Mark Gordon, Governor

Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.



Todd Parfitt, Director



December 17, 2019

Dan Heilig Senior Conservation Advocate Wyoming Outdoor Council 262 Lincoln Street Lander, WY 82520

Jill Morrison **Executive Director** Powder River Basin Resource Council 934 N. Main St. Sheridan, WY 82801

RE:

RESPONSE TO COMPLAINT AND REQUEST FOR INVESTIGATION RELATED TO WYOMING POLLUTANT DISCHARGE ELIMINATION SYSTEM (WYPDES) PERMIT WY0002062

Dear Mr. Heilig and Ms. Morrison:

The Wyoming Department of Environmental Quality (DEQ) has reviewed and considered your concerns related to the above referenced permit as provided in your August 15, 2019 letter to me. The current effective version of this permit was issued on April 27, 2015 as a major modification to the permit issued on October 21, 2013. A renewal of the current permit (WY0002062) is still pending.

Your comments on the existing permit focus on two primary concerns: 1) The produced water is not of good enough quality to be used for wildlife or livestock watering and is not actually being put to such use; and 2) The discharge of untreated and/or partially treated produced water into Alkali and Badwater creeks has violated Wyoming surface water quality standards. WDEQ has investigated your complaint and appreciates your concerns. Responses to your concerns are provided below.

1) Wildlife or livestock watering

WDEQ has determined that the discharge from this facility is being put to use for livestock, and complies with requirements under 40 CFR, Part 435 Subpart E, as well as Chapter 2, Appendix H(a)(i) of the Wyoming Water Quality Rules and Regulations.

In particular, Chapter 2, Appendix H(c)(i) allows the modification of effluent limits described in paragraphs (b)(vii) to be granted on a case by case basis (for existing permits where the original permit application was submitted prior to September 5, 1978) if a signed "letter of beneficial use" from the landowner specifically requests that the discharge in question be allowed to continue and indicates the exact beneficial use of the water and history of such use. According to Mr. Robert L. Hendry, the

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landowner at this facility, cattle have used the water for over 50 years with no issues, and wildlife use this water, as well. A copy of the landowner's letter reaffirming livestock and wildlife use of the water, and his desire to continue this practice, is attached.

Compliance with surface water quality standards

Discharge of produced water from this facility pre-dates the current designation of Badwater Creek as a Class 2AB water and Alkali Creek as a Class 3 surface water, which occurred in 2001. Class 2 designations were based upon the fisheries information contained in the Wyoming Game and Fish Department's *Streams and Lakes Database* submitted to DEQ in June 2000, and all other surface waters (excluding Class 1 waters) were designated as Class 3.

Since questions regarding the appropriateness of current designated uses and water quality criteria applicable to Badwater Creek arose during the permit renewal process, DEQ committed to evaluate whether these designated uses and water quality criteria are appropriate and attainable. DEQ began implementing sampling and data collection in April 2019 and has been collecting water quality data on Alkali, Badwater, Bridger, and Dry Creeks since that time. As part of this work, DEQ personnel have observed what appears to be uncharacteristic black sediment deposits on the bottom of the stream channels of Alkali and Badwater Creeks. Staff also noted the presence of foam in Badwater and Alkali Creeks. Samples of foam, as well as black sediment, were collected and analyzed to determine their chemical makeup and potential origin. Staff also collected samples from three discharge outfalls (i.e., outfalls 001, 006, and 009) on Aethon Energy Operating LLC's Moneta Divide facility to help determine whether the substances observed may be associated with discharges at the facility. In the course of its work, DEQ has also noted concerns with other water quality parameters in Alkali and Badwater Creeks that may be found to be associated with discharges at the facility.

While DEQ has evaluated the currently available data, not all of the data have been through the formal quality assurance and quality control process and additional data are still being collected and analyzed. With these caveats in mind, any violations of the Environmental Quality Act or DEQ rules and regulations will be addressed with the responsible party appropriately.

I believe these responses adequately address the concerns raised in your complaint and request for investigation. If you have any further questions, please feel free to contact Kevin Frederick, Water Quality Administrator at (307) 777-5985.

Sincerely,

Todd Parfitt

Director

Wyoming Department of Environmental Quality

TP/KF/SG

Attachment: (Letter from Robert L. Hendry)

RESPONSE TO COMPLAINT AND REQUEST FOR INVESTIGATION RELATED TO WYPDES PERMIT WY0002062 December 17, 2019 Page $\bf 3$ of $\bf 3$

cc: Kevin Federick, Administrator, Water Quality Division
Jason Thomas, WYPDES Permitting Supervisor, Water Quality Division
David Waterstreet, Manager, Watershed Section, Water Quality Division
Beth Callaway, Policy Advisor, Governor's Office
Brian Nesvik, Director, Wyoming Game and Fish Department
Kelly Shaw, Assistant Attorney General, Wyoming State Attorney General's Office

October 22, 2019

RE: Produced Water in Gun Barrel and Moneta Divide

To whom it may concern;

We have used the produced water coming from the Gun Barrel field since the early 60's. Our livestock have used the water with no issues at all. The ranch Clear Creek Cattle Co. and Big Horn Ranch Co. owns or has control over about half of the lands in the Gun Barrel field.

We use the Water from Pit #7 in the spring of the year. It's warm enough to stay open in the late winter. The cattle are calving in that pasture and we have not had any issues with the produced water.

We use the water from Pit #5 and Pit #6 in the fall and early winter. This water stays open as well. Our Livestock use the water all the time while in those pastures.

Wildlife such as Antelope and Deer use the water. But other wildlife such as Sage Grouse and other birds use the produced water.

Without the produced water we would have to drill water wells to provide water for our livestock. The ranch next to ours, The Spratt Ranch, will be in the same condition without the produced water.

If we can answer other questions please call; 307-259-6203.

Robert L. Hendry, Pres.

Clear Creek Cattle Co.