

## Merit Energy Company

Please see attached letter in support of the project with refined modeling, operational targets, and/or administrative control.



MERIT ENERGY COMPANY

Merit Energy Company  
Bighorn Basin Operations  
1501 Stampede Avenue, Unit 9019  
Cody, Wyoming 82414

July 5, 2019

Kevin Frederick  
Water Quality Division Administrator  
Wyoming Department of Environmental Quality  
200 West 17<sup>th</sup> Street  
Cheyenne, WY 82002

*Electronically submitted:*  
<http://wq.wyomingdeq.commentinput.com/>

**Re: Chloride Capacity – Wind River Class 1 Segment  
Aethon Energy Operating, LLC  
Frenchie Draw / Moneta Divide WYPDES Renewal      Draft Permit WY0002062**

Dear Mr. Frederick

In separate telephone conference calls with Aethon and the Division, Merit Energy Company has expressed concerns regarding the modeled chloride capacity that would be consumed by renewal and expansion of the above-referenced draft permit. Merit holds several active permits on the Wind River Indian Reservation that were only discharging a fraction of their permitted throughput or design capacity during the period when the baseline conditions were evaluated on the Class 1 segment of the Wind River. For this reason, Merit believes that the ability of the Wind River to accommodate the proposed chloride levels from the referenced Aethon facilities may be overestimated should the permitted chloride load from our facilities be discharged in the future. Similarly, the permitted chloride load from other existing NPDES permit holders above Boysen Dam may not have been adequately represented during the baseline evaluation period.

As we discussed with Aethon and the Division, Merit Energy Company believes that additional analysis and consideration is warranted before issuing the final permit. Our specific recommendations include:

1. Aethon should expand the scientific analysis for the GEMSS modeling to include the currently permitted, but un-used, chloride load that may not have been discharged during the baseline sampling program. While this will certainly diminish some of the assimilative capacity consumed by the expanded project, Merit also believes that refining some of the conservative assumptions of the GEMSS evaluation while also redefining the throughput targets for the Neptune Plant expansion will attenuate this impact, result in a more realistic estimate of available capacity, and create an operational buffer for surface water quality protection.
2. Permitting complexities from over-allocation with a single proposed project expansion may be alleviated if the Division were to only allow a portion of the available chloride load to be consumed. Merit Energy Company believes that administrative controls might offer a fair compromise to current permit holders and future projects that may discharge to this system, as an incremental buffer would always be preserved.

Merit Energy Company recognizes the solid science that Aethon has applied to the modeling effort, treatment system expansion, and overall water management strategy. The Division's outreach and public dialog efforts are to be commended. The economic benefits of the project are considerable. The proper management of produced water will also augment water scarcity, enhance habitat, and provide for beneficial use by agriculture. The Division must now accurately characterize and equitably allocate the available chloride load and issue this permit based on maintaining the integrity of the Class 1 water resource.

Should you have any questions or require additional information, please contact me at 307-527-2127 or [mike.williams@meritenergy.com](mailto:mike.williams@meritenergy.com).

Sincerely,



Michael A. Williams, P. G.  
Regulatory and Governmental Affairs Professional

cc: Ms. Arlene Valliquette, MEC – Dallas  
Cody HSE Files