

# Petroleum Association of Wyoming

Please find PAW's comments attached



May 14, 2019

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

**Re: Aethon Moneta Divide Draft WYPDES Permit WY0002062**

Dear Mr. Frederick,

The Petroleum Association of Wyoming (PAW) presents the following comments regarding Aethon's Moneta Divide draft WYPDES permit WY0002062 (Draft Permit). PAW is Wyoming's largest and oldest oil and gas organization dedicated to the betterment of the state's oil and natural gas industry. PAW members account for approximately ninety percent of the natural gas and eighty percent of the crude oil produced in Wyoming – production that supports the employment of thousands of Wyomingites.

PAW supports the release of the Draft Permit and Statement of Basis (SOB) for the above referenced WYPDES facility and encourages the WDEQ to approve the final permit upon completion of the public comment period. We believe the science and GEMSS model provide adequate proof that the discharge from this facility will meet the requirements of Chapters #1 and #2 of the Wyoming Water Quality Rules and Regulations. Additionally, the discharge associated with the Draft Permit and SOB satisfies the Departments antidegradation<sup>1</sup> and historic beneficial use criteria contained in the regulations<sup>2</sup>. PAW believes there will be no adverse environmental impacts as a result of issuance of a new permit and that the Class 1 water quality standards will continue to be met in the Wind River below Boysen Reservoir. The Draft Permit proposes continued monitoring of the Class 1 water in the Wind River Canyon as well as upstream Class 2AB waterbodies to ensure the corresponding instream water quality standards will continue to be met. Four years of monthly baseline data has already been collected, which will provide a reference point to which future monitoring data can be compared.

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<sup>1</sup> Wyoming Surface Water Quality Standards Implementation Policies for Antidegradation, Mixing Zones and Dilution Analysis

<sup>2</sup> Wyoming Department of Environmental Quality Rules and Regulations, Chapter 2, Appendix H (i)

Good quality surface water discharges are used by livestock and wildlife, particularly where water would otherwise not exist. These discharge waters also provide new wetlands and enhance riparian habitat along downstream water channels. Good quality produced water discharged from oilfields in Wyoming have provided additional surface water for agricultural and wildlife benefits for decades and was the genesis of Subpart E (Beneficial Use) of the Onshore Oil and Gas Effluent Limitation Guidelines (ELGs). By allowing the Draft Permit to be approved, additional surface water will become available for livestock and wildlife which have historically benefited from the Frenchie Draw WYPDES facility.

PAW believes the Draft Permit is more protective than previous WYPDES permits issued for this facility. A consulting firm was enlisted to complete GEMSS modeling to determine the maximum pollution load that is allowable and still protective of the Class 1 Wind River below Boysen Reservoir. Several conservative assumptions were utilized in the model, and the mixing zone was delineated based on aquatic life chronic water quality criteria. The model results show that even if the full discharge amount were to reach Boysen Reservoir, no existing uses would be adversely affected. Additionally, Aethon would be required to treat additional discharges resulting from development activity, thus reducing the pollutant loads to even less than that which historically occurred prior to 2013.

Hydrology and beneficial use studies conducted on several produced water discharges to ephemeral drainages in the Bighorn and Wind River Basins empirically document that riparian vegetation and seepage naturally consumes 0.3 to 1.3 cubic feet/second (cfs) per mile. Thus, using the more conservative measurement of 0.3 cfs/mile (4,617 barrels per mile per day) would result in approximately 6% of the maximum produced water volume reaching Boysen Reservoir during the growing season. Even under winter conditions, these studies have documented 0.12 cfs/mile seepage loss, which would diminish the expected effluent reaching Boysen Reservoir to less than 63% of the projected maximum discharge at the outfalls. Therefore, the GEMSS model output results in a very conservative worst-case estimate of the potential impacts to Class 1 waters, similar to the effluent being discharged directly to Boysen Reservoir with zero consumptive loss.

Thank you for your consideration of these comments. We understand if Aethon continues to develop the Moneta Draw field resulting in an increase in discharge volumes a revised permit would be necessary to adequately protect water quality. PAW supports the Draft Permit as we believe the proper review has taken place and the Wyoming DEQ rules and regulations have been followed. We urge the Department to issue the permit as quickly as possible.

Thank you,



John Robitaille