

PROTECT OUR WATER
JACKSON HOLE

FILED

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Hand-Delivered at Public Meeting

ENVIRONMENTAL QUALITY COUNCIL
STATE OF WYOMING

June 9, 2023

Keenan Hendon
Department of Environmental Quality
Water & Wastewater Program Manager
200 West 17th St.
Cheyenne, WY 82002

Re: POWJH Supplemental Comments on the Wyoming DEQ's "Notice of Proposed Permit to Construct" for the Teton Village Resort—Small Wastewater Facility, Permit No. 2023-025, Teton County

Dear Mr. Hendon:

The following supplemental comments are submitted on behalf of Protect Our Water Jackson Hole ("POWJH") in response to the Wyoming Department of Environmental Quality's ("DEQ") May 3, 2023 request for comments on the above-referenced Notice of Proposed Permit to Construct, the draft Small Wastewater Facility permit ("Draft Permit"), and Appendix A of supporting materials ("Appendix A"). These comments supplement those POWJH submitted on June 2, 2023 (the "June 2, 2023 Comments"). Additional Exhibits submitted with these supplemental comments are labeled consecutively from those submitted with the June 2, 2023 Comments. The June 2, 2023 Comments are attached for convenient reference as Exhibit M, and incorporated by reference. Only the headings for sections that have been supplemented are provided, below.

For the reasons explained below, and those in the June 2, 2023 Comments, the Draft Permit fails to protect water quality and human health and thus DEQ should not issue the Draft Permit. Instead, DEQ should conduct further analysis and require Basecamp Teton WY SPV LLC ("Applicant") to comply with DEQ's water quality rules and policies prohibiting degradation of Class 1 waters.

Additional Background

As noted previously, POWJH conducted a site visit on May 31, 2023 with its retained environmental consultant, Brian Remlinger, who is a Principal and Senior Scientist from Alder Environmental. Mr. Remlinger prepared a diagram depicting wetland boundaries, attached as

Exhibit N. That diagram depicts wetland boundaries and shows encroachments into wetlands, as well as grading that impermissibly occurred outside the boundary of the Site 9 boundary. DEQ should conduct a further site visit to inspect these violations.

Violations of the Wyoming Environmental Quality Act and the DEQ's Water Quality Rules and Regulations.

For the following further reasons, in addition to those in the June 2, 2023 Comments, DEQ should not issue the Draft Permit and instead it should conduct further analysis and require Applicant to comply with DEQ's water quality rules and ensure that the Fish Creek, a Class 1 water that is already listed as impaired by *E. coli*, will not be further degraded by septic tank discharge.

(1) The Wastewater System is Located in Prohibited Setbacks

In addition to the arguments in the June 2, 2023 Comments, the plain language definition of "small wastewater system" further indicates that the proposed facility should be treated as "commercial" facility subject to Chapter 25, Section 19. §35-11-103(c)(ix) (defining [s]mall wastewater system as "any sewerage system, disposal system or treatment works having simple hydrologic and engineering needs which is intended for wastes originating from a single residential unit serving no more than four (4) families or which distributes two thousand (2,000) gallons or less of domestic sewage per day"). As noted, there are serious questions about the volume of sewage the proposed facility will generate. It appears that the Applicant attempts to squeak under the line by characterizing the facility as a "campground," as opposed to a more appropriate characterization as a "motel." As noted previously, there are internal inconsistencies in the project proposal about number of "Geodome Guest Units;" a table suggests 11 units, but the text above that table suggests 13 units. Appendix A, Page 14 of 100 ("Table 2: WSFU Calculations" and text above).

Under Teton County's Small Wastewater Facility Regulations, attached as Exhibit G to the June 2, 2023 Comments, a proposed soil absorption system site must include room for an additional system. Under 9-3-4(e): "The site must include area for both the proposed soil absorption system and a future replacement soil absorption system. Both the proposed and replacement soil absorption systems shall be sized to receive one-hundred (100%) percent of the wastewater flow." Exhibit G at page 18. Applicant has not shown that the site meets these criteria and it does not appear that there is room for such a replacement site, much less the original site, without violating the setbacks, as explained in the June 2, 2023 Comments.

(2) The Draft Permit Fails to Protect Ground and Surface Water Resources.

(A) The Hydrology of the Fish Creek Watershed Shows a Connection Between Class 1 Surface Waters, Tributaries, and Adjacent Wetlands

In addition to the evidence submitted in the June 2, 2023 Comments, Exhibit N depicts surface water resources. DEQ should conduct a further site visit to examine the extent to which Applicant violates the setback requirements, as explained previously in the June 2, 2023

Comments. Further, it appears that one or two geodesic domes (i.e. motel rooms) are located outside the boundaries of the Site 9 area. The Office of State Lands and Investments' ("OSLI") Temporary Use Permit (TUP-03345) only authorized activity in a certain area, thus the legality of this infrastructure is in question and should be investigated by DEQ in coordination with OSLI.

(C) DEQ Failed to Consider Alternatives and thus Failed to Require Best Management Practices

As explained in the June 2, 2023 Comments, there is no indication that the Applicant or DEQ engaged in the required assessment of alternatives to determine Best Management Practices. Another alternative would be requiring advanced technology, such as a recirculating vertical flow ("RVF") wetland. The Teton Conservation District and Intermountain Aquatics, Inc. tested the use of a small artificial wetland to enhance treatment of wastewater from a single-family home in Wilson, Wyoming. Fish Creek Residential Wastewater Demonstration Project (September 2011), attached as Exhibit O. The recirculating vertical flow (RVF) wetland was installed between the existing septic tank and leachfield. *Id.* at 1. It was constructed in the fall of 2009 and planted, instrumented for data collection, and put into service in the spring of 2010. *Id.* Performance was monitored from June 2010 to June 2011. *Id.* In addition, an in-depth review of research and management publications was conducted to compare performance and cost of the RVF wetland to other types of onsite wastewater treatment systems and to provide information on key operation and maintenance issues.

Results of the study showed that pollutant removal was good during all seasons. These pollutant removal rates and the robust year-round performance were consistent with other research on vertical flow treatment wetlands. *Id.* Temperature data showed that the wetland remained unfrozen even during a five-month period of subfreezing air temperatures. *Id.* Technical issues related to design, operation, and performance do not appear to be major barriers to wider use of RVF wetlands. *Id.*

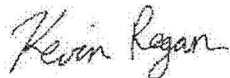
Yet another alternative for DEQ to consider is a subsurface flow treatment wetland, such as that used at the Darwin Ranch. POWJH has attached the Darwin Ranch SWF Application, Exhibit P, but the additional supporting documentation for that system should be in the possession of DEQ.

DEQ should conduct further analysis of alternatives to determine whether Best Management Practices are sufficient to avoid a degradation of water quality, which is prohibited by DEQ rules and policies.

Further, the applicant or DEQ will need to ascertain the existing quality of ground and surface water in order to determine whether the regulatory standard (i.e., no degradation, shall maintain existing water quality, etc.) can be achieved. See DEQ Water Quality Rules Chapter One, Section 4. As noted in the June 2, 2023 Comments, the monitoring protocol needs to be improved to establish a proper baseline and to establish an up-gradient monitoring well to serve as a basis for comparison.

In conclusion, for the reasons stated above and those in the June 2, 2023 Comments, POWJH requests that DEQ not issue the Draft Permit, that DEQ conduct further analysis, and that DEQ require Applicant to comply with DEQ's water quality rules. DEQ must fulfill its statutory and regulatory duty to ensure that the water quality of Fish Creek, a prized local waterway with Class 1 designation, its tributaries, and adjacent wetlands are not further degraded.

Sincerely,

A handwritten signature in cursive script that reads "Kevin E. Regan".

Kevin E. Regan
Law and Policy Advisor
Protect Our Water Jackson Hole

LIST OF EXHIBITS
(Incorporated by reference herein)

Exhibit A – November 22, 2022 Letter from Dan Heilig to Kennan Hendon Re POWJH Comments on Notification of Coverage

Exhibit B – Affidavit of Jennifer Zygmunt Filed by DEQ in Connection with *Protect Our Water Jackson Hole v. Wyoming Department of Environmental Quality*

Exhibit C – Alder Environmental, Aquatic Resources and Water Quality Impact Assessment of Wyoming State Land (Teton Village) OSLI Site 9, November 19, 2022.

Exhibit D – Sean E. O’Malley, P.E. Review of Teton Village Resort Wastewater Treatment, November 22, 2022.

Exhibit E – Photo of geodesic dome taken during May 31, 2023 site visit showing proximity to open water.

Exhibit F – November 28, 2022 Notice to Abate Issued by Teton County to Basecamp Hospitality LLC

Exhibit G – DEQ Antidegradation Policy

Exhibit H – Teton County Small Wastewater Facility Regulations

Exhibit I – Verhougstraete, M. et al. (2015) Linking fecal bacteria in rivers to landscape, geochemical, and hydrologic factors and sources at the basin scale. Publication of the National Academy of Sciences, available online at:
<https://www.pnas.org/doi/full/10.1073/pnas.1415836112>.

Exhibit J – Photo showing standing water inside installed septic tank taken during May 31, 2023 site visit

Exhibit K – November 22, 2022 from Jennifer Zygmunt, DEQ Administrator, Water Quality Division to Meghan Quinn, Executive Director POWJH

Exhibit L – Teton Conservation District, Teton County Septic System Effluent Monitoring Study Report, August 2022, available online at: <https://www.tetonconservation.org/septic-monitoring-study>

Exhibit M – Protect Our Water Jackson Hole’s June 2, 2023 Comments Submitted Electronically to DEQ through the Electronic Portal

Exhibit N – Diagram depicting Site 9 wetlands and aquatic resources prepared by Alder Environmental from a May 31, 2023 site visit.

Exhibit O – Draft Completion Report Fish Creek Residential Wastewater Treatment
Wetland Demonstration Project (September 2011)

Exhibit P – Small Wastewater Facility Permit Application for the Darwin Ranch dated
September 11, 2017