

# Water Quality Division Montana Pollutant Discharge Elimination System (MPDES) • Fact Sheet

Permit Number: MT0031631

Permittee: City of Bozeman

Receiving Water: Unnamed tributary to Bridger Creek

Facility Information: Lyman Creek Reservoir

1600 Story Mill Road, Bozeman, MT 59715

Facility Contact: Jill Miller, Water Treatment Superintendent

7024 Sourdough Canyon Road, Bozeman, MT 59715

Type of Facility: Water Treatment

Type of Treatment: Sodium hypochlorite (chlorine), and hydrofluosilicic acid (fluoride) to

potable water supply

Number of Outfalls: 1
Outfall Name: 001

Outfall Location: 45.7135817, -111.0036549

Fact Sheet Date: July 2024

## I. Facility Information

## A. Permit Status

The permit was administratively extended in 2022.

• October 1, 2017 2017-permit issued

March 7, 2022 MPDES received renewal permit application
 June 8, 2022 2017-issued permit administratively extended.
 September 30, 2022 Expiration date for the 2017-issued permit

#### **B.** Facility Description and Design Criteria Summary

The City of Bozeman utilizes Lyman Creek Spring as a potable water supply. Spring water is collected from the Lyman Creek drainage through a series of gravel beds and infiltration piping which directs water through a pipeline to a treatment and storage facility. The Lyman Creek water treatment plant (WTP) controls the volume of water entering the distribution system; meters flow; reduces pressure; and houses equipment for the addition of sodium hypochlorite (chlorine) and hydrofluosilicic acid (fluoride) to the potable water supply.

Treatment buildings include an Inlet Control Building and an Outlet Control Building with a 5-million-gallon water storage reservoir. Water flows through the Inlet Control Building piping into the water storage reservoir. The reservoir holds treated water for distribution to city residents before it flows through the Outlet Control Building as demand warrants (see Figure 1).

The 5-million-gallon water storage reservoir consists of a concrete basin overlaid with a polyethylene liner. There is a steady leak in the liner, which is the source of water covered under this discharge permit. Water is collected in an 8-inch drainpipe under the liner, which flows through a Parshall flume and then down the unnamed drainage to a small pond and then to Bridger Creek. Ground water from under the liner may also be collected in the 8-inch pipe. The total discharge flow, as reported on facility discharge monitoring reports (DMRs) is approximately 96 gallons per minute (gpm).

Since the effluent discharged to the unnamed drainage is the direct leakage collected in the 8-inch pipe underneath the storage reservoir liner, the water quality of the effluent is the same as the water quality of the potable drinking water. The facility uses a dichlorination system featuring a dry chemical tablet feed process to remove chlorine from the effluent.

The dichlorination dry chemical tablet feeder has a flow capacity of 20,000 gallons per day (gpd) to 200,000 gpd [13.9 gpm to 138.9 gpm]. Water collected in the 8-inch drainpipe is dechlorinated with tablets containing sodium sulfite or calcium thiosulfate. Tablets are formulated to maintain a controlled dosage based on the flow rate to remove chlorine to non-detectable levels.

## C. Existing Permit Requirements

Table 1: Numeric Discharge Limitations: Outfall 001					
Parameter	Units	Average Monthly	Daily Maximum		
pH <sup>(1)</sup>	s. u.	In the range of $6.5 - 8.5$			
Total Residual Chlorine (TRC)(2)	mg/L	0.00165	0.1		
Fluoride <sup>(3)</sup>	mg/L	$0.6^{4)}$	$0.6^{(4)}$		

#### Footnotes:

- 1. Effluent pH shall remain between 6.5 and 8.5 (instantaneous minima and maxima). Any single analysis beyond this limitation shall be considered a violation of the permit conditions.
- 2. Sampling of effluent with analytical results less than 0.1 mg/L is considered in compliance with the both the average monthly and daily maximum chlorine limits.
- 3. The 2017 permit continued the effluent limitations set from the 2010 permit that established a daily maximum fluoride limit based on the nonsignificance criteria of ARM 17.30.715. There is no acute or chronic water quality standard for fluoride. The human health standard is 4 mg/L, 15% of the human health standard (the lowest standard) for fluoride is 0.6 mg/L. This value is the nonsignificant effluent limitation for fluoride.
- 4. The AML is the highest allowable value for the average daily discharges obtained over a calendar month. Since the discharge may not exceed 0.6~mg/L fluoride, the AML is equivalent to the MDL.

#### D. Effluent Characteristics

The effluent consists of natural spring water from the Lyman Creek Spring, chlorine and hydrofluosilicic acid (fluoride), which is added by the City of Bozeman. Fluoride is also naturally present in the spring water. Except for the addition of chlorine and fluoride no additional treatment is performed at the plant.

Because treatment has remained consistent for the past five years, effluent data from October 2017 - June 2023 were selected to represent the period of record (POR) and are representative of the facility's effluent quality. **Table 2** summarizes discharge monitoring data from October 31, 2017 through June 30, 2023 for the Lyman Creek WTP

Table 2: DMR Effluent Characteristics <sup>(1)</sup> October 2017 to June 2023							
Parameter	Location	Units	2017 Permit Limit	Monthly Average Value	Daily Maximum Value	Number of Records	
Flow	Effluent	gpm	((2)	96	175	69	
Chlorine, Total Residual	Effluent	mg/L	0.00165/0.1(3)	0.01	0.0800	61	
Fluoride	Effluent	mg/L	$0.6^{(4)}$	0.23	0.57	69	
рН	Effluent	s.u.	6.5 - 8.5	7.61 <sup>(5)</sup>	8.46	69	
Footnotes:							

- 1. Statistical values based on individual values reported on DMRs when available. Average or maximum reported values used when no others available.
- 2. No limit in previous permit. Monitoring requirement only.
- 3. Monthly average / daily maximum.
- 4. Instantaneous maximum.
- 5. Minimum.

## E. Compliance History

From May 4, 2012, through the most recent inspection conducted on January 13, 2023, there have been no reported violations. (MPDES 3560 Compliance Inspection Reports dated February 14, 2018 and January 13, 2023).

## III. Receiving Water: Unnamed Tributary to Bridger Creek

**A.** Potable drinking water from the leaking reservoir discharges to the receiving stream, which is an unnamed drainage. Prior to the perennial leak from the Lyman Creek WTP, the unnamed drainage was ephemeral and only flowed in response to precipitation and occasional waste or seepage from the Lyman Creek WTP. Should the city repair the leak in the future, it is assumed the drainage would revert to its ephemeral condition.

## **Receiving Water Summary**

The following information is used to develop water quality-based effluent limits:

• Water Use Classification: B-1

Watershed: Missouri Headwaters

Waterbody Name/Location
 Unnamed Tributary to Bridger Creek

Montana Stream Segment: N/A Unnamed Tributary/MT41H003 110 (Bridger

Creek)

USGS Hydrologic Unit Code: NoneUSGS Stream Gage: None

• Ecoregion: Middle Rockies

• Identified as Impaired: No (Unnamed Tributary)/ 2020 303(d) List (Bridger

Creek)

Total Maximum Daily Load (TMDL): None
 7Q10: 0 cfs
 Dilution Ratio (7Q10:facility design flow): N/A

#### **B.** Water Use Classification

According to Montana Water Use Classifications [ARM 17.30.610(1)(a)], the unnamed drainage and Bridger Creek are classified as B-1 waters. The goal of the state of Montana is to maintain B-1 class waters suitable for:

- drinking, culinary, and food processing purposes, after conventional treatment;
- bathing, swimming, and recreation;
- growth and propagation of salmonid fishes and associated aquatic life, waterfowl and furbearers;
- and agricultural and industrial water supply.

#### C. Impairments

The unnamed drainage is not listed on the 2020 303(d) list of impaired streams. Bridger Creek (MT41H003\_110) is listed on the 2020 303(d) list of impaired streams as not fully supporting aquatic life or primary contact recreation. Agricultural and drinking water beneficial uses have not been assessed. All necessary total maximum daily loads (TMDLs) for Bridger Creek are completed and approved. The watershed drains an area of about 63 square miles and major land uses comprise of grazing, hay, and grain

production, as well as recreational uses. The Bridger Bowl Ski Area is located near the upper reaches of Bridger Creek. The Lyman Creek WTP is not a source of any of the impairments and is not subject to a TMDL waste load allocation (WLA)other than to continue to comply with the terms and conditions of the MPDES permit.

#### Pollutants identified as causing impairments:

- Chlorophyll-a
- Nitrate/Nitrite (Nitrite + Nitrate as N)

#### Probable Sources of impairments:

- Grazing in riparian or shoreline zones
- Impacts from resort areas
- Unspecified unpaved road or trail

## D. Applicable Water Quality Standards

Each waterbody classification has numeric and narrative water quality standards designed to ensure that the beneficial uses are protected. Discharges to B-1 classified waters are subject to the specific water quality standards of:

- Administrative Rules of Montana 17.30 Subchapter 6
- Department Circular DEQ-7, Numeric Water Quality Standards
- Department Circular DEQ-12A, Base Numeric Nutrient Standards

In addition to these water quality standards, dischargers are also subject to:

- Administrative Rules of Montana 17.30 Subchapter 5; Mixing Zones
- Administrative Rules of Montana 17.30 Subchapter 7; Nondegradation of Water Quality

# IV. Rationale for Proposed Technology Based Effluent Limits (TBELs)

## A. Scope and Authority

The Montana Board of Environmental Review (BER) has adopted performance standards for point source discharges to state waters, under Title 17, Chapter 30, Subchapter 12. The Board has adopted by reference 40 CFR Subpart N which is a series of federal agency rules that adopt TBELs for existing sources and performance standards for new sources [Administrative Rules of Montana (ARM) 17.30.1207(1)]. National Effluent Limitation Guidelines (ELG) have not been promulgated under Subchapter N for potable water treatment plants.

In addition to Subchapter 12, the BER has adopted general treatment requirements that establish the degree of wastewater treatment required to maintain and restore the quality of state surface waters. This rule states that in addition to federal ELGs, the degree of wastewater treatment is based on the surface water quality standards; the state's nondegradation policy; the quality and flow of the receiving water; the quantity and quality of sewage, industrial wastes and other wastes to be treated; and the presence or absence of other sources of pollution on the watershed [ARM 17.30.635(1)].

When federal ELGs have not been promulgated for a point source category, the permit writer must develop TBELs based on best professional judgment using the criteria of ARM 17.30.1203(6).

When permitting discharges from other water treatment plants (WTP) in Montana, DEQ imposes BPJ TBELs based on typical treatment technology for wastewater from those facilities. Typical wastewater from a WTP results from backwashing filters during the drinking water treatment process. The treated drinking water goes to the public water supply distribution system and the reject (filter backwash) water is treated and discharged as wastewater. In such cases the pollutant of concern for the application of TBELs is total suspended solids (TSS), and the typical treatment process is a settling pond or basin. At these facilities, DEQ sets BPJ TBELs for TSS in the 30 to 45 mg/L range.

The Lyman Creek WTP differs from other drinking water treatment plants in that little treatment of the water is provided other than the addition of chlorine and fluoride. These two parameters are limited by water quality-based effluent limits that are equivalent to, or more stringent than any BPJ TBELs that could

be developed. Since the discharge consists of dechlorinated potable water, the TSS is naturally low, and no other treatment is necessary. Additional TBELs are not necessary for these parameters.

The 2010 permit established a BPJ TBEL for pH in the range of 6.5 to 8.5. This limitation is maintained in the 2017 permit and this renewal. The pH standard at ARM 17.30.623(2)(c) applies to the discharge: "Induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 8.5 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0." DEQ normally implements this water quality standard with a pH limit that must be maintained between 6.0 and 9.0 SU. The Lyman Creek WTP is subject to BPJ TBEL for pH in the range of 6.5 to 8.5. This limit is protective of the standard and no separate WQBEL is necessary.

#### **B.** Nondegradation

Montana's Nondegradation Policy prevents degradation of state waters and ensures that existing uses continue to be achieved. Existing sources that comply with the conditions of their permit and do not exceed the limits are not considered new or increased sources. The 2010 and 2017-issued permits based chlorine and fluoride effluent limitations on the nonsignificance criteria in ARM 17.30.715 and found that the discharge volume was nonsignificant. The discharge from Outfall 001 increases the upstream mean monthly flow in the unnamed drainage from 0 gpm (except for precipitation events) to 0.21 cfs, which is an increase greater than the threshold for nonsignificance determination (increase or decrease of by <15% of mean monthly flow; ARM 17.30.715(1)(a)). However, the Department has determined that the discharge flow volume from the Lyman Creek reservoir is nonsignificant because: 1) the increased discharge of 0.21 cfs is well within the capacity of the unnamed drainage; 2) the unnamed drainage is densely vegetated and stable; and 3) the discharge effluent is high quality spring water and will supplement the base flow conditions of Bridger Creek and will likely be beneficial to the aquatic ecosystem (75-5-301(5)(c), MCA, ARM 17.30.715(3). These effluent limits and findings are maintained in this renewal.

## C. Final Technology-Based Effluent Limits

Table 3. Technology-Based Effluent Limits for Outfall 001						
Parameter	Units	Average Monthly Limit	Average Weekly Limit			
рН	s.u.	6.5 – 8.5 (instantaneous)				

# V. Water Quality-Based Effluent Limits

Permits are required to include Water Quality-Based Effluent Limits (WQBELs) when TBELs are not adequate to protect state water quality standards. WQBELs are developed for each parameter demonstrating reasonable potential to cause or contribute to an excursion from any water quality standard.

# A. Scope and Authority

The Montana Water Quality Act states that a permit may only be issued if DEQ finds that it will not result in pollution of any state waters. No waste may be discharged that can reasonably be expected to violate any state water quality standards. Montana water quality standards define both water use classifications for all state waters and numeric and narrative standards that protect those designated uses. MPDES permit limitations must control all pollutants which will cause or have reasonable potential (RP) to cause or contribute to an excursion above any state water quality standard, including narrative criteria.

#### **B.** Pollutants of Concern

Pollutants and parameters are identified as a pollutant of concern for the following reasons:

Listed as TBELs

- Identified as needing WQBELs in the previously issued permit.
- Identified as present in effluent monitoring or otherwise expected present in the discharge.
- Associated with impairment which may or may not have a WLA in a TMDL

Parameters that may cause or contribute to a violation of water quality standards include those found in **Table 4.** Identification of a pollutant of concern (POC) is not an indication that WQBELs are necessary, but an indication that further evaluation is required.

Table 4. Identification of Pollutants of Concern				
Parameter	<b>Basis for POC Identification</b>			
Conventional Pollutants:				
рН	TBEL in Previous Permit			
Total Residual Chlorine (TRC)	WQBEL in Previous Permit			
Fluoride	WQBEL in Previous Permit			

#### C. Mixing Zone

A mixing zone is an area where the effluent mixes with the receiving water and certain water quality standards may be exceeded. Mixing zones must have the smallest practicable size, a minimum practicable effect on water uses, and definable boundaries. DEQ will determine the appropriateness of a mixing zone and will grant a mixing zone, deny the mixing zone, or grant an alternative or modified mixing zone. Rules governing the granting of mixing zones are found in Montana Code Annotated (MCA) 75-5-301 and in ARM 17.30.501 et seq. Discharges must also comply with the general prohibitions of ARM 17.30.637(1) which require that state waters, including mixing zones, must be free from substances which will:

- (a) settle to form objectionable sludge deposits or emulsions beneath the surface of the water or upon adjoining shorelines;
- (b) create floating debris, scum, a visible oil film (or be present in concentrations at or in excess of 10 milligrams per liter) or globules of grease or other floating materials;
- (c) produce odors, colors or other conditions as to which create a nuisance or render undesirable tastes to fish flesh or make fish inedible;
- (d) create concentrations or combinations of materials which are toxic or harmful to human, animal, plant or aquatic life; and
- (e) create conditions which produce undesirable aquatic life.

No mixing zone was requested or granted in the 2010, or 2017-issued permits. There is no upstream flow for granting dilution and a mixing zone. Effluent limitations must be met at the end of the discharge pipe.

## D. Reasonable Potential Analysis

DEQ uses a statistical approach outlined in Chapter 3 of EPA's *Technical Support Document for Water Quality-based Toxics Control* (TSD) to determine reasonable potential for individual pollutants to exceed water quality standards. **Section VI. Final Pollutant Evaluation** describes the full reasonable potential analysis for each pollutant of concern.

- 1. Critical Effluent Concentration (C<sub>d</sub>) Calculation: The facility's maximum reported effluent concentration (C<sub>max</sub>) is converted into the projected critical effluent concentration (C<sub>d</sub>). This accounts for variation in effluent concentration.
  - First, the statistical TSD 3-2 multiplier is determined by the data set, coefficient of variation (CV) and sample size at the 95<sup>th</sup> percentile confidence interval. A default CV of 0.6 is used if there are less than 10 samples.
  - Then the TSD 3-2 multiplier is applied to the facility's maximum reported effluent concentration  $(C_{max})$  to determine the critical effluent concentration  $(C_d)$ .
- 2. Parameters Not Allowed Dilution: If the  $C_d > WQS$ , reasonable potential exists.

3. *Parameters Allowed Dilution:* The steady-state mass balance model (Equation 1) is used to determine the projected receiving water concentration ( $C_r$ ). If  $C_r > WQS$ , reasonable potential exists.

Equation 1. Using the Mass Balance Equation to Determine Reasonable Potential

Mass Balance Equation:  $Q_sC_s + Q_dC_d = Q_rC_r$ 

Receiving Water Pollutant Concentration:  $C_r = \frac{Q_d C_d + Q_s C_s}{(Q_r)}$ 

Variable: Calculated As:

 $Q_s = upstream \ flow$   $Q_s = dilution \ flow \ from \ Part \ V. \ C$   $Q_d = discharge \ flow$   $Q_d = average \ daily \ design \ flow$ 

 $Q_r = receiving flow after discharge$   $Q_r = Q_s + Q_d$ 

 $C_s = upstream \ pollutant \ conc.$   $C_s = 75th \ percentile \ critical \ instream \ conc.$   $C_d = discharge \ pollutant \ conc.$   $C_d = max \ effluent \ concentration \cdot TSD \ multiplier$ 

#### E. Water Quality-Based Effluent Limits Development

DEQ uses the approach outlined in Chapter 5 of EPA's TSD Manual to develop WQBELs for each pollutant. WQBELs are expressed as **maximum daily limit (MDL)** and **average monthly limit (AML)**.

- The maximum daily limit (MDL) is the highest allowable discharge measured during a calendar day or 24-hour period representing a calendar day.
- The average monthly limit (AML) is the highest allowable value for the average of daily discharges over a calendar month.

Each parameter's MDL and AML is derived from a **wasteload allocation (WLA).** The WLA is the concentration of a pollutant that the point source can discharge while conforming to DEQ implementation policies and assuring applicable water quality standards are attained in the receiving water.

WQBEL development is detailed on a parameter-by-parameter basis in **Section VI. Final Pollutant Evaluation.** 

#### VI. Final Pollutant Evaluation

#### A. Conventional Pollutants:

- 1. pH: The pH standard at ARM 17.30.623(2)(c) applies to the discharge: "Induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 8.5 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0". DEQ normally implements this water quality standard with a pH limit that must be maintained between 6.0 and 9.0 SU. The Lyman Creek WTP is subject to a BPJ TBEL for pH in the range of 6.5 to 8.5. This limit is protective of the standard and no separate WQBEL is necessary.
  - No additional limits are necessary TBELs adequately control these pollutants.

#### **B.** Nonconventional Pollutants:

#### 1. Total Residual Chlorine

The acute water quality standard for TRC is 0.019 mg/L; the chronic standard is 0.011 mg/L (Circular DEQ-7). The 2010 and 2017 permit imposed a monthly average TRC limit of 0.00165 mg/L based on the nonsignificance criteria of ARM 17.30.715, and a maximum daily limit of 0.1 mg/L based on the required reporting value (RRV) for chlorine. The 2010 and 2017 permit allow that any non-detect analysis at the RRV of 0.1 mg/L is considered in compliance with both the monthly average and daily maximum limits. These limits and monitoring requirements are continued in this renewal.

#### 2. Fluoride

The human health water quality standard for fluoride is 4 mg/L. There are no aquatic life standards for fluoride.

The 2010 and 2017 permits established a daily maximum effluent limit of 0.6 mg/L based on the nonsignificance criteria of ARM 17.30.715. This limit is continued in this renewal.

## D. Whole Effluent Toxicity Testing

Water quality standards require that state waters be free from substances attributable to municipal waste that create conditions which are harmful or toxic to human, animal, plant or aquatic life, and provides the basis for whole effluent toxicity (WET) requirements in MPDES permits. Lyman Creek WTP does not discharge municipal waste, WET testing will not be required in this permit renewal.

VII. Final Effluent Limits- The final effluent limitations are the more stringent limits of the technology-based and water quality-based effluent limits developed. The final effluent limits in Table 5 will be applied to the discharge at Outfall 001 beginning on the permit effective date and lasting through the term of the permit.

Table 5: Proposed Final Effluent Limits						
	Units	Effluent Limitations				
Parameter		Average Monthly Limit	Average Weekly Limit	Maximum Daily Limit	Instantaneous Maximum Limit	
pH <sup>(1)</sup>	s.u.	In the range of $6.5 - 8.5$				
Total Residual Chlorine (TRC) <sup>(2)</sup>	mg/L	0.00165		0.1		
Fluoride	mg/L			0.6		

#### Footnotes:

- (1) Effluent pH shall remain between 6.5 and 8.5 (instantaneous minima and maxima). For compliance purposes, any single analysis and/or measurement beyond this limitation shall be considered a violation of the conditions of this permit.
- (2) Sampling results reported as less than 0.1 mg/L is considered in compliance with both the average monthly and maximum daily limits.

# VIII. Monitoring and Reporting Requirements

#### A. Requirement to Monitor and Report

Lyman Creek WTP must monitor its effluent. The samples collected and analyzed must be representative of the volume and nature of the facility's discharge. The Required Reporting Value is DEQ's best determination of a level of analysis that can be achieved by the majority of commercial, university, or governmental laboratories using EPA-approved methods or methods approved by DEQ, unless another reporting level is specified by DEQ, in writing.

- Monitoring will start with the effective date of the permit and last for the duration of the permit...
- All analytical procedures must comply with the specifications of 40 CFR Part 136.
- Lyman Creek WTP must submit NetDMR results for each month by the 28<sup>th</sup> of the following month.

# B. Monitoring Locations, Frequency, Sample Type, and Calculations

The monitored parameters, their respective monitoring locations, and the reporting requirements are presented in **Table 6.** 

#### 1. Effluent Monitoring

Effluent samples must reflect the nature and effect of the discharge at the frequency presented in **Table 6.** The effluent grab sample must be obtained after the Parshall flume, which is located approximately 100 feet downstream from the 8-inch drainpipe (see Figure 1).

Table 6: Outfall 001 Monitoring and Reporting Requirements							
Parameter	Units	Sample Location	Minimum Sample Frequency	Sample Type <sup>(1)</sup>	Reporting Requirements	Reporting Frequency	Required Reporting Value
Flow	mgd	Effluent	Weekly	Instantaneous	Monthly Average Daily Maximum	Monthly	NA
pН	s.u.	Effluent	Weekly	Instantaneous	Monthly Maximum Monthly Minimum	Monthly	NA
Total Residual Chlorine (TRC)	mg/L	Effluent	Weekly	Grab	Monthly Average Daily Maximum	Monthly	0.1
Fluoride	mg/L	Effluent	Weekly	Grab	Daily Maximum	Monthly	0.2

#### Footnotes:

NA = Not applicable.

1. See Definition section at end of permit for explanation of terms.

## 2. Additional Reporting Requirements

Analytical methods in 40 CFR Part 136 requires TRC samples to be analyzed immediately. On-site sampling for TRC with a chlorine meter using an approved method is required. The method must achieve a minimum detection level of 0.1 mg/L. Effluent samples with an analytical result less than 0.1 mg/L are considered in compliance with the TRC effluent limitation.

All sample analyses must conform to analytical methods in 40 CFR Part 136.

#### 3. Nonsignificance Determination

The facility must meet nondegradation limitations for TRC and fluoride to ensure the discharge from the Lyman Creek Reservoir is nonsignificant [ARM 17.30 715(1)(c)]. Based on 75-5-301(5)(c), MCA and ARM 17.30.715(3), the Department has determined the discharge flow volume from Lyman Creek reservoir is nonsignificant because: 1) the increased discharge of 0.19 cfs is well within the stream channel capacity of the unnamed drainage; 2) the unnamed drainage is densely vegetated and stable; and 3) the discharge effluent is high quality spring water (after TRC and fluoride is removed) and will supplement the base flow condition of Bridger Creek and will be beneficial to the aquatic ecosystem.

# IX. Public Participation

DEQ issued Public Notice No. MT-24-08 dated August 19, 2024. The public notice states that a tentative decision has been made to issue an MPDES permit to the Permittee and that a draft permit, fact sheet and environmental assessment (EA) have been prepared. Public comments are invited any time prior to the close of the business on September 19, 2024. Comments may be directed to:

Department of Environmental Quality Water Protection Bureau PO Box 200901 Helena, MT 59620 or DEQWPBPublicComments@mt.gov

All comments received or postmarked prior to the close of the public comment period will be considered in the formulation of the final permit. DEQ will respond to all substantive comments and issue a final decision within sixty days of the close of the public comment period or as soon as possible thereafter.

All persons, including the applicant, who believe any condition of a draft permit is inappropriate or that DEQ's tentative decision to deny an application, terminate a permit, or prepare a draft permit is inappropriate, shall raise all reasonably ascertainable issues and submit all reasonably available arguments supporting their position by the close of the public comment period (including any public hearing).

#### A. Notification of Interested Parties

Copies of the public notice were mailed to the discharger, state and federal agencies and interested persons who have expressed an interest in being notified of permit actions. A copy of the distribution list is available in the administrative record for this permit. In addition to mailing the public notice, a copy of the notice and applicable draft permit, fact sheet and EA were posted on DEQ's website for 30 days.

Any person interested in being placed on the mailing list for information regarding this MPDES permit should contact DEQ, reference this facility, and provide a name, address, and email address.

#### **B.** Public Hearing

During the public comment period provided by the notice, DEQ will accept requests for a public hearing. A request for a public hearing must be in writing and must state the nature of the issue proposed to be raised in the hearing.

## C. Permit Appeal

After the close of the public comment period, DEQ will issue a final permit decision. A final permit decision means a final decision to issue, deny, modify, revoke and reissue, or, terminate a permit. A permit decision is effective 30 days after the date of issuance unless a later date is specified in the decision, a stay is granted, or the applicant files an appeal pursuant to 75-5-403, MCA.

The Applicant may file an appeal within 30 days of DEQ's action to the following address:

Secretary, Board of Environmental Review Department of Environmental Quality 1520 East Sixth Avenue PO Box 200901 Helena, Montana 59620-0901

#### **D.** Additional Information

Requests for additional information or questions regarding this permit should be directed to the Water Protection Bureau at 406-444-5546.

## VIII. Information Sources

Federal Water Pollution Control Act (Clean Water Act), 33 U.S.C. §§ 1251-1387, October 18, 1972, as amended 1973-1983, 1987, 1988, 1990-1992, 1994, 1995 and 1996.

Montana Code Annotated (MCA), Title 75-5-101, et seq., "Montana Water Quality Act,".

Administrative Rules of Montana Title 17 Chapter 30 - Water Quality

Subchapter 2 - Water Quality Permit and Application Fees.

Subchapter 5 - Mixing Zones in Surface and Ground Water.

Subchapter 6 - Montana Surface Water Quality Standards and Procedures.

Subchapter 7- Nondegradation of Water Quality

Subchapter 12 - MPDES Standards.

Subchapter 13 - MPDES Permits.

Montana Department of Environmental Quality. Circular DEQ-7, Montana Numeric Water Quality Standards. June 2019.

Montana Department of Environmental Quality. Montana 2020 Integrated Report and 303(d) List. A Compilation of Impaired and Threatened Water bodies in Need of Water Quality Restoration. Part A. Water Quality Assessment Results.

Montana Pollutant Discharge Elimination System Permit Number MT0031631: Administrative Record

Renewal Application DEQ Form 1 and 2E, Revised February 2021

US Code of Federal Regulations, 40 CFR Parts 122-125, 130-133, 136 and 442.

US EPA NPDES Permit Writers' Manual, EPA 833-K-10-001, September 2010.

US EPA. EPA Region VIII Mixing Zones and Dilution Policy. December 1994 (Updated September 1995).

US EPA Technical Support Document for Water Quality-Based Toxics Control, EPA/505/2-30-001, March 1991.

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Date: July 2024

