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

PERMITTEE:	City of Wolf Point
FACILITY NAME AND ADDRESS:	Wolf Point WWTF 201 4th Avenue South Wolf Point, MT 59201 (406) 395-4060
PERMIT NUMBER:	MT-0030571
RESPONSIBLE OFFICIAL:	Christopher M. Dschaak, Mayor
FACILITY CONTACT:	Ward Smith, Water/Wastewater Supervisor
PERMIT TYPE:	Indian country, minor permit, renewal
TYPE OF TREATMENT:	Aerated Lagoon System
FACILITY LOCATION:	North 1/2 of Section 22 Township 27N, Range 47E 48.081698° N Latitude, 105.633827° W Longitude
DISCHARGE LOCATION(S):	A ditch leading to the Missouri River 48.077958° N Latitude, 105.638808° W Longitude

1. Permit Status

This statement of basis is for the renewal of the National Pollutant Discharge Elimination (NPDES) Permit No.: MT-0030571 authorizing discharge from the City of Wolf Point Wastewater Treatment Facility (WWTF). The previous Permit was issued in 2011, with an effective date of October 1, 2011, and an expiration date of September 30, 2015. The application for Permit renewal was dated February 5, 2016.

The WWTF and its discharge are located within the boundaries of the Fort Peck Indian Reservation, which is home to the Assiniboine and Sioux Tribes. The Assiniboine and Sioux Tribes were granted treatment in a manner similar to a state (TAS) on August 29, 1996. The EPA has not approved the Tribes to implement the Clean Water Act (CWA) NPDES program in Indian country within the state of Montana. The EPA directly implements the CWA NPDES program on Indian country lands within the state of Montana. The EPA is issuing this Permit pursuant to the Agency's authority to implement the Clean Water Act NPDES program in Indian country as defined in U.S.C. 1151.

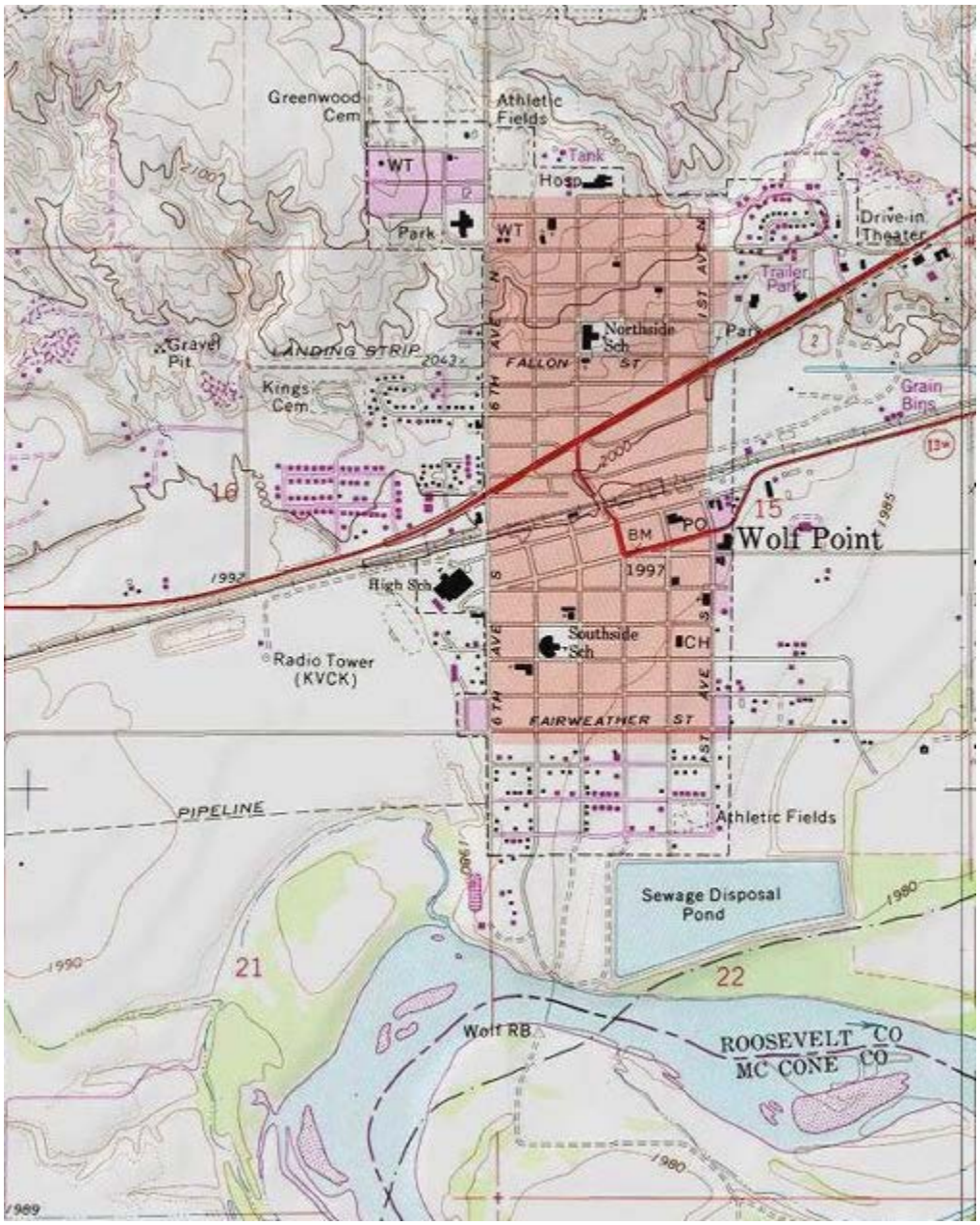
2. Facility Information

The WWTF is an aerated-facultative lagoon system, which was originally constructed in 1956. Modifications were made in 1988, 1994, 1999, 2004, and 2005. The WWTF presently serves a population of approximately 2,621. Current operations consist of Cells 1, 1A, and 2 (Figure 1). Cells 1 and 1A are the two small cells located at the east end of the lagoon system and are aerated. Cell 2 performs as a polishing cell. The cells are plumbed to either operate in series or in parallel. Plant processes do not include disinfection because the facility can meet Permit limits for bacteria without installing disinfection facilities. The discharge is located near the southwest corner of Cell 2. Flow is measured at the discharge point by a flume. The discharge flows approximately 325 feet through a ditch to the Missouri River. The average design flow rate of the facility is 0.420 million gallons per day (mgd), with a maximum annual average flow rate from the past two years of 0.372 mgd and a maximum daily flow rate from the past two years of 1.233 mgd. The design treatment capacity is an average of 1,100 pounds per day (lbs./day) of organic loading, and the peak capacity is 1,440 lbs./day.

According to the Permit application, the WWTF may discharge two times per year in the fall (November-December) and spring (March-April). The duration of the discharge is one week. From October 2011 through January 2017, the facility reported discharges on its Discharge Monitoring Reports (DMR) eleven times. The collection system is 100 percent separate sanitary sewer lines. There are no industrial users that discharge to the facility. Sludge has not been removed from the cells during the term of the previous Permit.

Figure 1. Aerial view of Facility and flow schematic

Figure 2. Map of Wolf Point and the receiving water



2.1 Effluent Characteristics

A summary of self-monitoring effluent data for the period of record (POR) from October 2011 through January 2017 is included in Table 1.

Table 1. Summary of Self-Monitoring Data for March 2011-January 2017

		Value Reported b/				
Parameter a/	Minimum	Maximum	Average	Permit Limit(s)	No. of Reported Values	No. of Exceed-ances
BOD_5, mg/L, 30-day average	5	23.34	12.349	30	11	0
BOD_5, mg/L, 7-day average	5	23.34	12.667	45	11	0
TSS, mg/L, 30-day average	15	66.34	23.667	30	11	1
TSS, mg/L, 7-day average	15	66.34	24.485	45	11	1
Fecal Coliform, #/100 mL, 30-day average (geometric mean) c/	ND	176	40.25	200	8	0
Fecal Coliform, #/100 mL, 7-day average (geometric mean)	ND	450	74.5	400	8	1
E. coli, #/100 mL, 30-day average (geometric mean) (Apr-Oct) c/	1	110	28	126	8	0
E. coli, #/100 mL, daily maximum (single sample) (Apr-Oct) d/	3	330	55.75	235	8	1
E. coli, #/100 mL, 30-day average (geometric mean) (Nov-Mar) c/	50	120	85	126	2	0
E. coli, #/100 mL, 7-day average (geometric mean) (Nov-Mar) d/	9	120	59.67	235	3	0
pH, s.u., single sample	7.85	8.94	NA	6.5-9.0	11	0
Oil & Grease, mg/L, single sample	0	0	0	10	2	0
Total Nitrogen, mg/L	8	24.7	16.35	N/A	2	N/A
Ammonia Nitrogen, mg/L	1.49	20	10.74	N/A	2	N/A
Nitrite-Nitrogen, mg/L	0.06	0.22	0.14	N/A	2	N/A
Nitrate-Nitrogen, mg/L	0.06	0.22	0.14	N/A	2	N/A
Total Kjeldahl Nitrogen, mg/L	8	24.6	16.3	N/A	2	N/A
Total Phosphorus, mg/L	1.98	4.4	3.19	N/A	2	N/A

a/ See Definitions, Part 1.1 of the Permit, for definition of terms.

b/ This table shows the minimum, maximum, and average of values reported on the Discharger's monthly discharge monitoring reports. The values are calculated from the statistical basis of the limitation (30-day average, 7-day average, etc.) indicated in the "Parameter" column of the table.

c/ Though the limit for bacteria was expressed as a geometric mean in the Permit, the DMR value was reported as a 30-day average.

d/ Though the limit for bacteria was expressed as a single sample maximum in the Permit, the DMR value was reported as a 7-day average.

2.2 Compliance History

Based on DMR data provided by the Discharger, there were four effluent violations during the POR:

- The 30-day average limitation on TSS of 45 mg/L was exceeded once in October 2011 with a reported value of 66.34 mg/L.
- The 7-day average limitation on TSS of 30 mg/L was exceeded once in October 2011 with a reported value of 66.34 mg/L.
- The 7-day average fecal coliform limit of 400/100 mL (as expressed in the Permit) was exceeded once in April 2013 with a reported value of 450/100 mL. This value was reported on the DMR as a 7-day average.
- The daily maximum limitation on *E. coli* of 235/100 mL was exceeded once in April 2013 with a reported value of 330/100 mL.

During storm events, the Discharger has been forced to discharge to avoid lagoon overflow, leading to the individual violations noted.

3. Technology-Based Effluent Limits (TBELs)

Treated effluent from the Wolf Point WWTF is subject to the Secondary Treatment Regulations found at 40 C.F.R. Part 133. Regulations at 40 C.F.R. § 133.102 require that the minimum level of effluent quality for secondary treatment is 30-day average concentrations of BOD_5 and TSS that do not exceed 30 mg/L and 7-day average concentrations of these parameters that do not exceed 45 mg/L. The secondary treatment regulations also provide a limit for pH to be maintained between 6.0 and 9.0 standard units. The limit for pH contained in this Permit is more stringent than required by the secondary treatment regulations in order to protect water quality, as discussed below.

In accordance with 40 C.F.R. § 133.105, less stringent standards may be applied to certain types of facilities that employ treatment technologies deemed "equivalent to secondary." Publicly-Owned Treatment Works (POTWs) or other facilities treating sewage with trickling filters or waste stabilization ponds (wastewater treatment ponds) are capable of achieving significant reductions in BOD_5 and TSS, but might not consistently achieve the secondary treatment standards. To be eligible for discharge limitations based on these equivalent to secondary standards, a POTW must meet all of the following criteria specified in 40 C.F.R. § 133.101(g): the principal treatment process must be either a trickling filter or waste stabilization pond; the effluent quality consistently achievable through proper operation and maintenance of the treatment system is in excess of 30 mg/L BOD_5 and TSS; the treatment works as a whole provides significant biological treatment, which is defined in 40 C.F.R. § 133.101(k) as consistently attaining a minimum 65 percent removal of BOD_5 as a monthly average.

Though the Facility's principal biological treatment system is waste stabilization ponds, data from the previous Permit term indicates that the discharge from the WWTF has not exceeded the secondary standards for BOD_5 and that there has been a single instance of exceeding the secondary standards for TSS.

The maximum effluent concentration of BOD_5 reported was 23.34 mg/L. The limitation for BOD_5 established by the Secondary Treatment Regulations at 40 C.F.R. § 133.102, 30-day average concentrations that do not exceed 30 mg/L and 7-day average concentrations that do not exceed 45 mg/L, are included in this Permit.

The Facility exceeded the effluent limitation for TSS once with a reported value of 66.34 mg/L; this exceedance represented one value of 11 total reported values. The Facility has otherwise maintained TSS concentrations consistent with secondary standards – the highest concentration of TSS excluding the exceedance was 30 mg/L. The facility generally has the ability to time its discharge to ensure compliance with effluent limitations based on the secondary treatment standards. Therefore, the limitation for TSS established by the Secondary Treatment Regulations at 40 C.F.R. § 133.102, 30-day average concentrations that do not exceed 30 mg/L and 7-day average concentrations that do not exceed 45 mg/L, are included in this Permit.

The percent removal requirements for BOD_5 and TSS required by 40 C.F.R. §§ 133.102(a)(3) and (b)(3) are not included in this Permit. Compliance with percent removal requirements generally is based on influent and effluent data taken at approximately the same time. The WWTF's lagoon system discharges intermittently and the duration of each discharge generally is less than one week. The hydraulic residence time is typically greater than 30 days. The percent removal requirement is based on a 30-day average, but for the lagoon system, influent and effluent samples collected within a given 30-day period are not representative of the same wastewater. It is infeasible to calculate the 30-day average percent removal, based on the operation of lagoon treatment systems.

4. Water Quality-Based Effluent Limits (WQBELs)

WQBELs, which are based on water quality standards (WQS), must be established for any parameters where TBELs are not sufficient to ensure WQS will be attained in the receiving water (40 C.F.R. § 122.44(d)). The parameters that must be limited are those that are or may be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an exceedance of WQS.

The Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation adopted surface WQS for the Reservation that were approved by the EPA and became effective on April 7, 2006. This section provides a basis and rationale for establishing WQBELs based on the applicable WQS of the receiving water.

The Missouri River forms the boundary between the Fort Peck Indian Reservation to the north and state of Montana land to the south. Because the receiving water is shared water between the Tribes and the state of Montana, the WQS of both are considered.

4.1. Receiving Waters

The discharge from the Facility exits Cell 2 and flows overland through a ditch approximately 325 feet to the Missouri River. The Missouri River forms the southern boundary for the Fort Peck Indian Reservation and the WQS of the Assiniboine and Sioux Tribes designate uses of

the Missouri River to the center of the water body. The state of Montana designates uses of the Missouri River from the center of the water body to the southern shore.

4.2. Water Quality Considerations

The Tribes assigned the following designated use classifications for the portion of the Missouri River from the southern border of the reservation to the center of the river: Public Water Supply, Class 1 Cool Water Aquatic Life, Primary Contact Recreation, Industrial, Navigation, and Agriculture. The 2010 draft of the revised WQS also apply the Cultural designated use to this portion of the Missouri River; this designated use is not considered for this Permit term as the new Standards have not yet been adopted.

Public Water Supply surface waters are suitable or intended to become suitable for potable water supplies (this is a goal designated use for this portion of the Missouri River – the River is not yet fully suitable for public water supply, but intended to become so). Primary Contact Recreation surface waters are suitable or intended to become suitable for recreational activities in or on the water when the ingestion of small quantities of water is likely to occur. Such waters include but are not limited to those used for swimming, ceremonial uses, and wading. Class 1 Cool Water Aquatic Life provides for protection and propagation of non-salmonid fishes, marginal growth of salmonid fishes, and growth and propagation of aquatic life normally found in water where the summer temperature does not often exceed 23° Celsius. Industrial Water supply waters are suitable for industrial processes and cooling water. Agriculture surface waters are suitable or intended to become suitable for crops usually grown on the reservation and which are not hazardous as drinking water for livestock. Navigation surface waters are suitable for the commercial shipping of goods.

The State water-use designation for the mainstem Missouri River between the Milk River and the North Dakota border is B-3. The location of the confluence of the Milk and Missouri Rivers marks the southwest corner of the Fort Peck Indian Reservation boundary; the State water-use designation of B-3 applies to the section of the Missouri River that makes up the southern boundary of the Fort Peck Indian Reservation from the center of the water body to the southern shore. Class B-3 waters are to be maintained suitable for drinking, culinary and food processing purposes, after conventional treatment; bathing, swimming, and recreation; growth and propagation of non-salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply. WQS for waters classified as B-3 are established at the Administrative Rules of Montana (ARM) 17.30.625.

Pollutants typically present in treated effluent from domestic wastewater treatment facilities that may cause or contribute to exceedances of WQS include conventional pollutants such as biological material (measured as BOD_5), TSS, oil and grease, fecal coliform bacteria, and pH; and non-conventional pollutants or parameters such as *E. coli*, total residual chlorine, ammonia, total nitrogen, total phosphorous, dissolved oxygen and total dissolved solids.

Based on the domestic nature of the discharge and absence of industrial users, other parameters, including most priority and non-conventional pollutants with numeric criteria established for the agricultural and drinking water designated uses of the Missouri River, are not expected to be discharged in quantities that would cause, have reasonable potential to cause, or contribute to an excursion of the Tribes' WQS; therefore effluent limitations and monitoring are not required for those additional parameters.

4.3. Conventional Pollutants

4.3.1. BOD_5, TSS, and pH – The Tribes' WQS do not include numeric criteria for BOD_5 or TSS, so no WQBELs are necessary for these pollutants at this time. The water quality criterion for pH, for all designated uses, is 6.5 to 9.0 standard units, which is more stringent than the TBEL, and will apply as the WQBEL. In addition, under the State WQS for pH, waters classified as B-3 must maintain pH between 6.5 and 9.0 pursuant to ARM 17.30.625.

4.3.2. Dissolved Oxygen – Both the Tribal and State WQS include numeric criteria for dissolved oxygen based on the designated uses of the receiving water and the presence or absence of early life stages of fish in the receiving water. Previous Permits have not required dissolved oxygen monitoring, so there is no historical information to use to determine reasonable potential to cause, or contribute to, an exceedance of either the Tribes' or the State's WQS. The discharge has consistently met the technology-based effluent limitations for BOD_5, indicating discharges of oxygen-demanding organic material are not excessive; therefore, no numeric limitations for dissolved oxygen are established for this Permit term. Monitoring for dissolved oxygen will be required in order to further evaluate the discharge to determine the potential for exceedance of Tribal or State water quality criteria. In addition, monitoring for dissolved oxygen is a permit application requirement stated at 40 C.F.R. § 122.21(j)(4)(iii). Monitoring for dissolved oxygen will be required once per discharge to allow for characterization of the effluent and to meet permit application requirements.

4.3.3. Fecal coliform – The fecal coliform criteria in the Tribes' WQS are applicable during periods when the maximum daily water temperature is greater than 15.5º C; based on this standard, fecal coliform WQBELs were applied April 1 through October 31 each year for the duration of the previous Permit term. The Tribal WQS state, however, that criteria for fecal coliform apply to all reservation water bodies with Recreational Contact or Domestic Water Supply uses, except the Missouri River. The state of Montana does not currently have standards for fecal coliform for B-3 classified waters. Because the receiving water for the discharge is the Missouri River, fecal coliform criteria in the Tribes' WQS do not apply and the fecal coliform limits are being removed from the Permit. Because there is no longer reasonable potential to cause an exceedance of WQS, removal of these limits does not trigger anti-backsliding provisions of the CWA and NPDES regulations.

4.3.4. Oil and grease – The Permit issued in 2011 included an effluent limitation for oil and grease of 10 mg/L. The Tribal WQS includes a narrative criterion that all surface waters on the reservation shall be free from substances that "float as debris, scum, oil…" The reissued Permit includes as WQBELs both a numeric limit of 10 mg/L and narrative limitation stating that "There shall be no discharge of visible floating debris, scum or oil." Visual monitoring for oil and grease shall occur once per discharge. In the event that an oil sheen or floating oil is observed in the discharge, a grab sample shall immediately be taken, analyzed, and reported.

4.4. Non-Conventional Pollutants

4.4.1. *E. coli* – The Tribal WQS include numeric criteria for *E. coli*: based on a statistically sufficient number of samples, the geometric mean of *E. coli* densities shall not exceed 126 colony-forming units per 100 mL, and no single sample shall exceed 235-colony forming units per 100 mL; however, the Tribal WQS indicate that biological criteria do not currently apply to the Missouri River.

The State WQS for B-3 classified waters state that (i) from April 1 through October 31, the geometric mean number of *E. coli* may not exceed 126 colony forming units per 100 milliliters and 10% of the total samples may not exceed 252 colony forming units per 100 milliliters during any 30-day period; and (ii) from November 1 through March 31, the geometric mean number of *E. coli* may not exceed 630 colony forming units per 100 milliliters and 10% of the samples may not exceed 1,260 colony forming units per 100 milliliters during any 30-day period. Because the Tribal WQS do not apply to the Missouri River, the State criteria will be applied as numeric limitations for *E. coli* for this Permit in order to protect downstream waters and ensure attainment of downstream State standards.

The Tribal mixing zone policy states that individual mixing zones may be denied for a variety of reasons including the potential for human exposure to pollutants resulting from recreational activities. Primary contact recreation is one of the designated uses of the Missouri River. In the Tribal WQS, primary contact recreation includes but is not limited to swimming, ceremonial use, and wading. The discharge is not disinfected and is discharged into an open ditch which runs across the floodplain and empties into the Missouri River. Furthermore, the state of Montana does not use mixing zones for *E. coli* standards in order to protect designated uses. As noted above, the Tribal WQS specifically indicate that biological criteria from the standards, including criteria for *E. coli*, do not apply to the Missouri River. In order to protect designated uses of the water body, including downstream uses in Montana, limitations for *E. coli* in this Permit are based on applying the criteria for *E. coli* for the Missouri River from Montana WQS at the point of discharge with no consideration of dilution.

The Tribal numeric criteria were previously applied as 30-day and 7-day limits. For this Permit, because of the increased sampling frequency to allow for accurate reporting, the Montana criteria will be applied directly as geometric mean and 10% sample maximum limitations. Because Tribal WQS for *E. coli* do not apply to the Missouri River and,

therefore, there is no reasonable potential to cause an exceedance of Tribal WQS, any differences in these limits when compared to the limits in the previous Permit does not trigger anti-backsliding provisions of the CWA and NPDES regulations.

4.4.2. Floating Materials – The Tribal WQS contain a narrative standard for floating material that states: "All surface water on the reservation shall be free from substances attributable to wastewater discharges or other pollutant sources that … float as debris, scum, oil, or other matter forming nuisances…" The reissued Permit includes as a WQBEL a narrative limitation stating that "There shall be no discharge of visible floating debris, scum or oil."

4.4.3. Ammonia – Without considering dilution, the maximum ammonia concentration of 20 mg/L detected in the effluent exceeds the acute and chronic water quality criteria of 6.4 mg/L and 2.6 mg/L, respectively. The Tribal WQS determine ammonia criteria based on pH and temperature. The previous version of the Permit required annual ammonia monitoring and the Discharger submitted 11 results during the POR. Because a small sample set of previous ammonia monitoring was available, the worst-case pH and temperature results were used to calculate these criteria.

Assuming a lognormal distribution of effluent concentration data, the projected 95th percentile ammonia concentration based on this maximum observed concentration and the two available data points would be as high as 76 mg/L. However, the receiving water for the discharge is the Missouri River. The Mixing Zone and Dilution Policy in the Tribes' WQS indicates that, for intermittent discharges, such as lagoon facilities that discharge during high ambient flow, the stream flow to be used in the mixing zone analysis should be the lowest flow expected to occur during the period of discharge. Streamflow data from United States Geological Survey (USGS) gaging station 06177000 (Missouri River near Wolf Point MT), located approximately 5 miles downstream from the facility discharge, indicates that the lowest recorded monthly mean streamflow over the last 75 years of monitoring is 995 cubic feet per second (cfs) and the lowest daily mean streamflow is 680 cfs. The average design flow of the facility is 0.42 million gallons per day (0.78 cfs), so based on the lowest daily mean streamflow (680 cfs) the available minimum dilution at the point where the facility discharge enters the receiving water is as much as approximately 870 to 1 if the full low flow of the river is available for dilution. This dilution results in a receiving water concentration of ammonia that is well below the criteria, even using a conservative estimate of the effluent concentration of ammonia. Dilution of this magnitude allows for a determination of no reasonable potential for ammonia; however, to better characterize the effluent and receiving water for future reasonable potential analyses, the Permit includes both effluent monitoring requirements for ammonia and ambient (Monitoring Location 001R) monitoring requirements for pH and temperature, which are needed to establish the ammonia criteria values.

4.4.4. Nitrate & Nitrite – Both the Tribal and State designated uses of the Missouri River include drinking water. The drinking water human health standard for nitrate is 10 mg/L, and the human health standard for nitrite is 1 mg/L in both the Tribal and State standards.

The previous Permit required monitoring for nitrate-N and nitrite-N. The maximum nitrate concentration was 0.22 mg/L, and the corresponding maximum nitrite concentration was 0.22 mg/L. Assuming a lognormal distribution of effluent concentration data, the projected 95th percentile concentrations of nitrite and nitrate based on the maximum observed concentrations and the two available data points would be high as 0.84 mg/L. These projected maximum concentrations do not exceed the WQS of 10 mg/L of nitrate, 1 mg/L of nitrite, and 10 mg/L nitrate + nitrite, even without considering dilution. Therefore, there is no reasonable potential to exceed the WQS for nitrate or nitrite, and no need to impose effluent limitations for these pollutants. Monitoring requirements for nitrate and nitrite will be retained in the Permit for future reasonable potential analyses.

4.4.5. Temperature – The segments of the Lower Missouri River from the Fort Peck Dam to the North Dakota border are listed on Montana's CWA § 303(d) list as impaired because of water temperature. Montana's temperature criteria for the Missouri River between the Milk River and the North Dakota border is "A 3ºF maximum increase above naturally occurring water temperature is allowed within the range of 32ºF to 77ºF; within the naturally occurring range of 77ºF to 79.5ºF, no thermal discharge is allowed which will cause the water temperature to exceed 80ºF; and where the naturally occurring water temperature is 79.5ºF or greater, the maximum allowable increase in water temperature is 0.5ºF. A 2ºF per hour maximum decrease below naturally occurring water temperature is allowed when the water temperature is above 55ºF. A 2ºF maximum decrease below naturally occurring water temperature is allowed within the range of 55ºF to 32ºF."

The effluent temperatures for the discharge reported in the permit application range from 45ºF to 54ºF. There currently is no temperature Total Maximum Daily Load (TMDL) for the listed segments of the Lower Missouri River. Given the effluent temperatures, the low effluent flow in comparison to the flow of the Missouri River, and the absence of any wasteload allocation from a TMDL, the discharge does not cause, have the reasonable potential to cause, or contribute to an excursion of WQS for temperature. The Permit includes temperature monitoring requirements for future reasonable potential analyses.

4.4.6. Total Kjeldahl Nitrogen, Total Nitrogen, Total Phosphorus and Total Dissolved Solids – Permit application requirements at 40 C.F.R. § 122.21(j)(4)(iii) require monitoring of these pollutants. Total Kjeldahl nitrogen, total nitrogen and total phosphorus were added for monitoring during the previous Permit and will continue to be monitored as part of this Permit. Monitoring for total dissolved solids, also required for the permit renewal application, will be added for this Permit. Monitoring for these permit application parameters will occur once per discharge to meet permit application requirements and to allow for characterization of the discharge.

4.4.7. Total Residual Chlorine – Though monitoring for chlorine is required for the permit application, 40 C.F.R. § 122.21(j)(4)(iii) states that "Facilities that do not use chlorine for disinfection, do not use chlorine elsewhere in the treatment process, and have no reasonable potential to discharge chlorine in their effluent may delete chlorine from [the permit application requirements]." The Facility does not use chlorine for disinfection and

does not use chlorine elsewhere in the treatment process so chlorine monitoring is not required for this Permit.

5. Final Effluent Limitations

The effluent limitations in Table two will be applied to the discharge at Outfall 001 for the duration of the Permit cycle. All limits become effective on the effective date of this Permit. Limits are based on the most stringent of either the TBELs or WQBELs presented in Sections Three and Four, respectively.

Table 2. Effluent Limitations Included in the Permit

Effluent Characteristic a/	Effluent Limitation		
	30-Day Average a/	7-Day Average a/	Daily Maximum a/
BOD_5, mg/L	30	45	N/A
TSS, mg/L	30	45	N/A
E. coli, cfu/100 mL, April 1-October 31 b/	126	N/A	252
E. coli, cfu/100 mL, November 1-March 31 c/	630	N/A	1,260
There shall be no discharge of visible floating debris, scum or oil. If visible oil or sheen is detected, a grab sample shall be taken immediately and analyzed in accordance with 40 C.F.R. Part 136. The concentration of oil and grease shall not exceed 10 mg/L in any sample taken.			
The pH of the discharge shall not be less than 6.5 standard units (s.u.) or greater than 9.0 s.u. at any time.			

a/ See Definitions, Part 1.1 of the Permit, for definition of terms.

b/ From April 1 through October 31, the geometric mean number of *E. coli* may not exceed 126 colony-forming units (cfu) per 100 mL and 10% of the total samples may not exceed 252 cfu per 100 mL during any 30-day period.

c/ From November 1 through March 31, the geometric mean number of *E. coli* may not exceed 630 cfu per 100 mL and 10% of the samples may not exceed 1,260 cfu per 100 mL during any 30-day.

6. Self-Monitoring and Reporting Requirements – Outfalls 001 and 001R

6.1. Discharge Monitoring – Outfall 001

The self-monitoring requirements in Table 3 apply to Outfall 001. The frequency of effluent self-monitoring requirements for *E. coli* have been increased compared to the previous Permit to allow for accurate calculation of geometric means in order to determine compliance with water quality criteria. The frequency of effluent self-monitoring requirements for ammonia, nitrate, nitrite, total Kjeldahl nitrogen, total nitrogen and total phosphorus have been increased to once per discharge in order to allow for better characterization of the effluent over the term of the Permit. Monitoring for dissolved oxygen and total dissolved solids, not required during the previous permit term, has been added beginning on the effective date of this Permit to allow for characterization of the discharge and to meet the permit renewal application requirements.

Table 3. Monitoring Requirements – Outfall 001

Effluent Characteristic a/	Frequency	Sample Type b/
Total Flow, mgd c/	Three per Discharge d/	Instantaneous
Total BOD_5, mg/L	Three per Discharge d/	Grab
TSS, mg/L	Three per Discharge d/	Grab
pH, standard units	Once per Discharge	Instantaneous
Temperature, °C	Once per discharge	Instantaneous
E. coli, cfu/100 mL	Three per Discharge d/	Grab
Oil and grease, visual observation e/	Once per Discharge	Visual
Oil and grease, mg/L e/	Upon Observation of Visible Oil or Sheen	Grab
Ammonia Nitrogen, mg/L	Once per Discharge	Grab
Nitrate-Nitrogen, mg/L	Once per Discharge	Grab
Nitrite-Nitrogen, mg/L	Once per Discharge	Grab
Total Kjeldahl Nitrogen, mg/L	Once per Discharge	Grab
Total Nitrogen, mg/L	Once per Discharge	Calculated
Total Phosphorus, mg/L	Once per Discharge	Grab
Dissolved Oxygen, mg/L	Once per Discharge	Grab
Total Dissolved Solids, mg/L	Once per Discharge	Grab

a/ All monitored data shall be recorded in a daily log (paper or electronic). If no discharge occurs on any one day, zero (0) shall be recorded in the daily log for that day for flow and for all other parameters required to be monitored. If the required data are not entered in the daily log on a day that a discharge occurs, it will be assumed that the required monitoring was not performed. If no discharge occurs during the reporting period, the appropriate "No Discharge" code shall be reported on the DMR.

b/ See Definitions, Part 1.1 of the Permit, for definition of terms.

c/ Flow measurements of effluent volume shall be made in such a manner that the Permittee can affirmatively demonstrate that representative values are being obtained. The average flow rate in mgd during the reporting period and the maximum flow rate observed, in mgd, shall be reported.

d/ For *E. coli*, flow, BOD_5, and TSS, a minimum of three (3) samples or measurements shall be taken during any discharge of wastewater. It is required that a sample be taken at the beginning, middle, and end of the discharge if the discharge is less than one week in duration. If a single, continuous discharge is greater than one week in duration, three (3) samples shall be taken during the first week and one (1) during each following week. All the samples collected during the 7-day or 30-day period are to be used in determining the averages. The Permittee always has the option of collecting additional samples if appropriate.

e/ One visual observation per discharge is required. If visible oil or sheen is observed, a grab sample shall be taken immediately and analyzed in accordance with the requirements of 40 C.F.R. Part 136. If no grab sample was taken during the reporting period because no visible oil was observed, enter the appropriate "monitoring not required" code on the DMR.

BOD_5 and TSS – Influent monitoring for BOD_5 and TSS is not required because the Permit does not contain a percent removal requirement.

E. coli – In order to properly characterize the effluent quality, sampling is being increased from once per discharge to a minimum of three times per discharge. It is required that a sample be taken at the beginning, middle, and end of the discharge if the discharge is less than one week in duration. If a single, continuous discharge is greater than one week in duration, three (3) samples shall be taken during the first week and one (1) during each following week.

Ammonia, Nitrate, Nitrite, Total Kjeldahl Nitrogen, Total Nitrogen, Total Phosphorus – Monitoring submitted during the previous permit term indicated that, though discharge occurred during the calendar year, monitoring results were not submitted (and it is therefore assumed that monitoring was not performed) if the discharge did not occur during December. To ensure that monitoring of these parameters occurs regularly, regardless of the month of discharge, monitoring requirements have been changed to once per discharge.

Dissolved Oxygen and Total Dissolved Solids – Monitoring once per discharged for dissolved oxygen and total dissolved solids has been added to the monitoring requirements for this Permit in order to characterize the effluent and comply with the permit application requirement at 40 C.F.R. § 122.21(j)(4)(iii).

Temperature – A requirement to monitor effluent temperature once per discharge has been added. The receiving water is listed as impaired for temperature on Montana's 2016 CWA 303(d) list. Temperature monitoring will provide data for future reasonable potential analyses and permit application requirements.

6.2 Ambient Monitoring Requirements – Outfall 001R

The self-monitoring requirements in Table 4 apply to Outfall 001R. As discussed above, ambient monitoring for pH, temperature and date and time of those readings, have been added to appropriately calculate the applicable ammonia criteria and assess attainment of the criterion in the receiving water. At a minimum, upon the effective date of this Permit, the facility is responsible for monitoring these parameters once during each discharge, during the fall and the spring of each year. Monitoring shall occur at the Missouri River monitoring point located at the fishing access at the State Highway 13 bridge east of Wolf Point, approximate latitude 48.067072° N, longitude 105.535976° W, as described in section 1.2 of the Permit.

Table 4. Monitoring Requirements – Outfall 001R

Parameter	Frequency	Sample Type a/
pH, standard units	Once per Discharge b/	Instantaneous
Temperature, °C	Once per Discharge b/	Instantaneous
Date sample collected	Once per Discharge b/	Instantaneous
Time sample collected	Once per Discharge b/	Instantaneous

a/ See Definitions, Part 1.1, for definition of terms.

b/ Receiving water monitoring shall occur at location 001R at a time between 24 hours and 72 hours after commencement of a discharge event.

6.3. Reporting of Monitoring Results

Upon the effective date of this Permit, the Permittee must electronically submit DMRs on a monthly frequency using *Net*DMR. Electronic submissions by permittees must be sent to the EPA Region 8 no later than the 28th of the month following the completed reporting period. The Permittee must sign and certify all electronic submissions in accordance with the signatory requirements of the Permit. *Net*DMR is accessed from the internet at https://netdmr.zendesk.com/home.

In addition, the Permittee must submit a copy of the DMR to the Assiniboine and Sioux Tribes. Currently, the Permittee may submit a copy to the Tribes by one of three ways: 1. a paper copy may be mailed, 2. the email address for the Tribes may be added to the electronic submittal through *Net*DMR, or 3. the Permittee may provide the Tribes viewing rights through *Net*DMR.

7. Biosolids

The use and/or disposal of sewage sludge shall be done under the authorization of and in accordance with the requirements of 40 C.F.R. Part 503.

8. Whole Effluent Toxicity Monitoring

Regulations at 40 C.F.R. § 122.21(j)(5) specify which publicly-owned treatment works must conduct whole effluent toxicity (WET) testing. WET testing is required for facilities with (1) a design flow greater than 1 mgd; and/or (2) an approved pretreatment program. The Director may require other facilities to conduct WET testing based on the following considerations: (1) variability of pollutants; (2) ratio of effluent flow to receiving stream flow; (3) existing controls on point and non-point sources; (4) receiving stream characteristics. The EPA's analysis indicates that the facility is not required to conduct whole effluent toxicity testing at this time.

9. Endangered Species Act Requirements

The Endangered Species Act (ESA) 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 or threatened species (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). [16 U.S.C. § 1536(a)(2), 50 C.F.R. Part 402]

When a Federal agency's action may affect a listed species, that agency is required to consult with the FWS, depending upon the endangered species, threatened species, or designated critical habitat that may be affected by the action (50 C.F.R. § 402.14(a)).

The U. S. Fish and Wildlife Information for Planning and Conservation (IPaC) website program was utilized to determine federally-listed Endangered, Threatened, Proposed and Candidate Species for the area of the WWTF. The IPaC Trust Resource Report findings are provided below for the Wolf Point WWTF site. The designated area utilized was taken directly from the IPaC system and covers the area of the WWTF and adjacent Missouri River on the Fort Peck Indian Reservation in Roosevelt County, Montana.

Figure 3 – Project Area

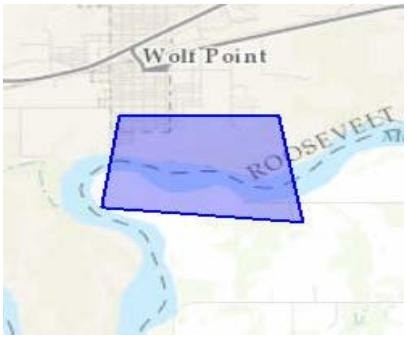


Table 5 – Threatened and Endangered Species Listing

Species	Status a/
Northern Long-eared Bat (*Myotis septentrionalis*)	T
Least Tern (*Sterna antillarum*)	E
Piping Plover (*Charadrius melodus*)	T, CH
Whooping Crane (*Grus americana*)	E
Pallid Sturgeon (*Scaphirhynchus albus*)	E

a/ T=threatened, E=endangered, CH=critical habitat

9.1 Endangered Species Determination

The official species listing the EPA obtained from the IPaC website lists two threatened and three endangered species as potentially being within the project area as shown in Table five, above. Additionally, one species, the threatened Piping Plover has critical habitat within the project area. Critical habitat for the Piping Plover in the project area consists of riverbanks and sand bars within the river channel. These areas are used for both nesting and foraging by the Piping Plover. The project area does not contain any other currently-designated critical habitat for any endangered or threatened species.

The EPA has determined this Permit renewal is not likely to adversely affect any of the species listed by the FWS under the Endangered Species Act within Roosevelt County or the Fort Peck Indian Reservation. The finding is based upon the following:

- The reissue of this Permit does not allow any increase in effluent limitations over the previous Permit. Thus the current water quality should be maintained.
- There is no new construction or Facility size increase with the reissue of this Permit that would result in an increase in discharge amount or in ground disturbance or vegetation removal within the Piping Plover critical habitat that occurs in the project area.
- The reissue of the Permit under the authority of the Clean Water Act and the associated federal regulations, coupled with enforcement of the Permit requirements and the associated federal regulations provide reasonable assurances that effluent water quality parameters control contaminants of concern to maintain the quality of the receiving water within the Assiniboine and Sioux Tribes and the state of Montana's water quality standards as approved by the Environmental Protection Agency.

Before going to public notice, a copy of the draft Permit, Statement of Basis and the official species listing was sent to the USFWS requesting concurrence with the EPA's finding that reissuance of this NPDES Permit (MT-0030571) for the Wolf Point WWTF is Not Likely to Adversely Affect any of the species listed as threatened or endangered for the Fort Peck Indian Reservation or Roosevelt County by the USFWS under the Endangered Species Act nor their critical habitat. On January 11, 2018, the USFWS concurred with the EPA's conclusion that the described project will not adversely affect listed species.

10. National Historic Preservation Act (NHPA) 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 EPA has evaluated its planned reissuance of the NPDES Permit for the Wolf Point Facility to assess this action's potential effects on any listed or eligible historic properties or cultural resources. This correspondence is typically conducted with the Tribal Historic Preservation Office (THPO).

The National Register of Historic Places is the official list of the Nation's historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the National Park Service's National Register of Historic Places is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources.

Based upon the information provided by the NPS database showing the nearest historic properties are approximately twenty miles away, the EPA does not anticipate any impacts on listed/eligible historic properties or cultural resources due to this permit issuance and WWTF discharge related activities from Outfall 001. During the public comment period, the EPA notified the THPO of the Assiniboine and Sioux Tribes of the planned issuance of this NPDES Permit and requested their input on potential effects on historic properties and the EPA's preliminary determination in this regard. The EPA did not receive any comments.

11. Total Maximum Daily Loads

The segment of the Missouri river to which the Wolf Point WWTF discharges is shared by the Assiniboine and Sioux Tribes and the state of Montana. Although the Assiniboine and Sioux Tribes have adopted WQS that have been approved by the EPA, they have not listed waterbodies as impaired pursuant to CWA § 303(d). This reach of the Missouri River, from the Milk River at the western boundary of the reservation to the Poplar River, is listed on the Montana 2016 303(d) list as one or more uses as impaired, based on flow regime alterations and temperature, although the State has not yet prepared TMDLs. When the EPA approved the state of Montana's 2016 list of impaired streams and lakes on December 27, 2016, which included water bodies within Tribal reservation boundaries, the EPA specifically stated that the approval did not extend to waters in Indian country.

12. Miscellaneous

The effective date and the expiration date of the Permit will be determined at the time of Permit issuance. The intention is to renew the Permit for a period not to exceed five years.

Permit drafted by Kristy Allen, Environmental Scientist, Tetra Tech.
Permit reviewed and edited by David Rise and VelRey Lozano, U.S. EPA, Region 8.

ADDENDUM:

PUBLIC NOTICE AND RESPONSE TO COMMENTS

The permit and statement of basis were public noticed in *The Herald-News* on January 25, 2018. The EPA did not receive any comments on this permit.