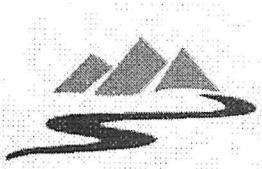

PROTECT OUR WATER
JACKSON HOLE

Transmitted Electronically via DEQ Comment Portal

June 2, 2023

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

Re: POWJH 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 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"). For the reasons explained below, 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. POWJH commends DEQ for its decision to hold a public meeting on June 9, 2023 regarding the Draft Permit and to allow the submission of written and oral comments. That meeting will allow the community to express the gravity of the risks to the Fish Creek watershed and human health.

POWJH is a tax-exempt, nonprofit organization registered in the State of Wyoming. The mission of POWJH is to serve as a powerful advocate for the protection of ground and surface waters in Teton County, Wyoming. Our members and supporters are very concerned about potential adverse impacts to Fish Creek, its tributaries, and adjacent wetlands resulting from the construction and operation of Teton Village Resort's wastewater facility located in the headwaters of this Wyoming Game and Fish Department-designated "Red Ribbon" fishery.

Background

Under application number 2023-025, Basecamp Teton WY SPV LLC has proposed to install a sand mound system with total mound size of approximately 156' X 16', fed by two 1,500-gallon septic tanks and two 1,000-gallon pumping chambers; HDPE water and sewer lines; and a pump house for the well. The proposed facility is located in the NE1/4 SE1/4, Section 36, Township 42 North, Range 117 West of the 6th Principal Meridian, Teton County.

A more thorough description of the Office of State Lands and Investments ("OSLI") issuance of a temporary use permit (TUP-03345) to Mountain Ventures/Basecamp Hospitality, LLC on June 24, 2022, to develop a geodesic dome hotel complex on state trust lands in Teton County is set out in POWJH's comment letter to Keenan Hendon dated November 22, 2023, attached as Exhibit A. In the interests of brevity, POWJH only provides further background on developments after that date.

On November 28, 2022, POWJH filed suit in the District Court of Teton County, Wyoming Ninth Judicial District seeking a review of agency action and request for a stay under W.S. § 35-11-1001(a) and W.S. § 16-3-114. In an abundance of caution, POWJH also filed an appeal of the Notification of Coverage before the Environmental Quality Council of the State of Wyoming.

In an Order Upon Status Conference Granting Motion to Stay Enforcement, dated January 31, 2023, Judge Owens stated: "[P]ursuant to Wyo. Stat. § 35-11-301 construction related to septic systems for Basecamp Hospitality, LLC development cannot take place until issuance of a valid permit by Respondent." Later, DEQ conceded that the general permit under which the Notification of Coverage Permit 2022-274 had been issued had expired. See April 26, 2023 Affidavit of Jennifer Zygmunt, attached as Exhibit B.

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 previously prepared a report dated November 19, 2022, attached as Exhibit C, which was submitted to DEQ with POWJH's November 22, 2022 comment letter. The May 31, 2023 site visit was secured with the assistance of litigation counsel, with consent from the Applicant, and with permission from OSLI. This was the earliest date that POWJH was able to secure a site visit. Accordingly, POWJH presents initial conclusions in this comment letter and reserves the right to submit further conclusions and a report from Mr. Remlinger to DEQ at the June 9, 2023 public meeting regarding the Draft Permit.

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

For the following reasons, 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) <u>The Wastewater System is Located in Prohibited Setbacks</u>

Applicant proposes to construct a non-residential, i.e., commercial wastewater facility, which is defined in the DEQ's rules as:

> (c) "'Commercial/industrial waste and wastewater facilities' means any facility not defined as a municipal or single family residence facility." See WQRR Chapter 11, Section 4.

Indeed, the proposed glamping facility is analogous to a hotel or motel, not a campground or residence, because it will have at least 15-18 toilets, 15-18 faucets, and 13-15 faucets. Appendix A, Page 11 of 100.[1]

Mandatory setbacks for commercial wastewater facilities are specified in WQRR Chapter 25, Section 19. As shown in Table 7 of those regulations, the minimum setback for an absorption system from surface water, including intermittent and seasonal waters, is 100 feet; from a public water supply well, the minimum setback is 500 feet. Applicant's engineering drawings show, however, that the raised-mound absorption field is 65 feet or less from a pond, well within the 100-foot setback from surface water required for commercial septic systems, and likely within the 50-foot setback required for residential systems. Appendix A at 90 of 100. Field observations confirm that the raised mound septic system has been already constructed within the mandatory setback from surface waters, in violation of Chapter 25, Section 19. See Sean E. O'Malley, P.E., Review of Teton Village Resort Wastewater Treatment, November 22, 2022, attached as Exhibit D. A representative of Applicant stated to a representative of POWJH on May 31, 2023 that Applicant will move the existing septic field to comply with the drawings in Appendix A.

In addition, the same engineering drawings show that the raised-mound pressure dosed absorption field is located 287 feet from a public water supply well, Appendix A at 90 of 100, considerably less than the 500-foot setback required by DEQ's rules, in violation of Chapter 25, Section 19.

In addition, Chapter 11, Section 27 requires that "Commercial/ industrial facilities that generate waste that is entirely domestic waste shall be designed in compliance with Part B of Chapter 11 or Chapter 25." Basecamp's wastewater system is not in compliance with Chapter 11 or Chapter 25 and the DEQ's approval of wastewater facilities inside these critical setbacks is a violation of its own water quality rules and regulations.

Further, the Draft Permit states: "It is the duty of the permittee, owner and operator to comply with all applicable federal, state and **local laws or regulations** in the exercise of its activities authorized by this permit." Draft Permit at page 2 (emphasis added). Teton County's Land Development Regulations require a 50-foot setback of "physical development" from ponds

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[1] There appear to be 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 11 of 100.

and a 30-foot setback of "physical development" from wetlands under Section 5.1.1.D. Here, there is evidence that the Applicant is developing within those prohibited setbacks. Exhibit E (photo depicting proximity of geodesic dome to surface water). Further, in a Notice to Abate issued by Teton County to Applicant, Teton County explained: "Basecamp Hospitality, LLC has submitted to Teton County in writing that they will not be complying with Section 5.1 of the LDRs, *General Environmental Standards*." Notice to Abate at 2, attached as Exhibit F.

Field observations confirm that pipes and the raised mound septic system have already been constructed. Exhibit D. This violates Teton County's Small Wastewater Facility Regulations, attached as Exhibit G. Such rules contemplate a final inspection by the Sanitarian. *Id.* at 9-2-9(a)(iv)(B). DEQ should require the Applicant to uncover the septic tanks and pipes leading to the tanks to facilitate an inspection to ensure "that the installation of the small wastewater system conforms to the approved design." *See id.*

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

(A) Legal Standards Governing DEQ Regulation of Class 1 Waters

The wastewater facility authorized by DEQ has been constructed in the headwaters of Fish Creek, a Class 1 surface water. Pursuant to DEQ's Water Quality Rules and Regulations (WQRR) Chapter 1, Appendix A, the entire Fish Creek drainage is designated Class 1, together with all tributaries and adjacent wetlands. Notably, the plain language of that provision designates "**[a]ll waters** within the Fish Creek (near Wilson, Wyoming) drainage." *Id.* at Appendix A(a)(xiv) (emphasis added); *id.* at Appendix(a)(xvii) (designating "[w]etlands adjacent to the above listed Class 1 waters.") The regulatory objective for Class 1 surface waters is to protect and maintain water quality that existed at the time of designation. WQRR Chapter 1, Sections 4 and 7.

In terms of point source pollution, Chapter 1, Section 4(a) specifically states "no further water quality degradation by point source discharges other than from dams will be allowed." In terms of nonpoint source pollution, "[n]onpoint sources of pollution shall be controlled through implementation of appropriate best management practices." *Id.* Further, Section 7(c) states that for Class 1 waters, "best management practices **will maintain existing quality and water uses**." (emphasis added) The term "Best Management Practices" is specifically defined in Chapter 1 as: "a practice or combination of practices that after problem assessment, **examination of alternative practices**, and in some cases public participation, are determined to be the most technologically and economically feasible means of managing, preventing or reducing nonpoint source pollution." Chapter 1, Section 2(b)(v). Under Chapter One, Appendix A(b)(iii), "[a]ll adjacent wetlands shall have the same classification as the water to which they are adjacent.

The definitions section of Chapter One provides additional definitions that are relevant here. "Adjacent wetlands" means "wetlands that are connected by a defined channel to a surface tributary system, are within the 100[-] year flood plain of a river or stream, or occupy the fringe of any still water body which is connected by a defined channel to a surface tributary system." Chapter One, Section 2(b)(ii). A "tributary" means "those streams or stream segments which

flow into or contribute water to another stream, stream segment, downstream reach of the same stream or other water body." Chapter One, Section 2(b)(lii).

Importantly, DEQ has issued formal guidance related to its antidegradation policies. See Wyoming Surface Water Quality Standards Implementation Policies for Antidegradation (Effective September 24, 2013), attached as Exhibit H. Section 3 of that guidance, which governs "Outstanding Aquatic Resources (Class 1)," reinforces DEQ's rules governing point source and nonpoint source pollution control. In terms of nonpoint sources, the guidance explains that "[f]or Class 1 waters, best management practices will maintain existing quality and water uses." *Id.* at 3(c).

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

A number of recent studies and reports show a hydrologic connection between ground and surface water in the Fish Creek drainage. See, e.g., Alder Environmental Report, Exhibit C. Indeed, at certain times of the year, groundwater flows on the surface. The commercial septic system authorized by DEQ in Permit No. 2023-025 will introduce a variety of pollutants into ground and surface water and adjacent wetlands in the headwaters of Fish Creek, including *E. coli*, further exacerbating an existing *E. coli* impairment documented in the DEQ's combined 305(b)/303(d) water quality assessment (2020). The DEQ's decision allowing a discharge of *E. coli*, nitrates and other pollutants into a tributary of Fish Creek is a violation of the Wyoming Environmental Quality Act, the federal Clean Water Act, and is unlawful agency action within the meaning of W.S. § 16-3-114(c).

Given the unique hydrology in this area, along with the inability of septic systems to remove all pollutants, contamination of ground and surface water from Basecamp's septic system is all but certain. See Verhougstraete, et al., *Linking fecal bacteria in rivers to landscape, geochemical, and hydrologic factors and sources at the basin scale*, National Academy of Sciences, August 18, 2015, Vol. 112, No. 33, 10419-10424. Attached as Exhibit I.

Further, during the May 31, 2023 site visit, there was evidence that the currently installed southern-most tank had standing water in it and that Applicants was attempting to drain the water with a pump and hose. Photo attached as Exhibit J. DEQ should conduct a site inspection to determine whether or not the standing water is groundwater.

(C) Recent United States Supreme Court Case Law Indicates that a Septic Facility in the Fish Creek Watershed Can Constitute a Point Source

Although the Clean Water Act has traditionally drawn a distinction between point source and nonpoint source pollution, recent Supreme Court case law holds that in certain situations a discharge to groundwater can constitute a point source. *County of Maui v. Hawaii Wildlife Fund*, 140 S. Ct. 1462 (2020). The Supreme Court held that the Clean Water Act requires a permit when the addition of pollutants into navigable waters is the *functional equivalent* of direct discharges from a point source. *Id.* at 1468. The facility in that case released treated waste into four injection wells, which terminate in a groundwater aquifer. *Haw. Wildlife Fund v. County of*

Maui, 24 F. Supp. 3d 980, 983-84 (D. Haw. 2014). Environmental groups asserted that pollution from the facility was reaching the Pacific Ocean and that a National Pollutant Discharge Elimination System (NPDES) permit was necessary to prevent violations of the Clean Water Act. *See generally id.*

Here, Applicant proposes to release sewage effluent into groundwater that has a direct hydrological connection to the aquifer, which in turn connects to Class 1 surface waters, i.e. Fish Creek, its tributaries, and adjacent wetlands. DEQ should conduct further hydrological analysis to determine whether, in light of the direct connection to surface waters, the proposed project constitutes a prohibited point source. WQQR Chapter 1, Section 4(a) ("no further water quality degradation by point source discharges other than from dams will be allowed.")

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

At the heart of the legal protections for Class 1 waters from nonpoint source pollution, including tributaries and adjacent wetlands, is the requirement of Best Management Practices. See discussion above in Section 2(a) of this Comment Letter. Under WQQR Chapter 1, Section 7(c), "[f]or Class 1 waters, best management practices **will maintain existing quality and water uses**." (emphasis added). Assessment of Best Management Practices requires consideration of alternatives. Chapter 1, Section 2(b)(v); Chapter One, Appendix A(b)(iii) (requiring the same for adjacent wetlands). Indeed, the plain language of "*Best* Management Practices" requires an assessment of which management practices are indeed "best" in a particular situation.

Here, there is no indication that the Applicant or DEQ engaged in the required assessment of alternatives to determine Best Management Practices. For example, one alternative would be the storage, removal, and disposal of wastewater from the project site at an appropriate wastewater treatment plant. Although DEQ summarily discounted this option in a letter to POWJH dated November 22, 2022, Exhibit K, noting the purported risks of holding tanks, it is obvious that commercial septic providers in Wyoming, such as Macy's Services, regularly provide waste holding, transport, and disposal services. See http://macysservices.com/ There is no evidence of significant releases from such providers. In any event, DEQ should conduct the necessary alternatives analysis.

Another alternative would be the use of alternative septic treatment technologies, including advanced treatment. Indeed, the Environmental Protection Agency ("EPA") notes that "many [septic] configurations include additional treatment components following or in place of the septic tank, which provide advanced treatment solutions." See https://www.epa.gov/septic/advanced-technology-onsite-treatment-wastewater-products-approved-state (EPA describing advanced treatment and providing links to various states' advanced treatment methods).

Yet another alternative would be the incorporation of findings from a recent 2-year study of raised mound wastewater treatment leachfields and septic systems in the Fish Creek watershed indicates that nitrate contamination of groundwater due to these systems is highest during winter months when the effectiveness of these systems is limited by cold conditions (Nelson and Alder

2022), attached as Exhibit L. That study showed that there was an increase in nitrate concentrations observed in the groundwater downgradient of the leachfields, most notably in the winter months. The study makes recommendations to improve winter treatment of wastewater in leachfields and septic systems through heat retention designs. See *id.* at page 50. Applicant's proposed insulation of piping to the septic system and insulation of the septic system and drainfield appears inadequate.

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.

(E) DEQ Failed to Consider Additional Requirements for Commercial Wastewater Facilities

Despite the high risk of water quality contamination, the DEQ has failed to demonstrate, as required by its rules, that ground and surface water quality standards will be met. WQRR Chapter 11 provides:

> PART C: COMMERCIAL/INDUSTRIAL WASTE AND WASTEWATER FACILITIES
>
> Section 25. General.
>
> This part contains the minimum standards for the design and construction of commercial/ industrial wastewater facilities. The applicant shall demonstrate to the Administrator that any discharge or seepage from the wastewater facility will not cause a violation of the Surface and/ or Groundwaters of the State in accordance with Chapter 1, "Quality Standards for Wyoming Surface Waters" and Chapter 8, "Quality Standards for Wyoming Groundwaters." Due to the wide variety of wastes, wastewater and site conditions, the latest available scientific information shall be used to demonstrate that violations will not occur.

POWJH has been unable to locate any evidence in the application, drawings, and related materials that such a demonstration has been made. Neither the Draft Permit nor Appendix A provides this required demonstration or even references this requirement. In its haste to approve Applicant's septic system, the DEQ missed —or perhaps ignored— this critical requirement.

(F) The Draft Permit Does Not Provide Adequate Monitoring to Detect Degradation of Fish Creek, a Class 1 Water that is Already Listed as Impaired for *E. Coli*

The Draft Permit and proposed project plans in Appendix A raise important questions about the adequacy of monitoring and about what steps DEQ will take if degradation of water quality is detected. For example, it does not appear that there is an upgradient monitoring well that will serve as a basis for comparison for future monitoring, as opposed to the collection of a single baseline/background sample. There are also questions about what time of year a baseline and background sample would be collected. At a minimum, DEQ should require winter and summer sampling as a background/baseline, in addition to up-gradient monitoring. The August

2022 study noted above, Exhibit L at page 31, observed that significant dilution occurs between ten and fifty feet from drain fields. Accordingly, the proposal to monitor sixty to eighty feet to the south of the absorption field is inadequate. DEQ should require placement of monitoring closer to the proposed absorption field.

Importantly, it is unclear what happens if water quality standards are not met. Chapter 1 prohibits degradation of Class 1 waters, as explained above in Section 2(a) of this comment letter. DEQ should specify criteria that constitutes a violation of the Draft Permit and describe next steps that should be taken.

In conclusion, for the reasons stated above, 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,

Kevin 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