

RESPONSE TO PUBLIC COMMENT
City of Bozeman Lyman Creek Reservoir
MPDES Permit No. MT0031631

The Montana Department of Environmental Quality (DEQ) issued Public Notice MT-24-08 on August 19, 2024. The Public Notice provided the tentative determination to issue a wastewater discharge permit renewal to the City of Bozeman Lyman Creek Reservoir under the Montana Pollutant Discharge Elimination System (MPDES) permit MT0031631. The notice included the draft Permit, Fact Sheet, and draft Environmental Assessment (EA).

The notice required that all written comments be received or postmarked by September 19, 2024. DEQ received written comments from one party: The City of Bozeman. DEQ considered the comments in preparing the final permit and decision.

This Response to Comments is an addendum to and supersedes relevant portions of the Fact Sheet to the extent those changes are described herein.

The City of Bozeman: Jill Miller, Water Treatment Plant Superintendent

Comment 1: It seems overly burdensome to put a Average Monthly Limit for Total Residual Chlorine at 0.00165 mg/L when compliance is actually anything less than 0.1 mg/L. It is widely known that it is impossible to achieve an average of 0.00165 mg/L. Every certified lab in the state agrees. That monthly average is an impossible statistical average that is randomly created. If compliance is actually anything less than 0.1 mg/L then why not just put that in the permit instead of 0.00165 mg/L?

***Response to Comment 1:** DEQ acknowledges that sampling results reported as “non-detect” for Total Residual Chlorine (TRC) at the RRV of 0.1 mg/L are considered in compliance with both the average monthly and maximum daily TRC limits. However, per 40 CFR 40 122.44 (I) when a permit is renewed or reissued, the effluent limitations must be at least as stringent as the final effluent limitations as the previous permit. MPDES permit MT0031631 was originally issued in 2010 and renewed in 2017 with the effluent limitations set for Total Residual Chlorine (TRC) at 0.00165 mg/L based on the nonsignificance criteria of ARM 17.30.715 (1)(c). This value is the nonsignificant effluent limitation for TRC and was set to ensure that the discharge will remain nonsignificant in the future. For clarification, Table 1, footnote 3 now reads, “Sampling results that show “non-detect” for TRC at the RRV of 0.1 mg/L is considered in compliance with both the average monthly and maximum daily limits.” No changes were made to the final effluent limitations of the permit in response to this comment.*

Comment 2: The dates on the draft new permit will change I assume to October 1, 2025, for the effective date and expiration date will become September 30, 2030.

***Response to Comment 2:** The effective date of the final permit will be the date of issuance, and the expiration date will be 5 years after the issuance date. These dates are updated in the final permit.*

Comment 3: In the Fact Sheet it states in VII. B. Monitoring Locations, ... “The effluent grab sample must be obtained after the Parshall flume,”. In the permit it states in I.C.1 Effluent Monitoring “Samples are to be taken at, or upstream of the Parshall flume,”. That is conflicting information. They should both state “at or upstream” or they should both say “after”.

Response to Comment 3: DEQ agrees with this comment and a modification has been made to the final permit to read “Samples are to be taken downstream of the Parshall flume, which is located approximately 100 feet downstream from the 8-inch drainpipe, unless another location is requested and DEQ agrees, in writing.”

Comment 4: Figure 1 in the Fact Sheet is from over 10 years ago. The current schematic was included with the renewal application and that is the one that should be referenced.

Response to Comment 4: The current schematic is included here as a supplement to the Fact Sheet. Figure 1 was used in the Fact Sheet because it was a more detailed schematic and better illustrated the facility description and design criteria summary of Section I.B. of the Fact Sheet. It should be noted though that the “Dechlorination Equipment” referenced in Figure 1 has been installed. The parenthetical statement “to be installed” should have been removed from the figure. No changes were made to the final permit in response to this comment.

The City of Bozeman: Jac Miller, Water Treatment Plant Assistant Superintendent

Comment 5: City Staff appreciates the effort that goes into these permit renewals. There is sufficient detail for the general public to comment appropriately without needing to gather additional information. However, there are some points in the permit documents that should be clarified for both the public’s understanding as well as future permit renewals beyond the comments already proposed by City staff.

The removal a chlorine process should be listed as dechlorination for reduction or removal of a free chlorine residual rather than dichlorination which implies the addition of chlorine. Word processing products tend to autocorrect this incorrectly.

Response to Comment 5: All mentions of “dichlorination” in the Fact Sheet should read, “dechlorination” as they describe the reduction or removal of free chlorine. There is no mention of dechlorination or dichlorination in the Draft Permit. No changes were made to the final permit in response to this comment.

Comment 6: The reservoir has been collected and treated with chlorine only. Fluoride is not added until it leaves the reservoir, after the leak, as it enters the distribution system. Therefore, the suggestion that the discharge water is treated by removal of chlorine in addition to fluoride is burdensome and misleading. Fluoride removal is unnecessary as it would alter the native water chemistry from what is observed prior to any treatment and there is no ability for fluoride to be added in the process prior to the leak. Additionally, to begin removing fluoride would require the City to install significant additional pieces of costly treatment equipment and maintenance to this facility.

Response to Comment 6: The MPDES permit identifies effluent limits to protect water quality; it is the responsibility of the permittee to identify, install and maintain engineering controls to meet the effluent limits. Fluoride was identified as a pollutant of concern based on information supplied in the previous permit application materials identifying both the natural presence of fluoride in the spring water and the addition of fluoride. Upon affirmative evaluation of reasonable potential for the discharge to cause or contribute to a water quality standard, a limit was first assessed in the original 2010-issued MPDES permit. No information was included in the 2022 renewal application indicating

a change to the operation of the fluoride injection system or requesting reevaluation of reasonable potential for fluoride. Please see the response to Comment 1 regarding the requirement that effluent limitations must be at least as stringent as the final effluent limitations in the previous permit. No changes were made to the final permit in response to this comment.

Schematic of Lyman Creek Reservoir Discharge Treatment

