



## NORTHERN ARAPAHO NATURAL RESOURCE OFFICE

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6-27-2019

To: Todd Parfitt, Director WYDEQ  
Kevin Frederick, Administrator, Water Quality Division

From: Ryan Ortiz, Executive Director, Northern Arapaho Natural Resource Office

Subject: WDEQ Draft Permit WY-0002062

Mr. Parfitt & Frederick,

On behalf of the Northern Arapaho Tribe of the Wind River Reservation, the Northern Arapaho Natural Resource Office (NANRO) submits the following comments on WDEQ's draft permit WY-0002062. The proposed permit authorizes Aethon Energy to substantially increase the amount of produced water discharged from the Moneta Divide Natural Gas Development project to Boysen Reservoir and Wind River Canyon. The project has the potential to provide needed economic benefit to the people of the Reservation and Fremont County. The Tribe supports the safe and responsible development of the Moneta Divide Field, as long it does not negatively impact the environment or economic activity on the Reservation. However, based on our review, the proposed permit will allow unnecessary impacts to water quality and also has the potential to impact economic development on the Reservation in the future. Therefore, we do not support the proposed discharge permit unless certain revisions are made as described below.

As you know, Tribal Trust lands border Boysen Reservoir and the Wind River through the Wind River Canyon below Boysen Dam. Tribal members recreate, hunt, fish, and operate fishing and whitewater rafting businesses on these waters and surrounding lands. Maintaining the environmental quality of these resources for current and future generations is essential.

The proposed permit would allow pollutants to be discharged at concentrations that will result in exceedance of the water standards for Badwater creek. The impaired stream segment will extend roughly 40 stream miles downstream to its mouth at Badwater Bay, at which point adequate dilution and mixing will occur to meet the water quality standards in the remainder of Boysen Reservoir and the Wind River Canyon. We do not support the designation of such an extensive mixing zone, which by regulation should be kept to a minimum. Nor do we support development

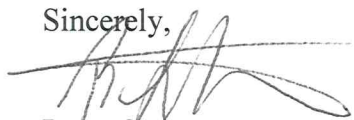
of a site-specific standard for chloride in Badwater Creek; WDEQ should require full compliance with the existing 230 mg/L standard for chloride in Class II AB water, with the proposed compliance schedule. Aethon has already demonstrated the treatability of the wastewater with its reverse osmosis treatment plant. We believe Aethon can and should meet all existing water quality standards through additional treatment capacity and blending of treated and untreated water upstream of the point of discharge.

The protection of the Class I designation of the Wind River through the canyon is another concern that needs to be carefully considered as it places additional constraints on the project. Under the WDEQ anti-degradation policy, no new or modified point source discharges are allowed upstream of the Class I segment that would result in a measurable decrease in water quality within the Class I segment. NAT and NANRO support the WDEQ's Class I designation and anti-degradation policy. This support is affirmed in the Tribe's own Water Quality Standards regulations. Aethon has determined, through water quality modeling, that the total chloride load from its operation, historically averaging around 300 tons per month, could be as high as 719 tons per month without increasing the background levels of chloride in the Class I waters. Any additional chloride load above this amount could cause unacceptable degradation of the Class I water during low flow conditions.

In the draft permit, WDEQ has allocated all of the available assimilative capacity for the Wind River system to absorb chloride, up to 719 tons per month, to Aethon. There is no allowance for any new permits or changes in operations of existing permits in the Wind River basin which would result in additional discharge of chloride to the system. The cost of treating any additional water or providing other means of disposal would thereafter be borne by the discharger. This could hinder future development of oil and gas resources on the Wind River Reservation, as well as negatively impact municipalities in Fremont County. We believe that Aethon should be held to the historic loading rate for chloride or be allowed only a small increase based on an allocation agreement negotiated by the interested parties.

Finally, at the meeting in Thermopolis it was mentioned that some constituents that have been monitored in previous permits will no longer be sampled due to the historic non-detect results. The NAT and NANRO does not support the practice of abandoning completely the testing of constituents that are known to derogate water quality simply because historically they are non-detect. We suggest that the WDEQ permit require sampling for all potential constituents of the operation that could potentially pollute the downstream water quality randomly at a minimum of one time during the permit cycle. This ensures that the waters downstream of the discharge maintains the proper protection of a water segment designated to be Class I.

Sincerely,



Ryan Ortiz  
Executive Director  
Northern Arapaho Tribe  
Natural Resource Office