

**MEETING MINUTES**  
**WATER POLLUTION CONTROL ADVISORY COUNCIL**  
**10:00 A.M., FRIDAY, MAY 3, 2019**  
**METCALF BUILDING**  
**1520 EAST SIXTH AVE., HELENA, MT**

**PRESENT**

**Councilmembers Present:**

Trevor Selch  
Earl Salley  
Michael Wendland  
Craig Workman  
Karen Bucklin Sanchez – phone  
Adam Sigler – phone  
Bob Zimmer – phone  
Stevie Neuman – phone

**Others Present:**

Hannah Riedl, DEQ  
Sandy Matule, DEQ  
Eric Sivers, DEQ  
Kristi Ponozzo, DEQ  
Tim Davis, DEQ  
Christina Staten, DEQ  
Eric Urban, DEQ  
Christine Weaver, DEQ  
Kurt Moser, DEQ  
Myla Kelly, DEQ  
Jason Mohr, LSD – phone  
Peggy Frank, TSRA – phone  
Derf Johnson, MEIC

**Councilmembers Absent:**

Mary Ahmann Hibbard

**CALL TO ORDER**

Chair Selch called the meeting to order at 10:00 A.M.

**APPROVAL OF AGENDA**

Chair Selch brought forward the approval of the agenda.

Councilmember Wendland moved to accept the agenda, Vice Chair Salley seconded, and the agenda was approved.

**APPROVAL OF MINUTES**

Chair Selch brought forward approval of the January 2019 meeting minutes. Councilmember Zimmer corrected that he was present in person. Vice Chair Salley moved to approve the minutes. Councilmember Wendland seconded the motion, and the minutes were approved as corrected.

**BRIEFING ITEMS**

***Legislative Update – Tim Davis, Division Administrator - DEQ/WQD***

Mr. Davis reported that DEQ had three water focused department bills– two passed, one did not.

HB55: The Department in the 2017 Legislative Session worked with Representative Mandeville and stakeholders to pass legislation to streamline and improve communication in the DEQ sanitation and subdivision program. Legislation from the 2017 Session (HB307) revamped our subdivision program but made it so it would sunset as a pilot project. By all accounts the pilot project worked. DEQ went from having a significant backlog in subdivision applications and blowing statutory timelines a couple of dozen times at the end of 2017. HB 307 was set to sunset in October. HB 55 made that pilot project permanent; it also built on some of the lessons learned. HB55 wasn't just a process bill, but it also created new incentives to connect to public facilities. It expanded what is known as municipal facilities

exclusion – an example is if a small unincorporated town could connect to a neighboring larger town’s public facilities, it allows them to do so without having to rewrite every certificate of subdivision approval. It makes it much simpler for public systems to connect in redeveloped areas using public facilities. The bill was broadly supported by the development community, local sanitarians, local public health officials, and DEQ. There was no opposition throughout the entire process. The Subdivision and Development Advisory Council came out of this house bill. It is similar to WPCAC, but not a legislatively established advisory council. DEQ didn’t think the development community, or conservation groups were being engaged on subdivision and development issues.

SB 48: Mr. Davis reported that the goal of this bill was to bring all six types of federally authorized water quality standard variances into state law and to couple those with clear protections for water quality so that while someone has a variance, they must protect and improve water quality. It is not a static process. If a water quality standard is difficult to achieve, the bill gives them new tools to seek a variance from it, but they must make progress during the term of the variance. A contentious issue was who was going to do rulemaking for future variances – the Board of Environmental Review or the Department. DEQ did not take a position. The sponsor, Senator Richmond, recommended to the Senate Natural Resources Committee that the Department do the rulemaking. SB 48 is still on the Governor’s desk.

Mr. Davis asked if there were any questions. There were no questions.

Mr. Davis reported that HB507 – the lead in schools bill, which would have established a grant program to help schools and daycares monitor and remediate sources of lead in schools and daycares drinking water – did not pass. By the end of session, the fee was removed, so there was not a funding source. DEQ will initiate the program without the bill. DEQ just received word from EPA that the Department will receive \$192,000 to begin helping schools and daycares test for lead in drinking water. DEQ will be working with schools, DPHHS, cities and towns, and rural water systems to help them set up a program to begin testing sources of drinking water in schools first and then daycares.

Mr. Davis asked if there were any questions.

Councilmember Workman asked: can grant funding be used for mitigation or remediation, or just testing?

Mr. Davis responded just testing for now. DEQ is looking for additional funding sources.

In Mr. Davis' opinion there weren't any other bills that were deleterious to water quality that were passed. Three bills that did pass that were not DEQ bills – one was SJR 3, the study of septic systems and alternative septic systems. Senator Fred Thomas sponsored this study.

Jason Mohr replied that they might go to local government.

SB32 also passed which established a stream gauge advisory council. DNRC is the lead agency.

There was some concern over SB300, but it was amended to say that it can't limit their ability to comply with state and federal laws regarding their water and wastewater systems.

Mr. Davis asked if there were questions regarding any other legislation. Mr. Davis believes that most of the bills that passed will help make progress on water quality issues.

Derf Johnson asked when rulemaking might begin on SB48 and who will be doing it.

Mr. Davis responded that the Department will do the rulemaking, but has no plans to at this point as the bill just passed.

Councilmember Sanchez congratulated DEQ on the bills that were passed, and the department plan for the lead-in-schools issue. She heard about HB625, that would have eliminated the general variance for numeric nutrient standards. She wondered where that came from and how viable it was.

Mr. Davis responded HB625 was brought by Representative Mercer and got through the house. It would have directed the department to eliminate the numeric nutrient criteria, and it would have eliminated variances for nutrients – essentially striking the existing nutrient variance in statute. The Department opposed it in both the House and Senate. The sponsor believes some of the agreements that were made by the working group were not upheld in the most recent variance: (1) The EPA had adopted a variance regulation after the original nutrient variance was adopted, and the working group wasn't aware of it. (2) The general variance was not upheld for private dischargers. (3) Lastly, he wanted it to be a placeholder because federal district court Judge Brian Morris has in front of him a challenge to nutrient variance. Judge Morris did uphold the concept of variances under the clean water act, and the justification for general variance. Judge Morris directed DEQ to work with the other parties to answer a couple of questions for him within 60 days.

Councilmember Workman asked if the challenge was brought by the WaterKeepers.

Mr. Davis responded yes – WaterKeepers vs EPA, and DEQ, Treasure States, League of Cities and Towns, and NACWA are intervenors.

Mr. Davis asked if there were other questions – he then spoke regarding budget and the Department appreciated the bi-partisan nature of the support for the Department. DEQ is \$50,000 down in General Fund as the budget was proposed, and one FTE down.

***Black Butte Copper Mine permitting process – Kristi Ponozzo, DEQ Public Policy Director***

Ms. Ponozzo gave an update of the Black Butte Copper Mine and where the Department is with the permitting and environmental analysis for the proposed mine near White Sulphur Springs. DEQ is currently in the public comment period of the draft EIS. The draft EIS was noticed for public comment in early March. There have been three public meetings and two public webinars. Public comment closes May 10. DEQ has had a lot of interest in the project. The comments will be reviewed and a response to comments will be completed. The Department expects 1000's of comments. DEQ hopes to have a final environmental statement completed by late summer – early fall. That will serve as the environmental analysis for the metal mines permit, the MPDES permit, surface water discharge permit, stormwater construction permit, as well as the air quality permit. The proposed action was to sequentially backfilling each area where ore is mined as soon as it's finished, whereas the Department's preferred alternative proposes Tintina backfill certain mine voids like access tunnels to the backfill stoops at the end of operations using cement paste tailings. This backfill material would return bedrock zones to conditions similar to pre-mining state. Ms. Ponozzo explained the process for backfill and then opened it up for questions.

Councilmember Workman: Is “end of operations” when the mine is closed?

Ms. Ponozzo responded she could send Councilmember Workman some information on that as she wasn't sure what the definition might be.

Vice Chair Salley: Has this backfilling technology been used before?

Ms. Ponozzo said because she is more the process and public involvement person, she can have DEQ's geochemist, Garrett Smith, and hydrologist, Wayne Jepson, provide more details.

Councilmember Sigler followed up on that question. He is intrigued by the prospect of the cementing approach. It seems like that is the kind of thing you always hoped you could do with these abandoned hard rock mines, so doing it during processing is potentially a compelling approach. Are there other technical references within the EIS that we could look at to get more information?

Ms. Ponozzo responded there is, and she would be happy to send the council a link to all the information with the EIS. Ms. Ponozzo asked Hannah Riedl to send the link to everyone.

***The Process for Developing Nonanthropogenic Standards, presented by Myla Kelly.***

Ms. Kelly gave a briefing on the progress of an upcoming project. Following the 2015 legislative session that directed the Department to set standards that are not any more stringent than the natural conditions. DEQ gathered a work group together and started the process of identifying what that means: How would the department go about setting standards that were not more stringent than nonanthropogenic conditions? Ms. Kelly said she would use the word natural in place of nonanthropogenic. The work group started the process by first identifying what parameters across the state are naturally higher than some of our standards. The group identified a handful of those parameters – aluminum, iron, salinity, and arsenic. The work group decided to start with the area where they had the most data on with those natural conditions – they decided to start with arsenic. With the work group process and in conjunction with EPA, a process was developed for establishing what the natural levels of arsenic are for the Yellowstone River and the Madison River. They are two data rich systems with a lot of monitoring data there. There is also a lot of certainty on what the natural condition is because it is coming from the geothermal activity of Yellowstone National Park. It was an easy one to identify what was natural and what was not. The group is close to coming forth with some standards for the Yellowstone River for arsenic. They are slightly higher than the standards that are currently on the books, which is a human health standard of 10. The work group will be ready by the July WPCAC meeting to give a full presentation regarding the process and the proposed criteria.

Chairperson Selch asked if anyone had questions of Myla.

Councilmember Sigler responded that her presentation was fascinating, and he will be interested to learn more. He asked if there were permitted arsenic dischargers on either of those rivers?

Ms. Kelly responded that the stretch of the river that we know is naturally higher than the human health standard of 10 extends through Laurel until the Big Horn River. It does not include Billings, but it does include Laurel. There are permitted dischargers through there.

***Elevated Arsenic in Groundwater Wells, presented by Eric Sivers***

Mr. Sivers introduced himself as the Section Supervisor of the Source Water Protection Program at DEQ. Mr. Sivers reported on a situation in the southern Mission Valley – south of Charlo – where DEQ and

DPHHS became aware late last year of elevated arsenic in a private well. DEQ's understanding is that it is naturally occurring arsenic, but when it comes to drinking water, the toxicology doesn't change whether it is naturally occurring or industrial – your body doesn't know the difference. Private wells are not regulated by DEQ. Private well quality is not regulated by any level of government; so, it is incumbent upon the home owner to determine the safety of their drinking water. DEQ finds that not enough people are aware of that and sample their water. Most people will take a sample when they buy a house to make sure – nitrate sample and bacteriological samples to make sure they aren't getting septic influence, but many of them don't take other parameters. DEQ and DPHHS are working together on an increased outreach over this topic. It is something the source water protection program has been doing for a decade or more and see an increasing need for urgency.

Mr. Sivers spoke in more detail regarding the current issue in Charlo. Late last year DPHHS became aware of a family who had been dealing with many health problems from an undiagnosed source. From what is understood, eventually the family went to the Mayo Clinic. The Mayo Clinic decided to sample a hair sample for arsenic and found these symptoms are consistent with arsenic poisoning. They sampled the well and the result came back at 980 parts per billion arsenic. As Myla mentioned the EPA MCL in our corresponding water quality standard is 10 parts per billion. DEQ and DPHHS response was to do outreach to homeowners in a 3-mile radius of that well. The well log showed their water source was the deep aquifer. The well seemed to be decently constructed. It was sealed and screened into the deep aquifer. There were no apparent anthropogenic sources of arsenic on the surface. It seemed as if there was arsenic in the well, unless it was coming from something in the home system, it is coming from the deep aquifer. If that is the case, it is likely to be natural and more people in the area are being exposed to arsenic at elevated levels.

Mr. Sivers arranged for funds and worked with DPHHS to do an outreach to wells that we identified within a 3-mile radius of that property. A letter was sent to each of them informing them that DEQ/DPHHS had learned there was a household in their neighborhood with elevated arsenic. They were encouraged to sample their wells. They would be provided with an arsenic analysis for free if they returned the postcard to the DPHHS Environmental Lab. The mailing was 89 people and 38 responded. Of those 38, 86% exceeded the MCL. The highest was 130, which is why DEQ would be interested in resampling the original well as it was out of sync with the other elevated numbers that were seen. There were many people who had unsafe levels of arsenic in their drinking water and are being encouraged to treat their water. Everyone Mr. Sivers spoke to had iron treatment on their well and iron presents itself as a problem. It tastes bad, it smells bad, it stains your whites, your fixtures. People see it and put on iron treatment. Elevated arsenic can be related to glacial aquifers. DEQ and DPHHS are working on an outreach campaign stressing the need to further sample your well for parameters other than BacT and Nitrates.

Councilmember Workman asked what the treatment methodology is for arsenic?

Mr. Sivers responded there are a variety of treatments; i.e., reverse osmosis, resin or absorptive medium. How it is employed depends on the water quality parameters, what the concentration of arsenic is, and whether you are looking at a point of use system or a point of entry that treats all water coming into the home.

Councilmember Wendland asked how deep the well was?

Mr. Sivers responded 450 feet and in confined conditions. DEQ is comfortable in saying it was isolated from things on the surface. In the Mission Valley that area is a little bit of a bowl and the groundwater outlet is higher than the bottom of the bedrock, resulting in a long groundwater residence time.

Mr. Sivers added that both Departments are working with the Tribes.

Councilmember Sigler thanked Mr. Sivers for the effort being put into the campaign. He also explained a project that his office, MSU Extension, is working a similar outreach program.

Ms. Riedl asked what is recommended for a schedule?

Mr. Sivers responded on their Fact Sheets, it is recommended doing a complete screen when you start drinking the water – buying the house or drilling the well, etc. Doing BacT and Nitrate annually and doing a follow-up metal screen on a 2 to 5-year basis.

***State Harmful Algae Bloom Program, presented by Hannah Riedl***

See the Power Point presentation on the DEQ website.

Councilmember Wendland: As a representative of Production Ag, he thinks agriculture shouldn't be blamed for algae blooms. He asked what nutrients are causing the blooms?

Ms. Riedl responded that she didn't think there has been enough studies done to answer.

Councilmember Wendland: We aren't out there putting enough on that it ends up in the water in agriculture. We want it to stay on the ground, so the plants use it.

Chair Selch: The optimal growing conditions for algae is typically 16:1 Nitrogen to Phosphorous. If nitrogen is limiting, the blue-green algal blooms can get it from the atmosphere, so they can outcompete the good algae.

Councilmember Wendland: In Hill County last year we had algae bloom on Beaver Creek. There is very little agriculture around there. There is some grazing. There was a fire the year before and some of that may have been part of the factor for the bloom.

Ms. Riedl: Yes, many factors can come in to play, so, it is difficult to answer for any given waterway.

Councilmember Wendland asked where the signage can be picked up.

Ms. Riedl said they can be mailed to him.

Chair Selch said the county health departments are all supposed to have digital format they can print out. DPHHS is responsible for coordinating with counties.

Vice Chair Salley asked if the bloom is on a drinking water source, how it is treated? Is it difficult?

Ms. Riedl said it is difficult to treat – it requires additional treatment to get the toxins out. For example, if you were camping you wouldn't just boil water. The first summer we had this program we had a

bloom at Salmon Lake. Residents around that lake used lake water for their drinking water. DEQ coordinated with the county to get mailers out and let people know they needed to buy bottled water.

Mr. Urban: Again, that is the private well thing we have going today. That is the biggest concern for Canyon Ferry, as I see it. Many of those residents have a tap for Canyon Ferry water use.

Councilmember Sigler asked what range of toxin concentrations have been detected in Canyon Ferry?

Mr. Riedl commented that was a good question. Last year none of the samples came back above that 4 ug/L threshold. In the past there has been, but Ms. Riedl did not know the answer to that question. They weren't screaming high – Clarks Canyon had really high levels of microcystin.

Mr. Urban added Hebgen Lake has had some high values and again back to the agriculture comment, there really isn't any. Of all the waterbodies in Montana, he thinks the longest data set on this topic is Hebgen Reservoir. Montana has been familiar with the topic, more than the nation has. We have been tracking it at some level – our past outreach on it was limited – I started about 7 years ago – we had a small paragraph that once a year we would run in the newspapers. We knew it was going on, but we didn't know to what extent to track it. The program we have today went from ground 0 to most of what you see here today. With Hannah, FWP, and DPHHS, within a matter of 2 months, they went from 0 to a lot of this.

Ms. Riedl: As I mentioned, DEQ is trying to do something about the blooms by helping develop standards for Canyon Ferry at least. In terms of the State HAB Program, it is education and point of contact to answer questions. I received phone calls in the past from ranchers who have cattle and their source of drinking water has potential blooms in it. She wants to have resources and a point of contact for them in the guide this year.

Councilmember Sigler asked if there was a link to buy the test strips and a guide on how someone could do that independently?

Ms. Riedl said there is the name of the company, Abraxis, and phone number in the guide that distributes the test strips. DEQ has a supply on hand.

Chair Selch mentioned that FWP is intending to have the strips available at their regional offices.

Mr. Urban cautioned that a negative result doesn't tell you anything as it could change in an hour. It tells you that at that moment, it is negative.

Councilmember Sanchez wanted to follow-up on a statement by Hannah – about producers. The Farm Bill that was reauthorized in 2018 includes a large amount of money for source water protection. The funding goes to the producer through NRCS and specifically targeted to this type of problem algae bloom. She asked Ms. Riedl if she would like her to follow-up with her after the meeting.

Ms. Riedl asked if this was different from the EQIP Program?

Councilmember Sanchez said she wasn't sure. There is \$1 Billion available nationally. She will send Ms. Riedl the information she has.

**General Public Comment**

There were none.

**Agenda Items for Upcoming Meetings**

1. Agenda items for July meeting
  - a. Nutrient variance
  - b. Harmful algae bloom program for summer meeting

**Adjourn**

Motion to adjourn by Vice Chair Salley and seconded by Councilmember Wendland.