

MEETING MINUTES
WATER POLLUTION CONTROL ADVISORY COUNCIL
10:00 A.M., FRIDAY, JANUARY 11, 2019
METCALF BUILDING
1520 EAST SIXTH AVE., HELENA, MT

PRESENT

Councilmembers Present:

Trevor Selch
Earl Salley
Mary Ahmann Hibbard
Karen Bucklin Sanchez
Michael Wendland – phone
Craig Workman – phone
Adam Sigler – phone
Bob Zimmer

Others Present:

Hannah Riedl, DEQ
Sandy Matule, DEQ
Joanna McLaughlin, DEQ
Jason Garber, DEQ
Haley Sir, DEQ
Jon Kenning, DEQ
Autumn Coleman, DEQ
Dell Johnson, MEIC
Bill Snoddy, DEQ

Councilmembers Absent:

Stevie Neuman

CALL TO ORDER

Chairman Selch called the meeting to order at 10:05 A.M.

APPROVAL OF AGENDA

Chairman Selch brought forward the approval of the agenda.

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

APPROVAL OF MINUTES

Chairman Selch brought forward approval of the November meeting minutes. There were no changes.

Vice Chair Salley moved to approve the minutes. Councilmember Ahmann Hibbard seconded the motion, and the minutes were approved as recorded.

BRIEFING ITEMS

General Permit Reissuance – Suction Dredging presented by Joanna McLaughlin, Permit Writer

Ms. McLaughlin explained that she in attendance to inform the council of the upcoming Suction Dredge general permit renewal which is currently in the review process. Substantial updates include requirements for Sage Grouse and restructuring some of the best management practices. This is the 6th issuance of the permit. DEQ currently has 22 permittees. After the new process is complete we will go through public notice and have a public hearing and then notify the current permittees. Ms. McLaughlin asked if there were any questions.

Councilmember Sanchez asked: I am curious – you have 22 permittees – does that number change?

Ms. McLaughlin explained the numbers do fluctuate. There are both individual and general permits that cover very similar activities. The number depends on whether the permittee wants to continue their operations. It is a simple application process. DEQ has other permits that have hundreds of permittees.

Chairman Selch asked if this permit also covered recreational dredging

Ms. McLaughlin responded that it does. These are the people who are generally out on the weekends or they have stream restrictions.

Chairmen Selch Added – there are closure areas that are not open to dredging – there are some areas where they are required to call a biologist and talk about where they can or cannot go. It protects the common core habitat agreement.

Councilmember Sanchez asked for an example of one of the revised best management practices?

Ms. McLaughlin responded that a BMP is an enforceable condition of the permit and DEQ added prevention of entry of aquatic invasive species. They focus mainly on protecting the nature of the stream channel, preventing stream bank erosion.

Councilmember Ahmann Hibbard asked if it is an annual renewal or is it just as you see changes?

Ms. McLaughlin clarified that general permits renew every 5 years. People who obtain coverage under this general permit are also covered for 5 years.

Chairman Selch asked if there were any other questions. A member of the public, Dell Johnson, asked if he could get a draft of the permit. Ms. McLaughlin said she would send him an email when it goes to public notice.

Belt Abandoned Mine Lands Update with presenters Autumn Coleman and Trevor Selch.

Ms. Coleman introduced herself as the manager of the Abandoned Mine Lands Program at DEQ. She presented on the Belt Acid Mine Drainage Water Treatment Plant project. The AML Program is a federally funded program. The funds come from a per ton fee on coal mined in Montana and that fee is returned to Montana to reclaim abandoned mines or “pre-law” mines– these would have never been permitted, are very old, and left for DEQ as scars on our landscape. The presentation at this meeting focused on Belt.

DEQ has over 3200 abandoned coal mines and 3800 abandoned hard rock mines in Montana. Most of the abandoned coal mines are in the coal fields in Eastern Montana, and most of the abandoned hard rock mines are in Western Montana. The Great Falls coal field is special because it has the acid-producing coalbeds. The rest of these coalbeds aren’t acid-producing. In the hard rock mines, we do have considerable acid mine drainage in the western part of the state. Great Falls has all the acid-producing coal, so a lot of time was spent in the Belt, Sand Coulee and Stockett area. Belt was mined extensively at the turn of the century to provide coal for the railroad and the smelter in Great Falls. Mining dried up around the 1940s – the last miner was there in 1950.

The reason the coal mines in the Great Falls area produce acid, and the others don’t, is the significant amount of Pyrite in that coal bed. There is anecdotal evidence that the miners were paid to remove the

Pyrite nodules from the coal before they brought it out. So, in theory there are piles of Pyrite nodules there and it produces sulfuric acid which then dissolves those minerals and comes out the front of the mine. When the water comes out the front of the mine, it is clear and looks fine. Once the pH starts to raise, it produces iron sludge. The Belt coal workings go back about 3 miles from the town of Belt.

Ms. Coleman talked about Belt Creek contamination and DEQ's plans for that area. Ms. Cole reported that DEQ purchased land near Belt and is planning on building a water treatment plant. Belt Creek exceeds water quality standards for aluminum, cadmium, iron, nickel and zinc. The goal of the project is to restore Belt water quality, return it to beneficial uses, and remove it from the 303(d) list. DEQ currently has a 30% design which covers the big fundamentals of that design – what kind of treatment, where it will be located, and how much water. DEQ has decided to do a single stage lime treatment – using calcium carbonate to treat the acid mine drainage, raising the pH, and forcing those metals to fall out of solution and become a sludge. Then that sludge will be piped back down into the mine workings three miles away. Ms. Cole explained in detail how the plant will work. **(See “Belt Wastewater Treatment” and “Treatment Factsheet” Presentation Materials)**

Ms. Coleman asked if there were any questions:

Councilmember Sanchez asked about the operation and maintenance and operation – is someone hired from Belt?

Ms. Coleman responded that DEQ has looked at three different options – hiring a state employee, having Tetra Tech – our consultant – hire someone, and the third option, where DEQ is leaning, entering into a MOU with the City of Belt. The City of Belt would operate and maintain that plant. Because they have a new waste water treatment plant, this option provides overlap with operators, 24-hour support, and that would help the city with their staff as well – they would have additional operators for their plant.

Vice Chair Salley asked how much pollution comes from upstream from Neihart and Monarch?

Ms. Coleman responded that is the unusual thing about Belt Creek – it is on the 303(d) list in the Monarch/Neihart area for hard rock mines, and then it goes through sluice boxes and comes out the other end fully meeting standards until it hits the Belt AML. Ms. Cole said she didn't know of another place that has both hard rock impacts and then coal impacts in the same stream, but somehow between the two different reaches the contamination from the hard rock mines is sequestered somewhere in the lime of the sluice box area. Also, there are the gravel pits just upstream of Armington where Belt Creek dries up. Ms. Cole wonders when it goes underground if it cleans up a little bit. That may be why water quality standards area being met above and then not below.

Councilmember Sanchez asked about the acidity rate of 2.7.

Ms. Coleman responded: The rate fluctuates quite a bit. French Coulee is 1.9.

Mr. Snoddy: French Coulee is the most contaminated water in Belt Creek. On the positive side of that it is only flows at 20 gpm. It is fully diluted after it hits the creek, but then the pH is much lower and the metals content is much higher.

Councilmember Sanchez: Those are shocking pH's. What is the pH of sulfuric acid?

Response: 2.5

Councilmember Salley: Where do the residents get their drinking water?

Ms. Coleman responded that they have a Madison aquifer well. They have great water. The wellhouse is very close to the plant that will be built.

Councilmember Sanchez: In relation to the waste water treatment plant upgrades – the upgrades being constructed currently in Belt are to remove a portion of the flows and to spray irrigate that so there will be less discharge from the lagoon – will that also impact the Creek?

Ms. Coleman responded that she didn't know about that part as she hadn't spent much time on their waste water treatment plant. DEQ staff are visiting the site in the next week. DEQ is going to try and design their controls to match the Belt WWTP controls. The operators will then have an easier transition between the two plants.

Councilmember Sanchez let Ms. Coleman know that she works for USDA Rural Development (though she uses personal leave time to participate in WPCAC) and they are a funder of that project. She would like to coordinate with DEQ on the project.

Ms. Coleman responded that DEQ would be happy to have them out to Belt and give them a tour of the area. It is still very shocking to see.

Councilmember Hibbard asked how the town of Belt's reaction has been.

Ms. Coleman said it has been great – they want DEQ to hurry up.

Ms. Coleman explained that this is a very expensive project that DEQ has been saving since 2012 for. A trust was created to continue operation and maintenance of the plant long after the program may not exist. DEQ is working closely with the City of Belt, waste water operators and mayor on all these things.

Belt Abandoned Mine Lands Update with presenters Autumn Coleman and Trevor Selch

Chairman Selch: Several years back we were approached by Autumn when the workings of this plant were coming online in the near future. They wanted to get baseline biotic data in the creek before everything went online. Today I will present the work we have done and the results. ***(See "Belt Biota" presentation materials)***

Councilmember Zimmer asked how long it takes metals to flush out of the sediment.

Ms. Coleman responded the metals have created a concrete on the rocks.

Mr. Snoddy responded the loose sediment flushes quickly, in spring time, but that iron staining will be there a long time, until natural abrasion can remove it.

Councilmember Sanchez asked if there is a human impact from eating fish contaminated with Aluminum.

Chairman Selch responded EPA only has guidance for mercury, cadmium, arsenic. None for lead or aluminum.

Ms. Riedl asked if biota may have adapted over time to acid drainage conditions.

Chairman Selch responded he wasn't aware of historic data that could show that.

Water Quality Division's 20-Year Plan – Hannah Riedl

In the absence of Tim Davis, Division Administrator, Ms. Riedl presented the Division 20-year plan which can be viewed on the department website (See ***"Water Quality Division's Strategic Plans" presentation***

materials). She encouraged councilmembers and others attending the meeting to review the website and dashboard and provide feedback.

Vice Chair Salley asked how many watersheds are in the state.

Ms. Riedl responded it depends on the scale of interest, but generally the state breaks up watersheds on an 4-code (8-digit HUC) level.

Councilmember Sanchez asked how we do outreach in order to implement additional projects in priority watersheds.

Ms. Riedl responded that they have met with NRCS, Conservation Districts, watershed groups

Councilmember Sanchez asked if we tie in wildfire.

Ms. Riedl responded where there is interest, that can generate a lot of landowner buy-in, although the Nonpoint Source Program is focused on water quality improvement.

Councilmember Ahmann Hibbard asked if we work with the Montana Watershed Coordination Council.

Ms. Riedl responded definitely.

General Public Comment

There were none.

Agenda Items for Upcoming Meetings

1. Election of new chair and vice chair for 2019. A motion was made by Councilmember Ahmann Hibbard to keep the chair and vice chair the same. The motion was seconded by Councilmember Workman on the phone. The motion carried and Trevor Selch was elected chair and Earl Salley vice chair.
2. Meeting calendar for 2019 will be on website.
3. Agenda items for upcoming meetings
 - a. harmful algae bloom program for spring meeting
 - b. legislation

Chairman Selch invited people to email him or Hannah Riedl with any other agenda items, and they will be worked in as soon as possible.

Adjourn

Motion to adjourn by Vice Chair Earl Salley.