

**U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 8  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
STATEMENT OF BASIS**

PERMITTEE:	United States Bureau of Reclamation
FACILITY NAME AND ADDRESS:	Yellowtail Dam Wastewater Treatment Facility  USBR Yellowtail Dam 2 Ave B Yellowtail, MT 59035
PERMIT NUMBER:	MT0022993
RESPONSIBLE OFFICIAL:	Chris Wright, Deputy Area Manager Phone: (406) 247-7557 Email: cawright@usbr.gov
FACILITY CONTACT:	Josh Anderson Phone: (406) 666-3206 Email: jjanderson@usbr.gov
PERMIT TYPE:	Indian Country, Minor Permit, Federal Facility, Domestic Sewage Permit Renewal
FACILITY LOCATION:	S ½ of Section 18, Township 6S, Range 31E  Latitude 45.3075° N and Longitude 107.9575° W  Crow Reservation, Big Horn County, Montana

## **1 INTRODUCTION**

This statement of basis (SoB) is for the issuance of a National Pollutant Discharge Elimination System (NPDES) permit (the Permit) to the United States Bureau of Reclamation for the Yellowtail Dam Wastewater Treatment Facility (Facility). The Permit establishes discharge limitations for any discharge of wastewater from the Facility through Outfall 001 to the Yellowtail Afterbay located on the Bighorn River. The SoB explains the nature of the discharges, EPA's decisions for limiting the pollutants in the wastewater, and the regulatory and technical basis for these decisions.

The Facility is located on the Crow Reservation and the National Park Service's Bighorn Canyon National Recreation Area. EPA Region 8 is the permitting authority for facilities located in Indian country, as defined in 18 U.S.C. § 1151, located within Region 8 states and implements federal environmental laws in Indian country consistent with the [EPA Policy for the Administration of Environmental Programs on Indian Reservations](#) and the federal government's general trust responsibility to federally recognized Indian tribes.

## **2 MAJOR CHANGES FROM PREVIOUS PERMIT**

- Percent removal calculation requirements have been added back into the permit for total suspended solids (TSS) and biochemical oxygen demand (BOD<sub>5</sub>). See Section 6.1.

## **3 BACKGROUND INFORMATION**

This Permit is for the discharge from the wastewater treatment facility (WWTF) that treats the sanitary wastewater from the 20 employees who work four days per week at the Yellowtail Dam and power plant. The dam, which is operated by the Bureau of Reclamation, is located on the Bighorn River in southeastern Montana within the Crow Reservation and the National Park Service's Bighorn Canyon National Recreation Area. The WWTF is located just east of the power plant at the base of the dam, and it discharges continuously from one outfall, Outfall 001 (near the east bank) to the Yellowtail Afterbay Reservoir/Bighorn River. The design flow of the WWTF is 0.0006 million gallons per day (MGD).

**Figure 1. Location of Facility and Discharge Point a/**



a/ Image provided by Facility in 2016 permit application

### 3.1 Treatment Process

The Yellowtail Dam WWTF is a package plant operating on a separate sanitary sewer and includes an extended mechanical aeration treatment plant with two trickling sand filters and ultraviolet (UV) disinfection. Only one sand filter is used at a time, with the other kept in reserve until it is needed. There is no flow measuring device, but effluent flows are estimated using a flow meter in the treatment/distribution system. Over the past year, the WWTF flows have averaged between 2,400 and 3,000 gallons per month. Effluent samples are collected at the sampling valve located downstream of the UV disinfection unit and just before the discharge piping goes back into the concrete.

### 3.2 Chemicals Used

No chemicals are used to treat wastewater at the Yellowtail Dam WWTF.

## 4 PERMIT HISTORY

According to EPA records maintained for the Facility, this renewal is at least the 5<sup>th</sup> issuance of this NPDES permit. The previous permit for the Facility became effective on November 1, 2016 and was set to expire on October 31, 2021. The Facility submitted a permit renewal application prior to the permit's expiration, and thus the previous permit was administratively continued.

### 4.1 Discharge Monitoring Report (DMR) Data

Discharge monitoring data was evaluated for an approximate five-year period ending with the date of query in the ICIS database (January 1, 2017– July 7, 2022). Twelve instances of potential non-compliance were identified by ICIS during this timeframe; two of these were for overdue monitoring results, and ten were for reported numeric effluent exceedances. Summaries of DMR data submitted for Outfall 001 are provided in Table 1 below, and the Facility's potential non-compliance data is listed in Table 2 below.

The permit record indicates that the Facility received notifications of effluence exceedances in March and April 2017, March and August of 2018, and April and September of 2020. The BOD<sub>5</sub> exceedance identified on March 29<sup>th</sup> 2017 was due to the failure of a valve between two sand filters resulting in a 30-Day Average of 36mg/L. Monitoring data was not reported for *E. coli* in March 2017, the permit record does not account for the exclusion of *E. coli* in reporting data. Available monitoring data from April 2017 indicates that *E. coli* limitations were exceeded. The permit record indicates that changes to the sewer system at the Facility may have contributed to these monitoring results.

In March 2018, an exceedance of the BOD<sub>5</sub> 30-Day Average limitation was documented in the permit record. The Facility operator cited the process of switching out sand filters as well as the influence of inflow and infiltration issues in the collection system as being the likely reasons for this exceedance. In September 2018, the Facility reported *E. coli* monitoring results in exceedance of permit limitations. The initial sample sent in early September was incorrectly processed and the Facility resampled and received a corrected result on September 28<sup>th</sup>, 2018. The result received on September 28<sup>th</sup> was in exceedance of permit limitations. The Facility did not have an opportunity to make changes between sampling events in September but replaced their UV light in early October.

In September 2020, the Facility received a Significant Noncompliance (SNC) warning. Exceedances of *E. coli* limitations were documented in April and June 2020. Monitoring data in exceedance of BOD<sub>5</sub> limitations were also reported in April 2020. The permit record indicates that the exceedances may have been related to COVID-19 which resulted in changes in employee schedules and availability as well as in changes to the contents and volume of influent.

**Table 1. Summary of the DMR Data (January 1, 2017 – July 7, 2022) for Outfall 001 from EPA’s Integrated Compliance Information System (ICIS) database (date accessed July 7, 2022)**

Parameter	Permit Limit(s)	Reported Average	Reported Range	Number of Data Points	Number of Exceedances
Discharge Volume, million gallons per day (mgd)	N/A	0.00019	0.000001 - 0.001	120	N/A
5-Day Biochemical Oxygen Demand (BOD <sub>5</sub> ), 7-Day average, mg/L	45	13.74 <u>a/</u>	3.40 – 66	28	1
5-Day Biochemical Oxygen Demand (BOD <sub>5</sub> ), 30-Day average, mg/L	30	13.74 <u>a/</u>	3.40 – 66	28	3
Total Suspended Solids (TSS), 7-Day Average, mg/L	45	11.71 <u>a/</u>	10 - 14	7	0
Total Suspended Solids (TSS), 30-Day Average, mg/L	30	11.71 <u>a/</u>	10 - 14	7	0
<i>E. coli</i> , Daily Maximum, cfu/100 mL	410	113.48 <u>a/</u>	1 – 1600	35	4
<i>E. coli</i> , 30-Day Average, cfu/100 mL	126	113.48 <u>a/</u>	1 – 1600	35	4
pH, s.u.	<u>b/</u>	7.34	6.56 – 8.01	120	0
Oil & Grease; visual	<u>c/</u>	0	N/A	59	0

a/ The Facility appears to have reported the same value for both 7-Day and 30-Day Average in every instance of monitoring possibly due to only one sample having been collected and analyzed.

b/ The pH of the discharge shall not be less than 6.5 or greater than 9.0 at any time.

c/ There shall be no discharge of floating solids or visible foam in other than trace amounts. There shall be no discharge which causes a visible oil sheen in the receiving water.

**Table 2. Summary of Potential Non-Compliance**

Parameter	Permit Limit(s)	Type	Month	Comments
5-Day Biochemical Oxygen Demand (BOD <sub>5</sub> ), 7-Day average, mg/L	45	Numeric	April 2020	Reported 66 mg/L; <b>47% over permit limit</b>
5-Day Biochemical Oxygen Demand (BOD <sub>5</sub> ), 30-Day average, mg/L	30	Numeric	March 2017	Reported 36 mg/L; <b>20% over permit limit</b>

Parameter	Permit Limit(s)	Type	Month	Comments
		Numeric	March 2018	Reported 34 mg/L; <b>13% over permit limit</b>
		Numeric	April 2020	Reported 66 mg/L; <b>120% over permit limit</b>
<i>E. coli</i> , Daily Maximum, cfu/100 mL	410	Report Overdue	March 2017	Monitoring for limit not reported
		Numeric	April 2017	Reported 1600 cfu/100mL; <b>290% over permit limit</b>
		Numeric	September 2018	Reported 1000 cfu/100mL; <b>144% over permit limit</b>
		Numeric	June 2020	Reported 660 cfu/100mL; <b>61% over permit limit</b>
<i>E. coli</i> , 30-Day Average, cfu/100 mL	126	Report Overdue	March 2017	Monitoring for limit not reported
		Numeric	April 2017	Reported 1600 cfu/100mL; <b>1,170% over permit limit</b>
		Numeric	September 2018	Reported 1000 cfu/100mL; <b>694% over permit limit</b>
		Numeric	April 2020	Reported 660 cfu/100mL; <b>424% over permit limit</b>

#### 4.2 Other Facility History

N/A

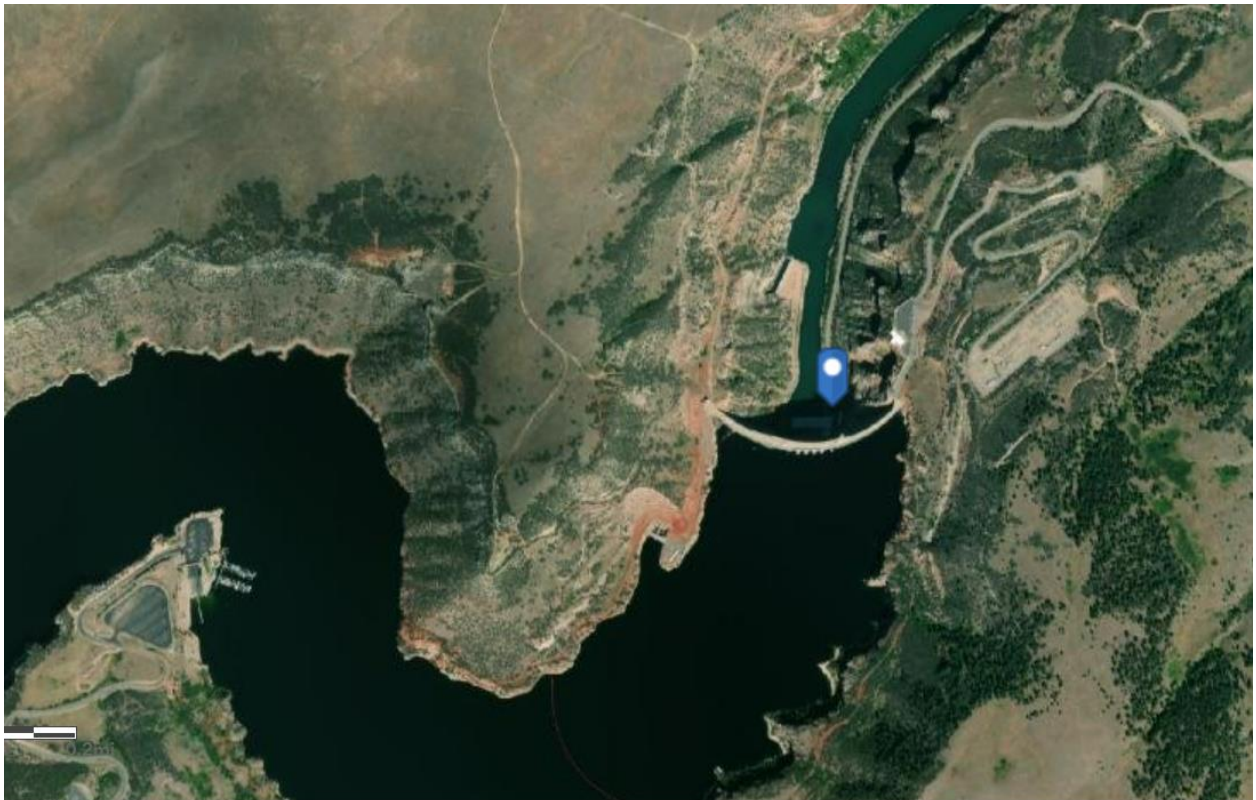
### 5 DESCRIPTION OF RECEIVING WATER

The discharge from the WWTF goes to the Afterbay Reservoir/Bighorn River downstream of the Yellowtail Dam. The reservoir is approximately 2.2 miles long, has a surface area of approximately 181 acres, and a capacity of approximately 3,140 acre-feet. The primary purpose of the reservoir is to minimize the downstream effects of variable flows coming from the Yellowtail Dam. Minimum flows from Yellowtail Dam are unknown, but there is a USGS gaging station on the Bighorn River (USGS 06287000) just downstream from the Afterbay Reservoir dam. The flow records for this gaging station for the period October 1, 1985, to December 1, 2014, show a 7 day low flow average of 1,240 cfs. The BOR tries to maintain a minimum flow of 2,000 or 2,500 cfs from the reservoir if the water is available. To maintain that



minimum level of discharge from the Afterbay, discharges from the dam into the reservoir must be roughly the same. According to the Permittee, the flow from the dam into the reservoir is very seldom zero, and then only for a brief period of time. Using the minimum flow measured at the gaging station since 1985 to represent the critical condition for the reservoir (i.e., 1,240 cfs) and the design flow for the WWTF of 0.000928 cfs (0.0006 MGD), the dilution ratio for the discharge is over 4,000,000:1

**Figure 2. Facility Receiving Water a/**



**a/** Facility discharge point called out by blue arrow shown on aerial. Image generated using EPA GeoPlatform with ESRI World Imagery Base Map, August 2022.

## **6 PERMIT LIMITATIONS**

### **6.1 Technology Based Effluent Limitations (TBELs)**

The secondary treatment standards (40 CFR Part 133) have been developed by EPA and represent the level of effluent quality attainable through the application of secondary or equivalent treatment. The regulation applies to all publicly owned treatment works (POTWs). Although the WWTF treats sanitary wastewater, the Facility is not considered a publicly owned treatment works (POTW) under the Clean Water Act (CWA) because it is owned by the federal government. To be considered a POTW, the treatment works must be owned by a state or municipality (as defined by section 502(4) of the CWA). However, the TBELs in the current Permit were determined using best professional judgement (BPJ) as provided for by section 402(a)(1) of the CWA. Because sanitary wastewater is being treated, BPJ was used to align the effluent limitations with the National Secondary Standards (NSS) as described in 40 CFR Part

133.102. Secondary treatment is defined in terms of effluent quality as measured by BOD<sub>5</sub>, TSS, pH, and percent removal of BOD<sub>5</sub> and TSS. The TBELs for the Facility are listed in Table 3.

**Table 3. Secondary treatment standards**

Parameter	30-day average (mg/L)	7-day average (mg/L)	30-day average percent removal (%)
BOD <sub>5</sub>	30	45	≥85
TSS	30	45	≥85
pH	Maintained within the limits of 6.0 to 9.0 <u>a/</u>		

a/ EPA’s 304(a) criterion for pH in freshwater is 6.5 to 9.0, which is more stringent than the TBEL, and will apply as the WQBEL. See Table 4 for Final Effluent Limitations.

Percent removal requirements generate data that can be used to assess whether inflow, infiltration, or other forms of dilution are impacting the WWTF’s operation. The previous permit determined that percent removal requirements should be removed from the permit because the wastewater at the Yellowtail Dam WWTF differs from a municipality and goes directly from the power plant to the WWTF, infiltration and intentional dilution are not concerns and the percent removal requirements for TSS and BOD<sub>5</sub> are not applicable to this facility (Final Statement of Basis MT-0022993, Permit Renewal 2016). However, review of the Facility’s monitoring data and compliance history indicates that the Facility has historical challenges meeting the 30-day and 7-day average limitation for BOD<sub>5</sub> (see Table 2). 30-day percent removal requirements will be added to this permit issuance because this monitoring will provide an additional metric by which system performance can be evaluated.

## 6.2 Water Quality Based Effluent Limitations (WQBELs)

The Facility discharges to the Bighorn River in the Afterbay Reservoir downstream of the Yellowtail Dam. The receiving water is within the Crow Reservation and the National Park Service’s Bighorn Canyon National Recreation Area. The Crow Tribe does not have EPA-approved water quality standards under Section 303(c) of the Clean Water Act (CWA). Section 101(a)(2) of the CWA states, “[I]t is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water to be achieved by July 1, 1983.” To achieve this Congressional goal in the absence of federally-approved Tribal water quality standards (WQS) on the Reservation, EPA considers the beneficial uses of the receiving waters to include drinking, culinary, and food processing; bathing, swimming, and recreation; growth and propagation of fishes and associated aquatic life; and agricultural and industrial water supply. EPA relied on CWA § 301(b)(1)(C) and principles of Tribal sovereignty in establishing WQBELs based on EPA’s Section 304(a) recommended water quality criteria (WQC).

### 6.2.1 Oil and Grease

EPA Region 8 has developed a technology based and water quality based guidance on oil and grease for POTWs. It states “if a visible sheen or floating oil is detected in the discharge, a grab sample shall be taken immediately, analyzed and recorded in accordance with the requirements of 40 CFR Part 136. The concentration of oil and grease shall not exceed 10 mg/L in any



sample.” The visual narrative “sheen or floating oil” requirement was developed in alignment with 40 CFR § 401.16 which lists “oil and grease” as a conventional pollutant (as related to technology-based limitations in line with 40 CFR § 125.3(h)(1)) pursuant to section 304(a)(4) of the Act, as well as the National Recommended Aquatic Life Criteria which recommends that “surface waters shall be virtually free” from floating oils of petroleum origin and floating nonpetroleum oils of vegetable or animal origin, as “floating sheens of such oils result in deleterious environmental effects.”

However, the previous permit removed the 10 mg/L limit because the influent to the Facility was determined to be low risk for oil and grease products and the Facility’s monitoring at the time of the previous permit issuance indicated, based on daily monitoring via observation, zero observances of oil and grease since the limit was put in place in the 2005 permit. In light of this information, EPA concluded that oil and grease was mistakenly identified as a pollutant of concern for this facility, and there is no reasonable potential for oil and grease to be in the discharge and thus to cause or contribute to an exceedance of the narrative 304(a) criteria in the Bighorn River. As a result, EPA has concluded that the 10 mg/L oil and grease effluent limit is not necessary to protect water quality, and thus the limit was removed from the permit.

The current permit application and permit record indicate that there are no identifiable sources of petroleum products or other oils and greases in the system. However, because it is possible that small quantities of oil and grease could be introduced to the system via a toilet or sink, the narrative prohibition on a visible oil sheen will remain in the permit.

### 6.2.2 pH

EPA has determined that the 304(a) criterion for pH in freshwater should be applied to ensure the protection of aquatic life and the receiving water’s current beneficial use as habitat for the growth and propagation of fishes and associated aquatic life. Therefore, discharges must be maintained within a pH range from 6.5 to 9.0 per guidance established by “EPA National Recommended Water Quality Criteria for Aquatic Life” (2002).

### 6.2.3 *Escherichia coli* (*E. coli*)

The previous permit applied *E. coli* WQBELs based on the EPA 304(a) recreational water quality criteria. EPA considers *E. coli* a pollutant of concern for facilities processing domestic waste. Furthermore, as mentioned in Section 6.2 above, due to the beneficial uses of receiving waters, there still exists a potential for primary recreational contact due to the bene EPA will utilize the adopted numeric human health criteria. Since there still exists a potential for primary recreational contact with the effluent as it is conveyed to and within, EPA will utilize the adopted numeric human health criteria for bacteria for the protection of primary contact recreational uses per EPA’s 2012 recommended *E. coli* criteria for primary contact recreation (“Recreational Water Quality Criteria”, Office of Water 820-F-12-058). These contact values for *E. coli* are 410 colonies/100 mL (statistical threshold value with an excursion frequency of 10% or less) and 126 colonies/100 mL (geometric mean). EPA has determined that the statistical threshold value of 410 colonies/100 mL with its ‘10% may not exceed’ criteria will be implemented as a daily maximum. EPA typically implements permit limits as either 30-day averages, 7-day averages, or daily maximums. Both a 30-day average and a 7-day average could allow exceedance rates much

higher than 10% of the time, while a daily maximum allows for no exceedances of this value. Since the Facility only samples for bacteria once per month (see Table 6), the daily maximum and ‘10% may not exceed’ criteria are equivalent for practical purposes. This is consistent with how EPA has issued other NPDES permits in Indian country in Region 8.

6.3 Final Effluent Limitations

Applicable TBELs and WQBELs were compared, and the most stringent of the two was selected for the following effluent limits (Table 4).

**Table 2. Final Effluent Limitations for Outfall 001**

<b>Effluent Characteristic</b>	<b>30-Day Average Effluent Limitations <u>a/</u></b>	<b>7-Day Average Effluent Limitations <u>a/</u></b>	<b>Daily Maximum Effluent Limitations <u>a/</u></b>	<b>Limit Basis <u>b/</u></b>
Biochemical Oxygen Demand (BOD <sub>5</sub> ), mg/L	30	45	N/A	TBEL
Biochemical Oxygen Demand (BOD <sub>5</sub> ) Percent Removal (%)	≥85	N/A	N/A	TBEL
Total Suspended Solids (TSS), mg/L	30	45	N/A	TBEL
Total Suspended Solids (TSS), Percent Removal (%)	≥85	N/A	N/A	TBEL
<i>Escherichia coli</i> ( <i>E. coli</i> ), number/100 mL	126	N/A	410	WQBEL
Oil and Grease (O&G), Visual	There shall be no discharge of floating solids or visible foam in other than trace amounts. There shall be no discharge which causes a visible oil sheen in the receiving water.			PP
Flow, gallons per day (gpd)	report only	N/A	report only	N/A
pH, s.u.	Must remain in the range of 6.5 to 9.0 <i>at all times</i>			WQBEL

a/ See section 1 of the Permit for definition of terms.

b/ WQBEL = Limitation based on water quality-based effluent limit; TBEL = Limitation based on technology based effluent limit; PP = Limitation based on previous permit

6.4 Antidegradation

The Crow Tribe does not have an antidegradation policy because they do not have approved water quality standards. There is no antidegradation requirement..

## 6.5 Anti-Backsliding

Federal regulations at 40 CFR Part 122.44(l)(1) require that when a permit is renewed or reissued, interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit unless the circumstances on which the previous permit were based have materially and substantially changed since the time the Permit was issued and would constitute cause for permit modification or revocation and reissuance under 40 CFR Part 122.62.

This permit renewal complies with anti-backsliding regulatory requirements. All effluent limitations, standards, and conditions in the Permit are either equal to or more stringent than those in the previous permit

## 7 MONITORING REQUIREMENTS

### 7.1 Self-Monitoring Requirements

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, as required in 40 CFR Part 122.41(j), unless another method is required under 40 CFR subchapters N or O.

#### 7.1.1 Nutrients

Nutrient parameters that were evaluated for reasonable potential in the 2016 permit issuance included: Ammonia, Nitrate/ Nitrite, Total Nitrogen (TN), and Total Phosphorus (TP). The 2016 permit issuance determined that reasonable potential did not exist for nutrients at this Facility and therefore no monitoring requirements or effluent limitations were applied at that time. As a result, no effluent data is available for these parameters at this time. Therefore, reasonable potential for these parameters will be evaluated qualitatively, as in previous issuances of this discharge permit.

##### *7.1.1.1 Total Nitrogen (TN) and Total Phosphorus (TP)*

At this time, the Crow Tribe does not have approved narrative or numeric standards for TN and TP. Likewise, EPA has not developed 304(a) criteria for these pollutants. The ecoregional value for TN is 0.38 mg/L and for TP is 0.029 mg/L. Currently, the Facility's average discharge is 0.00019 mgd or 0.0003 cfs. Flow data from USGS Gage 06287000 indicates that low flow in the Big Horn River in the area of the Facility's discharge averages at 1,240 cfs. Therefore, the ratio of receiving water flow to waste (the dilution ratio) is over 4,000,000:1, meaning the discharge would not change the concentration of the river and there is no reasonable potential for TN and TP. Based on this information, no effluent limits are necessary for TN and TP, and given the extremely high dilution ratio, no monitoring will be required.

##### *7.1.1.2 Ammonia*

EPA established table-based limitations for Ammonia in the 2013 guidance document "Aquatic Life Ambient Water Quality Criteria For Ammonia – Freshwater." Ammonia monitoring

requirements were previously excluded on the basis of a review of data from an upstream facility (Libby Dam WWTF) – the average pH of the effluent at that facility & the temperature of the reach being discharged to did not indicate an exceedance per EPA’s limit table. EPA’s water quality portal indicates that USGS Gage 06287000 is the closest upstream monitoring location for Big Horn Lake in the vicinity of Yellowtail Dam. This data confirms that the temperatures in Big Horn Lake have an all year average of 8.34°C, and a seasonal summertime (May-September) average of 10.91°C. Data from this gage also indicates that pH measurements average at about 8 s.u. all year round. Based on this information, and the significant dilution factor at this Facility, the assumptions of the previous permit issuance appear to stand. Therefore, ammonia monitoring will not be required in this permit.

7.1.1.3 Nitrate/ Nitrite

The EPA National Primary Drinking Water Regulations for nitrate of 10 mg/L and 1 mg/L for nitrite are the relevant water quality criteria based on protecting human health and the drinking water use of the receiving waters. Currently the Facility’s average discharge is 0.00019 mgd or 0.0003 cfs. Flow data from USGS Gage 06287000 indicates that low flow in the Big Horn River in the area of the Facility’s discharge averages at 1,240 cfs meaning the ratio of flow to waste (or the dilution ratio) is over 4,000,000:1. Due to the low ratio of effluent to receiving water flow at the Facility, Nitrate and Nitrite monitoring will not be required in this permit issuance.

7.2 Self-Monitoring Requirements – Outfall 001

Outfall 001 effluent characteristics that are subject to self-monitoring requirements (see Section 4 of the Permit) are listed in Table 6 below. The Facility discharges from Outfall 001 on a continuous basis. To ensure that potential variability in the effluent is properly characterized, composite samples will be required to monitor for most effluent characteristics except where monitoring parameters are not amenable to compositing.

Monitoring frequencies for flow, BOD<sub>5</sub>, TSS, *E. coli* and pH will remain as they were established in the previous permit issuance. The addition of percent removal monitoring requirements for BOD<sub>5</sub> and TSS should provide more data and insight into the system’s treatment efficacy and BOD<sub>5</sub> monitoring result variability over the last permitting cycle. Therefore, increased monitoring frequency is not required at this time.

**Table 6. Monitoring requirements for Outfall 001**

<b>Effluent Characteristic</b>	<b>Monitoring Frequency</b>	<b>Samples Type a/</b>	<b>Data Reported on DMR b/</b>
Flow, gpd	Daily	Grab	Daily Max. 30-Day Avg.
BOD <sub>5</sub> , mg/L	Monthly	Composite	Daily Max. 30-Day Avg.
BOD <sub>5</sub> , % removal	Monthly c/	Calculated	30-Day Avg. % removal
TSS, mg/L	Monthly	Composite	Daily Max. 30-Day Avg.

Effluent Characteristic	Monitoring Frequency	Samples Type <u>a/</u>	Data Reported on DMR <u>b/</u>
TSS, % removal	Monthly <u>c/</u>	Calculated	30-Day Avg. % removal
<i>Escherichia coli</i> ( <i>E. coli</i> ), number/100 mL	Monthly	Grab	Daily Max. 30-Day Avg.
O&G, visual	Weekly	Visual	Narrative
pH, s.u. <u>d/</u>	Monthly	Grab	Instantaneous Min. Instantaneous Max

a/ See section 1 of the Permit for definition of terms.

b/ Refer to the Permit for requirements regarding how to report data on the DMR.

c/ On a monthly DMR reporting basis, the BOD and TSS percent removal shall be calculated using the 30-day average values for influent and effluent BOD and TSS reported during that calendar month.

d/ pH measurements must be analyzed within fifteen (15) minutes of sampling.

### 7.3 Self-Monitoring Requirements – Influent Monitoring (001-I)

Influent monitoring sampling will consist of a minimum of a composite sample at least once per month, to be incorporated into calculations for reporting effluent TSS and BOD<sub>5</sub> percent removal associated with discharges. Influent samples shall be taken at any accessible influent structure or location that contains representative flow from the entire service area, prior to treatment. To ensure that potential variability in the influent is properly characterized, composite samples will be required. Monthly sampling was selected to align with the frequency of effluent sampling.

**Table 8. Influent Monitoring Requirements – 001-I**

Influent Characteristic	Frequency	Sample Type <u>a/</u>
Biochemical Oxygen Demand (BOD <sub>5</sub> ), mg/L	Monthly, <u>b/</u>	Composite
Total Suspended Solids (TSS), mg/L	Monthly, <u>b/</u>	Composite

a/ See section 1 of the Permit for definition of terms.

b/ A minimum of one BOD<sub>5</sub> and TSS grab sample will be taken at least once each month and will be used in the calculation for the 30-day average for the month in which they are performed. Additional samples may be taken at the Permittee’s discretion if a large amount of variability is anticipated in the influent within a month. Any additional sample results must be included in the 30-day average influent DMR reporting for the month in which the sampling is performed. If only one sample is taken within a month, that result will be the 30-day average for the month.

## 8 SPECIAL CONDITIONS

N/A

## **9 REPORTING REQUIREMENTS**

Reporting requirements are based on requirements in 40 CFR §§ 122.44, 122.48, and Parts 3 and 127. A discharge monitoring report (DMR) frequency of monthly was chosen, because the Facility typically discharges continuously.

## **10 COMPLIANCE RESPONSIBILITIES AND GENERAL REQUIREMENTS**

### **10.1 Inspection Requirements**

On a weekly basis, unless otherwise modified in writing by EPA, the Permittee shall inspect its treatment facility. The permittee shall document the inspection, as required by the Permit. Inspections are required due to ensure proper O&M in accordance with 40 CFR 122.41(e).

### **10.2 Operation and Maintenance**

40 CFR § 122.41(e) requires permittees to properly operate and maintain at all times, all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. In addition to an operation and maintenance plan, regular facility inspections, an asset management plan, and consideration of staff and funding resources are important aspects of proper operation and maintenance. Asset management planning provides a framework for setting and operating quality assurance procedures and helps to ensure the permittee has sufficient financial and technical resources to continually maintain a targeted level of service. Consideration of staff and funding provide the permittee with the necessary resources to operate and maintain a well-functioning facility. These requirements have been established in sections 6.3.3 and 6.3.4 of the Permit to help ensure compliance with the provisions of 40 CFR 122.41(e).

### **10.3 Industrial Waste Management**

N/A

## **11 ENDANGERED SPECIES CONSIDERATIONS**

The Endangered Species Act of 1973 requires all Federal Agencies to ensure, in consultation with the U.S. Fish and Wildlife Service (FWS), that any Federal action carried out by the Agency is not likely to jeopardize the continued existence of any endangered species or threatened species (together, “listed” species), or result in the adverse modification or destruction of habitat of such species that is designated by the FWS as critical (“critical habitat”). See 16 U.S.C. § 1536(a)(2), 50 CFR Part 402. When a Federal agency’s action “may affect” a protected species, that agency is required to consult with the FWS (formal or informal) (50 CFR § 402.14(a)).

The U.S. Fish and Wildlife Information for Planning and Conservation (IPaC) website (<https://ecos.fws.gov/ipac/>) was accessed on July 15, 2022 to determine federally-listed Endangered, Threatened, Proposed and Candidate Species for the area near the Facility. The



IPaC Trust Resource Report findings are provided below. The designated area utilized was identified in the IPaC search and covers the entire facility and immediate downstream areas.

**Table 9. IPaC Federally listed Threatened and Endangered Species**

Species	Scientific Name	Species Status	Designated Critical Habitat
Monarch Butterfly	<i>Danus plexippus</i>	Candidate <u>a/</u>	No critical habitat has been designated for this species.

a/ The monarch is a candidate species and not yet listed or proposed for listing.

### 11.1 Biological Evaluation

The Facility was previously covered under an EPA Region 8 wastewater individual permit.

Based on the IPaC information generated, there are currently no federally listed species in the project area, nor is there any critical habitat designated for any species within the project area. EPA’s determination is that there will be “No Effect” on any federally listed threatened or endangered species because of the information in Table 9. The Montana FWS field office representative was notified of the “no effect” determination on December 12<sup>th</sup>, 2022.

## 12 NATIONAL HISTORIC PRESERVATION ACT REQUIREMENTS

Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. § 470(f) requires that federal agencies consider the effects of federal undertakings on historic properties. The first step in this analysis is to consider whether the undertaking has the potential to affect historic properties, if any are present. See 36 CFR 800.3(a)(1). Permit renewals where there is no new construction are generally not the type of action with the potential to cause effects on historic properties.

## 13 401 CERTIFICATION CONDITIONS

At the time of the Permit reissuance, EPA was the Clean Water Act (CWA) Section 401 certifying authority for the Permit, because the Crow Tribe had not received authorization to implement Section 303(c) of the CWA. EPA has determined § 401 conditions are unnecessary, because EPA has determined the Permit protects Tribal water quality requirements.

## 14 MISCELLANEOUS

The effective date of the Permit and the Permit expiration date will be determined upon issuance of the Permit. The intention is to issue the Permit for a period not to exceed 5 years.

Permit drafted by Margaret Kennedy, U.S. EPA, (303) 312-6644 [July 2022]

## **ADDENDUM**

### **AGENCY CONSULTATIONS**

On December 12<sup>th</sup>, 2022, the FWS was notified of EPA's conclusion that the Permit reissuance will have "no effect."

### **PUBLIC NOTICE AND RESPONSE TO COMMENTS**

The Permit and statement of basis, including the CWA Section 401 certification, were public noticed on EPA's website on December 12<sup>th</sup>, 2022. No comments were received. Upon addressing all comments received during the public notice comment period related to Section 401 certification requirements, the signing of the Permit shall constitute EPA's Section 401 certification.