

Lloyd Larsen

Please see the attached file



WYOMING HOUSE DISTRICT 54

February 5, 2020

Wyoming Department of Environmental Quality
Water Quality Division
200 West 17th Street 4th Floor
Cheyenne, Wyoming 82002

Re: Wy0002062 Frenchie Draw Permit #1 Revised Draft

To Whom It May Concern,

After reviewing the revised draft water discharge permit for Wy0002062 Frenchie Draw Permit #1 we would like to comment on some of the significant changes included in this version of the draft.

There appear to be two points discovered through the public comment period that could warrant some adjustment in the permit.

1. The total allocation for the identified constituents was given to one operator in the first draft, thus impacting the ability of other oil and gas producers with surface discharge permits where production water has potential of reaching Boysen Reservoir to expand their production.
2. In the original permit the operation of the Neptune water treatment facility owned and operated by Aethon Energy was included as part of the permit application. The price of natural gas has made the operation of the facility uneconomical and is not intended to be used, which would impact the volume of water within the parameters of the permit that could be discharged.

What is difficult for us to understand is why the permit was revised to the extent that it is now more restrictive than the original permit? It seems logical that if the first draft of the permit was complying with the guidelines to protect the Wind River as Class I water down stream of Boysen Dam, the permit with the new finding could be adjusted to still allow for increase volumes of water to be discharged through the permit and comply with the discharge limits for Bad Water Creek. The new permit is now at the volume level of the original permit with additional new requirements to adhere to a total sulfide limit, comply with the schedule for 230/mg/L chloride limit, and to get regular toxicity test for frac chemicals. This is not a new permit, it is being renewed, and since this permit was originally issued the conditions governing the permit has been grandfathered in with each renewal even though new permits have to comply with updated changes in policy. We understood new compliance parameters would be established as was the case in the first draft permit as increased volumes were anticipated but this permit has reverted back to the original volumes.

It is our understanding that total sulfides have always been reported, but the permit has never required the operator to comply with a limit policy. What criteria was used to establish the sulfide levels of this permit; it has come to our attention that the new standards are far more restrictive than other permits in the state issued by the DEQ. For example:

1. The average sulfide levels in the water being discharged by Aethon is 400 parts per billion ug/l.
2. An operator in Park County is discharging water, which after treatment has a sulfide level of 1-part per million mg/l or 1,000 parts per billion ug/l or 2.5 times higher than Aethon is discharging untreated.
3. The proposed new requirement for Aethon is 20 parts per billion! This is 50 times more restrictive than is being allowed in Park County.
4. It is also interesting to note that the sulfate (SO₄) levels discharging from the hot springs at Hot Springs State Park where the public is encouraged to have direct contact are 760 parts per million mg/l, as referenced in the state park's Total Dissolved Solid report. This discharge goes directly into the Wind River/Big Horn River.

It would be helpful to know the rationale of this restrictive limit; it does not make sense from our viewpoint.

Investigation of the frac chemical monitoring indicates there is not a current test available for a number of the identified chemicals currently being used in the frac process, which would suggest the operator would be out of compliance by virtue of conditions outside his control. A follow-up question to this observation is if the department verified current best practices for compiling analytical data for this requirement before it was determined it should be a condition of the existing renewal permit:

The discussion on chlorides from a historic perspective seems to “trip” over itself as a determination is made for this permit draft. This is our understanding:

1. Surveying of aquatic life in the Badwater Creek Drainage dates back to at least 1956. (2014 WGF Badwater Drainage 6BW (HUC10080006) and has taken place periodically up to the date of their last report a couple of years ago.
2. The original Frenchie Draw Permit #1 was issued to Exxon in the early 1960s.
3. From the date of the original permit the impacts of the discharge waters at the original chloride levels show no detrimental impact on aquatic life in the Badwater drainage.
4. In 1974 Wyoming's surface water quality standards started to incorporate information provided by the Wyoming Fish and Game Department in the classification of waters that supported game fish or had the potential to support game fish. No game fish were found in Badwater Creek only Brassy Minnows, Flathead Chubs, and Mountain Suckers. No concerns were expressed in this report with the water being discharge from the Frenchie Draw Permit #1.
5. In 1990 Badwater Creek was identified as Class 2 waters as the department revised their standards. Class 2 waters support or have the potential to support game fish, no game fish were identified in Badwater Creek, and the revised standards were made knowing that the discharge waters from Frenchie Draw were incorporated into the waters of Badwater Creek. New chloride criteria of 230 mg/L were adopted but there was no requirement to amend the Frenchie Draw Permit #1. There is still no evidence from the information we have that the chloride levels contained in the discharge waters from Frenchie Draw during this time frame had any negative impact on the aquatic life existing in Badwater Creek. The new adopted chloride levels by the department were not the result of any negative evidence of waters impacting aquatic life in Badwater Creek, but were a result of and somewhat arbitrary classification adopted by the WGF

and arbitrary limits created by the EPA which the state adopted to comply with the Clean Water Act. The result is that even though nothing had changed in Badwater Creek since 1956, the creek was now governed by a more stringent standard.

6. In 2001 the DEQ again updated the standard for surface water classifications to comply with the EPA's requirements, unless attainability analysis had been completed. This revision continued to have Badwater Creek being required to comply with at a more stringent level than is supported by the types aquatic life existing there, and at the same time no evidence is presented to suggest the surface discharge waters associated with the production water from Frenchie Draw were having any negative impact.
7. The process to amend the Frenchie Draw #1 Permit became necessary in the late 2000's when Encana significantly increased the development of the field and the volume of water being discharged increased as well. The impacts of the increased volume of water was unknown and the process allowed by the 2001 updated standards allows for an attainability analysis to be completed which was started with oversight by the department. That attainability has not been completed, yet the draft permit is more stringent than the original permit. That seems counterproductive for determining the actual capacity of chlorides that Badwater Creek can accommodate without being detrimental.
8. We did note in the WGFD's 2013/2014 Badwater Drainage report 6BW (HUC10080006) that the number of previously identified non-game fish below site #3 had declined. The WGFD attribute that decline to a culvert placed incorrectly across Badwater Creek creating a physical road block for those species to move.

We suggest the attainability analysis sampling be extended to allow Aethon to determine what technology might be available to comply with department standards.

If the use of a "load limit" is no longer being considered, then it seems appropriate to renew the existing permit again at the limits established in the original permit,

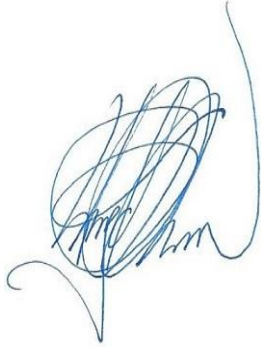
We get the impression from the department comments regarding information gathered in the public comment period that the data gathered in the attainability analysis by Aethon as part of the permit application requirements were outside any involvement of the DEQ, but at the public meetings held in Riverton and Thermopolis the department shared with the public its involvement and oversight of the process of gathering the required data by Aethon. This collaboration is critical and supports the process where the conditions of the permit are developed.

As we read through the comments it is concerning that there is an opinion that the produced water from this development has historically been detrimental to the area. We encourage the department to remember this water has been a source of benefit for wildlife and livestock for nearly 60 years to the point that producers depend on the water as they make management decisions.

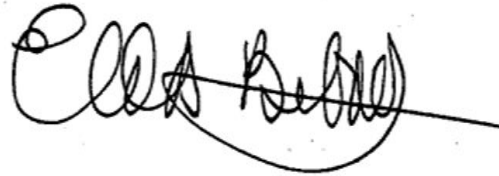
There were public comments submitted on the economic importance the development of this natural resource is to Wyoming, but the department in their response suggest such comments are not relevant to the conditions of the permit. We argue that point, when the agency considers any permit it cannot ignore the impacts their decisions will have on social, historical, and economical conditions in the area. This permit certainly will have an impact on all those areas and in our opinion, it is important to take that impact into consideration for this permit.

We would also reiterate the right a producer has in this state whether on state or public land to develop mineral leases, and we would hope it be the department's intent to help them get that accomplished.

Sincerely,



Representative Lloyd Charles Larsen



Senator Eli Bebout