

UTAH DIVISION OF WATER QUALITY

IN THE MATTER OF USBR Flaming Gorge Dam Wastewater Treatment Plant 5995 Flaming Gorge Visitors Center Dutch John UT 84023 UPDES PERMIT NO. UT0020338	PERMIT VARIANCE FOR TECHNOLOGY BASED PHOSPHORUS EFFLUENT LIMITS
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BACKGROUND

1. The United States Bureau of Reclamation (Bureau) operates a small (100-2,150 gallons/day) extended aeration activated sludge facility (Facility) to treat municipal wastewater from employees and visitors to Flaming Gorge Dam.
2. The Facility discharges to the Green River below Flaming Gorge Dam, which flows at 442-5,558 million gallons per day (MGD) and is designated for secondary contact recreation (2B) and as a cold-water fishery (3A) (*UAC R317-2-13*).
3. The Bureau's operations at the Facility are undertaken subject to UPDES Discharge Permit No. UT0020338 ("Permit").
4. The Facility is required to achieve technology-based phosphorus effluent limits ("TBPEL") on or before January 1, 2020, unless a variance is granted. *See UAC R317-1-3.3*.
5. The Bureau submitted a variance request, dated July 31, 2023, to the Utah Division of Water Quality ("DWQ"), seeking a variance to the TBPEL (the "Variance Request."). The rationale for the Variance Request is that the Facility contributes a small percent of the overall phosphorus load in the Green River, where degradation to designated uses have not been observed.
6. The Bureau was previously granted a TBEL Variance (DWQ-2018-006810), effective August 28, 2018, through March 31, 2023.
7. Utah law provides that DWQ may grant a variance for compliance with the TBPEL in the event that the operator demonstrates that the TBPEL or Phosphorus loading cap are clearly unnecessary to protect water downstream from the point of discharge. *See UAC R317-1-3.3.C.1.c*.
8. The Director of DWQ has determined that the Bureau has met its burden to show that the TBPEL is clearly unnecessary within the meaning of the *UAC R317-1-3.3* and that a variance is appropriate, subject to the limitations and conditions provided herein.

AUTHORITY

9. The Director of DWQ has authority to grant a variance as to the implementation deadline for TBPEL pursuant to *UAC R317-1-3.3* and the corresponding provisions of the Utah Water Quality Act.
10. The State of Utah administers the Utah Pollution Discharge Elimination System (UPDES) permit program under the Utah Water Quality Act.

CLEARLY UNECESSARY – FINDINGS

11. The Variance Request (DWQ-2023-121201) included the following submissions, among others:
- a. Request for a Variance to the Technology-Based Phosphorus Effluent Limit- USBR Flaming Gorge Dam Wastewater Treatment Plant (July, 2023).
 - b. Green River flow, and the background phosphorus concentration and load in the Green River below the dam.
 - c. Phosphorus loading from the Facility, as currently operated, to the Green River.
 - d. Utah Division of Wildlife (DWR) Flaming Gorge Project Leader review of current situation and impact on aquatic life.
12. Based on the foregoing submissions, the Director has determined that the Facility has established that the TBPEL is unnecessary to protect water downstream from the point of discharge, within the meaning of *UAC R317-1-3.3.C.1.c*, for the following reasons:
- a. Both flow and TP loads from the Flaming Gorge discharge are minuscule in comparison to those in the Green River.
 - b. There is no evidence that the downstream uses are currently threatened or are likely to be threatened by phosphorus inputs.
 - c. The discharge from the facility is so small relative to the Green River, that it is questionable whether or not TP inputs from the plant could even be detected downstream, even under a worse-case scenario.

VARIANCE

13. The Director hereby grants the Flaming Gorge a variance to the TBPEL; subject to the following conditions:
- a. This variance does not extend beyond November 30, 2027, the expiration date of the Bureau's existing UPDES permit. This variance shall be revisited at the time of the Flaming Gorge UPDES permit renewal and may be renewed, modified, or abandoned.
 - b. Pursuant to *UAC R317-1-3.3.C.2*, this variance is subject to re-evaluation in the event that there is any substantive change in the facility design at the time of the Variance Request. The Bureau must provide timely notice to DWQ of any such substantive changes and DWQ will likely reevaluate the TP variance in concert with the required Level 2 Antidegradation review (*UAC R317-2-3*).
 - c. If it is found that Flaming Gorge/Bureau has failed comply with the requirements of this variance the Division of Water Quality may terminate this variance and the facility will be immediately expected to comply with the requirements *UAC R317-1-3.3*.

- d. While the relative load from the facility is small relative to background TP loads in the Green River, TP concentrations are high in comparison with other municipal discharges in Utah. DWQ has requested that the Bureau exercise due diligence and attempt to identify and minimize potential phosphorus sources. The results of these efforts should be reported to DWQ in a timely manner.

John K. Mackey, P.E.
Director
Utah Division of Water Quality

Date: _____

DWQ-2023-121654

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