of the changes that DEQ is proposing are in DEQ-7, the Montana numeric water quality criteria. Then DEQ-7 is incorporated in rule. Often DEQ has a lot of technical information that they need to get into the rules, but it doesn't make sense to publish 60 pages of technical information in the rule. DEQ puts this information into a circular; adopt that into rule, which then becomes rule. So DEQ-7 is rule. Ms. Steinmetz said there are also a couple of other changes DEQ is proposing to the administrative rules of Montana.

Next, Ms. Steinmetz covered some housekeeping items in DEQ-7, some grammar wordsmithing and technical edits and correction of some errors. Ms. Steinmetz quickly read through them but said if there are any questions to let her know. She clarified that water quality standards include 3 pieces:

1. Beneficial uses of waters
2. Numeric and narrative water quality criteria that are designed to protect the uses
3. Non-degradation provision to protect waters

Ms. Steinmetz explained that water quality standards are more encompassing than water quality criteria, which is about the numbers in DEQ-7 or the narrative statements to protect uses. Right now in DEQ-7, DEQ uses standards when talking about the criteria.

DEQ is proposing the following:

Grammar, wordsmithing, and technical edits (in DEQ-7)

- Where it's appropriate, replacing standards with criteria.
- Remove SAX numbers- Ms. Steinmetz said she has never spoken with anyone who has used these out of DEQ-7
- Add units to all columns in table- to remove confusion.
- Use dashes instead of hyphens and note in intro (for search capability)- to make PDF's searchable
- Clarify "harmful" confusion in Footnote (1)

Correction of errors (DEQ-7)

- Correct spelling errors- Indeno (1,2,3-cd) pyrene has an I instead of the 1, making it non-searchable
- Dioxin scientific notation is incorrect
- Beta and gamma emitters decimal place is misplaced
- Footnote 7 units in the table that are incorrect
- Nitrate trigger values- there is a clerical error in the last version of DEQ-7 so the trigger values read incorrectly

Reference corrections and updates

- Reference DEQ-12 in DEQ-7 (DEQ-12 is new since the last revision of DEQ-7)- need to make updates to the introduction and footnotes to reference DEQ-12 which has the numeric water quality criteria for nutrients for aquatic life and recreation
- ARM 17.30.609 (reference error)
- ARM 17.30.702 (reference error)
- Ensure correct version of 40 CFR 136 referenced in all WQA rules (2011)

- Compliance schedule authorizing provision—reference permitting compliance schedule rules

Ms. Steinmetz asked for questions. Ms. Williams asked for clarification about the renaming of “criteria” instead of “standards”. Ms. Steinmetz said that DEQ is proposing this only when they are talking about the numbers. Ms. Williams asked if there are any implications, if you change standards will it seem that there aren’t as many? Ms. Steinmetz said she didn’t see any implications, that it would be more consistent with the federal use of the word. The only place she could think of was in 75-5-301, it does talk about water quality standards in both beneficial uses and water quality standards in the numbers. But she didn’t see there being implications from that. She suggested adding a statement in the introduction. Mr. Urban assured that this package has been through DEQ’s legal counsel and that at this time there is no question (on the wording). Ms. Williams would like DEQ to check on this, saying it would not be a good thing having fewer standards. Ms. Steinmetz said she would specifically run this by legal. The WPCAC council agreed to this action item.

Next, Ms. Steinmetz spoke about the human health criteria. Last year the EPA made a lot of changes to the national recommended human health criteria for surface waters. These are the only changes that have been made since 2012, no years were skipped. The changes were made all at once last year. EPA adopted 94 new and updated national recommended water quality criteria, and also updated their recommended human exposure inputs. Ms. Steinmetz continued with the sources used for the human health criteria in DEQ-7, referring to the second page on a handout that had an example of a table from DEQ-7. She pointed out if you look at the human health criteria, there are both surface water and ground water quality criteria. In those columns under the numbers are some letters: MCL, PP, HA and also (not on the handout) NPP. Ms. Steinmetz talked about these sources of human health criteria under the federal clean water act, which deals with surface water. Ms. Steinmetz said that when you think clean water act, think of streams, lakes, and rivers. Under this water act, EPA adopts national recommended water quality criteria (NRWQC). These numbers are to protect surface waters. Also referred to as 304(a) criteria, but talking about the same parameters and numbers. These are split out into priority pollutants (PP) or non-priority pollutant (NPP). If you look at the table (page 3 of handout) and you see PP and NPP, those are clean water act, national recommended water quality criteria.

Ms. Steinmetz moved to the Federal Safe Drinking Water Act. EPA puts out and adopts maximum contaminant levels (MCL). Both of these programs are federal programs. The clean water act roughly parallels the Montana water quality act. DEQ-7 was originally written for the clean water act. For surface waters, Montana uses the more restrictive of the MCL or the NRWQC. The more restrictive the number, the more protective it is. If the MCL and the priority pollutant or nonpriority pollutant (NRWQC) are the same, then DEQ will site the priority pollutant and nonpriority pollutant number because EPA reviews and signs off on the numbers. If neither a NRWQC nor an MCL are available, DEQ will use health advisories (HA), which are calculated in the same way, but not an adopted NRWQC or MCL. For Groundwater, Ms. Steinmetz said the top choice would be MCL. IF there is not an MCL, DEQ would go to the NRWQC. If that’s not available they would go to a HA.

Ms. Steinmetz continued, saying based on EPA adoption of the 94 new and updated NRWQC, DEQ updated 83 human health criteria. She explained that it was only 83 because sometimes the MCL was a lower number, retaining the MCL instead of the NRWQC. In addition to the 83 updated human health criteria, DEQ also updated 67 pesticide numbers that were based on health advisories. These are numbers that DEQ or EPA had calculated. DEQ updated these using the new human exposure inputs. The drinking water intake went from an estimated 2 liters to 2.4 liters, the mean adult body weight went

from 70 to 80 kilograms, and the fish consumption rate went for 17.5 grams to 22 grams. Ms. Steinmetz pointed out that there were a lot of changes to the numbers based on federal adoptive changes.

Mr. Wendland asked what the fish time period was. Ms. Steinmetz said it was daily. Mr. Selch thought it was considered a meal.

Ms. Steinmetz continued, saying that in addition to changing the numbers for the human health criteria and the NRWQC, sometimes the source did change. There were a couple of situations where the NRWQC became the same as the MCL which DEQ had previously used. So instead of siting the MCL as the source, DEQ switched that to Priority Pollutant. Ms. Steinmetz said if you look through DEQ-7 there are 17 places where the source changes.

Ms. Williams asked of the 94 EPA changes, if any of them were noticeable or significant. Ms. Steinmetz said there were some significant ones as some of the numbers went down quite a lot. DEQ had their organic chemist go through each one of the changes and review them in detail. The chemist only had one that she had an issue with during (EPA's) public comment. The comment was submitted through AQUA, and EPA ended up removing it in their final rule adoption. Ms. Steinmetz pointed out that most of these numbers are never seen. They are on the books, but as far as who they're going to affect, it's really limited. In conclusion, Ms. Steinmetz said there was noticeable change in many (of the numbers). Ms. Williams asked if any pollutants were added. Ms. Steinmetz said one pollutant was added, and is listed in the rule changes hand-out under *reasons*.

Ms. Steinmetz continued with 5 new pesticides that were added under the Montana Agricultural Chemical Groundwater Protection Act. Any time a new pesticide is detected in groundwater, if DEQ does not have a water quality criterion for that pollutant, they must develop one for that pollutant. Five new pesticides have been detected in the last couple of years that DEQ has to get on the books under Montana Agricultural Chemical Groundwater Protection Act. The numbers have been calculated and will be entered into DEQ-7, as long as they're adopted, as health advisories. There are no priority pollutant numbers or MCL's for them.

This makes for a total of 6 new human health criteria and 1 new aquatic life criterion since 2012:

- Cadmium (2016)
 - Currently acute/chronic are 0.52/0.097 µg/L @25 mg/L hardness
 - Proposed acute/chronic are 0.49/0.25 µg/L @25 mg/L hardness
- Carbaryl (2012)
 - Proposed acute and chronic are both 2.1 µg/L

Mr. Workman asked if these were both based on EPA recommendations. Ms. Steinmetz said yes. Mr. Workman clarified if Cadmium has any relation to pH, or just hardness? Ms. Steinmetz said just hardness. She said that there is an equation that is also included. If the council recommends that DEQ go forward, Ms. Steinmetz will make sure to include this equation.

Ms. Williams asked if Cadmium is an issue in some of the Legacy Mine waste, and wondered if the standards will affect these streams. Ms. Steinmetz said that Cadmium is a concern at the Legacy Mining sites. But she said the comment number was so low that it was hard for some of the labs to even measure it. She thought there might be a little bit of a difference for the lab clean-ups, but thought that it wasn't going to be an issue, that it will make a little bit of a difference.

Ms. Steinmetz moved onto a couple of other changes to DEQ-7. One of the other columns in the example table (handout) is *category*, which is whether the pollutant is a carcinogen, or toxic, or harmful. There are 3 different categories, and there were 4 changes of categories based on EPA's new information when they did their human health criteria updates.

Next Ms. Steinmetz explained that DEQ-7 if meant to house numeric water quality criteria. Currently we have 4 narrative criteria (Color, pH, Temperature and Turbidity) that are included just referring to the narrative criteria that are specified in detail in the administrative rules of Montana. Ms. Steinmetz acknowledged that having these references in DEQ-7 introduces some confusion, so DEQ is proposing removal of the reference in DEQ-7. The narrative criteria will still be on the books, there won't be any changes, just removal of the reference.

Ms. Steinmetz asked for questions. There were none.

Ms. Steinmetz moved on to the last item with DEQ-7 changes. DEQ-12 was adopted in 2014, so this is a reference update.

Another nutrient update is a clarification. When the rules were adopted in 2014, reference was added in the nondegradation rules, saying the new nutrient criteria were subject to nondegradation review. The Clark Fork River nutrient criteria was not referenced when this was done, which makes it look like it could be exempt for nutrients. DEQ wants to add one phrase that incorporates the Clark Fork river nutrient into the nondegradation review.

Other proposed rule changes:

- Add "most probable number" as acceptable units for E. coli units, which is accepted under 40CFR-136 for permitting purposes. This brings us in line with Federal accepted methods and allows permitting to use the data.
- Modify the surface water use designation to have defined start and end points, which may have changed since the adoption of the rules in 1967. DEQ is not reclassifying or changing any use designation, just adding a lat and long to define where the drinking water intake is or was.
- Remove tribal waters from DEQ's beneficial use designations, since DEQ doesn't have jurisdiction over tribal waters.
- Reference to compliance schedule authorizing provision in permitting rules

Ms. Williams asked if DEQ was proposing to only remove waters when the entire watershed is tribal. Ms. Steinmetz said if there is an entire water in tribal boundaries, it was removed. But if the water body was split, the portion that's still in Montana is included in rule, but the portion in the tribal boundary is now excluded.

Ms. Steinmetz next talked about a public outreach meeting in October, where there could be a Q and A session if anyone has questions. She believes the human health criteria might be the biggest topic of discussion.

Ms. Williams asked if the tribes knew about the changes being made. Ms. Steinmetz said that DEQ spoke with the EPA contact who works with the tribes and that he was coordinating with them. Ms. Steinmetz also said that they have spoken with the Northern Cheyenne tribe, but not with the Salish-Kootenai tribe, which is the only other one that would be affected. Ms. Steinmetz said that DEQ will let them know about the triennial review.

Next, Ms. Kelly spoke about the 60 day comment period and the responses received, which was only 3, but relevant. First Ms. Kelly explained a new regulation:

For parameters which EPA has published new or revised criteria recommendations and the State has not adopted those, we are required to provide an explanation.

- Aluminum - prior to 1995 Montana adopted the dissolved fraction of aluminum as the water quality criteria. In Montana there are many water bodies that are naturally high and the criteria are refined to a specific pH range. DEQ is figuring out what the implications might be in adopting a total recoverable aluminum criteria vs. the total dissolved. This is not going to happen in this triennial review.
- Ammonia – in 2013 EPA recommended a revised a more stringent applied life ambient water quality criteria. These new criteria pose some technical challenges, mostly understanding what the different treatment options are and identifying natural biological communities, one being that it's based on the presence of mussels. DEQ has developed a series of strategies to adopt this ammonia criteria, one is implementing BMP's to achieve the best ammonia, total nitrogen and total phosphorous removal. DEQ didn't find a singular approach that addresses all of the concerns, but many potential approaches for optimization.
- Methyl Mercury – In 1995, EPA recommended an aquatic life water quality criterion for methylmercury as the dissolved metal in the water column. In 2001, EPA recommended a human health water quality criterion as a concentration in fish and shellfish tissue rather than in the water column. MT DEQ is currently in the process of evaluating how the criteria can be implemented as a water quality standard. Stakeholder input will be solicited and incorporated into this process.
- Selenium – in June of 2016 EPA finalized an update their 1999 an aquatic life water quality criterion for selenium, expressed both in terms of fish tissue and water concentration. In June of 2016 they divided water concentration into flowing and non-flowing water. Ms. Kelly said this is very new so DEQ is waiting for implementation guidance on this from EPA.

Ms. Williams asked about aluminum and any ramifications or public scrutiny with Sheep Creek and the proposed mine there. Ms. Kelly said at this point DEQ has their dissolved aluminum criteria in place. Ms. Williams wondered if the EPA recommendations would make any difference. Mr. Selch asked if the pH range is expanded in the new criteria. Ms. Kelly said no. Mr. Selch said he has seen data with pH ranges and high levels of aluminum outside of what's in the criteria. He said they would have a higher understanding of the toxicity because those levels exist in Montana. Ms. Steinmetz said that their staff has looked at total vs. dissolved. But before they know the implications they will see by changing from the dissolved to the total, they still have a lot of work to do to see who this is going to affect. Ms. Kelly said that although they are not proposing any changes for this triennial review, they will prepare for this question and look at what the difference would be of a total dissolved criterion vs. a total recoverable criterion. Mr. Selch said he assumes the total recoverable numbers are higher than the total dissolved. Ms. Steinmetz said DEQ adopted the number, but said dissolved instead of total recoverable. Ms. Kelly said they will look into this.

Mr. Selch asked about more information on the implementation guidance for selenium. Mr. Urban said the real challenge with the federally adopted criteria is that it's more sophisticated than just water. He said there is a hierarchal process between egg ovary tissue concentration, body muscle tissue concentration, and water. Mr. Urban said that while it might be fairly easy to use this to determine if a water body is healthy, it's difficult when writing a discharge permit. He asked how many micrograms of

selenium are acceptable in the end of a pipe to not have fish tissue repercussions. Mr. Urban said at this point, Montana is in a holding pattern to understand how to implement without unintended consequences. Mr. Urban said that DEQ is very active on selenium in Lake Koocanusa. They are well into the details science on how selenium transfers from water through the aquatic environment into the avian community. Mr. Urban stated that Montana is most actively pursuing this topic because it's of most important.

Mr. Selch said that all evidence suggests Montana's numbers have been way too high. He said it was five and the proposed number is significantly lower. He asked if there is a benefit to adopting these lower numbers now and then in 3 years going even lower or making adjustments. Mr. Urban said that right now Montana's selenium criteria is 5 micrograms/liter and the non-flowing water criteria is about 1.5/liter. But the flowing water criteria are 3.1. Mr. Urban said the challenge is this is a generic number adopted nationally. But to understand selenium you need to know local conditions. Mr. Urban said in some systems 3 isn't protective, but maybe 10 is. DEQ is taking a cautious approach to make sure we don't have an unnecessary state effort. Mr. Urban explained there would be unintended consequences for adopting an overprotective number: to the 303 listing process, to TMDL development and could be very expensive and arduous for Montana. Mr. Urban said that until we understand how to implement these numbers, it's hard to just adopt them.

Ms. Kelly next covered the public comments. She explained that DEQ received a total of 3 relevant comments. The first 2 were comments about (1) Montana continuing to use the total recoverable metals criteria instead of the total dissolved, like most other states, and (2) to allow *Freshwater copper criteria to be calculated utilizing the procedures identified in EPA's Aquatic Life Ambient Freshwater Quality Criteria – Copper (2007), EPA-822-R-07-001*

Ms. Kelly explained for metals other than aluminum, EPA has recommended adopting the total dissolved fraction and DEQ has the total recoverable fraction for water quality standards. EPA still maintains that total recoverable fraction is scientifically defensible and can be used.

Ms. Kelly said that prior to the next triennial review DEQ is committed to understanding the complexities of using a total dissolved standard as well as using the BLM model for copper criteria. Ms. Kelly walked the group through the complexities of doing this:

- The BLM model is extremely data intensive and requires a number of parameters collected on the site-specific basis. In the absence of this information, many conservative assumptions are made.
- Permit dischargers are required to express as a total recoverable discharge, not a dissolved discharge. This would require a translation factor and not sure of the implications this would have on both permitting and the criteria.
- Although the standard is bio-available to aquatic life, DEQ believes that aquatic life is affected from metals that aren't just in the water.

Ms. Kelly next spoke about the third comment that was received in regards to DEQ's nutrient criteria.

DEQ cannot continue to force POTW to shoulder all the burden and cost of cleaning up the lakes, rivers and streams. The millions more spent to reduce total nitrogen and further limit phosphorous contributions at the POTWs will have little to no effect to the quality without addressing the other sources of contamination.

Ms. Kelly said that the BER has not adopted any lake numeric criteria for nitrogen or phosphorous, but have adopted them for rivers and streams. The data shows that both need to be regulated to control eutrophication in flowing waters. Ms. Kelly said that DEQ is also aware of the increasing price of community wastewater fees and she explained that DEQ has many rules and policies to address nutrients that come from sources other than POTW's.

Ms. Williams asked who the comments were from. Ms. Kelly said the first was from the Treasure State Resource Council and the second from a copper advocacy group, she believed. The third one was from a member of the public in the flathead area.

Ms. Williams asked about the proposed mine (in Sheep Creek) and if DEQ can safely say that the response regarding metals is the most protective for Montana waters. Mr. Urban said it's more complicated, that both methods are protective for aquatic life, but figuring out which one is more protective depends on local conditions and assumptions made in the permitting process. Mr. Selch added that the general consensus is that total recoverable is more conservative.

Ms. Kelly moved onto some of the other comments:

Comment: Commenter supports retaining Maximum Contaminant Levels (MCL) where they are more stringent than the Section 304(a) criteria. Commenter does not recommend that the MCL be used where consideration of available treatment technology, costs, or availability of analytical methodologies has resulted in a MCL that is less protective than a Maximum Contaminant Level Goal (MCLG).

Board of Environmental Review (Board) Response: DEQ considered all 94 updated 304(a) criteria. Where they were less stringent than the 304(a) criteria, DEQ retained the MCLs.

Comment: Commenter recommends clarifying which water quality criteria apply to which designated uses.

Board Response: The Board agrees that there are many areas where the designated uses and/or criteria that apply to a water body are not clear. In determining how best to address the lack of clarity, DEQ determined that with 17 water-use classes and 23 distinct but often very similar uses, it is impossible to provide clarification without changes to the structure of our water uses and use classes. Therefore, DEQ will research and address this issue over the next several years, ultimately providing clarity through a new surface water use class structure.

Comment: Commenter recommends improvements to Montana's nondegradation rules such as:

Board Response: The Board agrees that Montana's nondegradation rules should be reviewed. Montana's nondegradation rules are used not only by the Montana Pollution Discharge Elimination System program, but also by other programs throughout DEQ such as the groundwater program, subdivisions, and remediation. Therefore, modifications to the rules will require an understanding of potential impacts to more programs within DEQ.

Comment: Commenter requests consideration of adoption of a broad narrative to protect downstream WQS.

Board Response: Montana participated in the national workgroup that developed the customizable templates for a narrative downstream use protection standard. During this process Montana and many other states shared concerns on how such a narrative standard would be implemented within the Clean water act programs. EPA is putting together implementation guidance.

Comment: Commenter requests efforts regarding water quality standards and natural conditions meet EPA's public participation requirements and be submitted to EPA for review/action.

Board Response: The Board welcomes EPA's participation in the SB325 state regulation for natural conditions rulemaking effort, as well as any other efforts regarding site-specific criteria based on natural conditions. DEQ will ensure that new/revise water quality standards have met all public participation requirements of 40 CFR Part 131 and 40 CFR Part 25 and are submitted to EPA for review/action under CWA 303(c).

Ms. Williams asked if this rule package responds to all of the comments. Ms. Kelly said that a lot of them will not happen within this triennial review. Ms. Williams asked if EPA will approve the package without full response, if this puts the rule package in jeopardy. Ms. Steinmetz said no, that EPA just requires a response so the public knows the comments were taken into consideration. But EPA doesn't approve or disapprove on what DEQ does with the comments.

Ms. Steinmetz wanted to clarify that she did put the cadmium numbers in the package.

Mr. Selch asked for a motion to move ahead with the triennial review proposed amendments to the water quality standards. Mr. made a motion that DEQ proceed to the BER to request initiation rulemaking on the proposed amendments. Mr. Lew seconded it. Mr. Selch asked for discussion. Ms. Williams asked if anyone from the public was in the room. There was one public participant on the phone who did not comment. No one opposed the motion and Mr. Selch declared the motion carries.

Ms. Williams commented that there are references to standards in the MCA and she thinks it's important to check with DEQ legal about that term being eliminated from DEQ-7. Mr. Selch said that Ms. Steinmetz has it on her list of things to do after the meeting and that she'll get back to everyone on it.

Ms. Williams also said that giving people the opportunity to explain these responses. Ms. Steinmetz said that DEQ will do this in October.

Mr. Selch moved to the next agenda item which was the WPCAC website. Ms. Steinmetz said this was first initiated because of broken links and a web publisher for DEQ wanting to know how far back the council wanted to keep records. Ms. Steinmetz asked for suggestions on how everything could flow better. Ms. Smart has offered to make it better organized and welcomes any suggestions. Mr. Selch asked if DEQ is looking to get records off from a storage standpoint because he does go back to look at past documents. Ms. Steinmetz said that storage wasn't so much an issue, but when the platform is updated the links often break. She welcomed any opinions as far as a timeframe for keeping old meeting minutes and agendas. Ms. Williams said there is a need to keep all of the information somewhere. Ms. Steinmetz agreed, saying DEQ has both hard copies and on DEQ's network drive. Mr. Selch said the triennial review is 3 years, there are also 5 year deadlines, so he thought as far back to at 6 or 7 years. Ms. Williams said that at a minimum, getting the past meeting minutes in a place that's easy to see would be good. Ms. Kelly said it's not so much the date but the topic that's important and it would be helpful to search by topic. Mr. Selch agreed, that the briefing items or action items listed would be helpful. Ms. Steinmetz said that DEQ will ask the web developer if there can be a search function just for WPCAC.

Mr. Selch said any other ideas to be sent to Ms. Steinmetz, who said that for the date DEQ will go back to 2010. Mr. Selch agreed on that timeframe. Ms. Williams said that she has also seen transcripts for past meetings, as well as minutes. Ms. Steinmetz said that now DEQ is just doing minutes.

Mr. Selch asked for any public comments. Hearing none Mr. Selch moved to the agenda items for the November 18th meeting. Ms. Steinmetz said that there are no action items yet for that meeting, except to set the first meeting for 2017. She asked for any briefing items. Mr. Selch mentioned the recent listing of Columbia Falls Aluminum as a superfund site. He said the contaminants of concern are 1:52 I would think he says fluoride here but it sounds like floralhead, cyanide, other metals, selenium, cadmium, pcb's and pah's? Mr. Selch said an oxbow of the Flathead River's floodplain was blocked off and used as a waste disposal site. He said there is waste disposal in the floodplain, which is between 12 to 20 feet below the 100-year flood level.

Mr. Selch also mentioned that Mr. Darrin Kron's group getting the Beaverhead water clarity data analyzed and thought it would be a good briefing item. Ms. Steinmetz spoke to Mr. Kron about this, who didn't think he would be ready for November but certainly the next one. Ms. Steinmetz said she will find out who in DEQ is assigned to the Columbia Falls aluminum plant and see if they are available for November's meeting.

Mr. Workman asked about the MS4 working group for stormwater regulations. Mr. Urban said the first draft of that permit is available and coming out in the next couple of weeks. It's been a 2 year effort to incorporate new federal requirements. He said the timing is good for November. Ms. Steinmetz said that WPCAC is supposed to get updates to any general permits, which they may receive soon.

Mr. Selch said if anyone thinks of anything else to pass them onto Ms. Steinmetz.

Mr. Selch asked for a motion to adjourn. Mr. Salley approved. The meeting adjourned at 11:59 am.