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

PERMITTEE:	Salish and Kootenai Housing Authority
FACILITY NAME AND ADDRESS:	St. Ignatius Southside WWTF P.O. Box 38 Pablo, MT 59855
PERMIT NUMBER:	MT-0029017
RESPONSIBLE OFFICIAL:	Mr. Lytle Gillin, Operations Manager (406) 675-4491
FACILITY CONTACT:	Raquel Davis Salish and Kootenai Housing Authority P.O. Box 38 Pablo, MT 59855
PERMIT TYPE:	Indian country, Minor, Renewal
TYPE OF TREATMENT:	Moving Bed Biofilm Reactor
FACILITY LOCATION:	US Highway 93, St. Ignatius, Montana 59865 NE ¼ of the SW ¼ of Section 14, Township 18 North, Range 20 West; Latitude 47.317560° N, Longitude 114.109613° W
DISCHARGE LOCATION:	Lat. 47.318333° N Long. 114.111944° W
RECEIVING WATERS:	Un-named tributary of Sabine Creek

1. INTRODUCTION

This statement of basis (SoB) is for the issuance of a National Pollutant Discharge Elimination System (NPDES) discharge Permit to the Salish and Kootenai Housing Authority (SKHA), for the St. Ignatius Southside Wastewater Treatment Facility (WWTF). The Permit establishes limitations for any discharge of effluent from the facility's discharge point(s). The SoB explains the nature of the discharges, and the EPA's decisions for limiting the pollutants in the wastewater, as well as the regulatory and technical basis for these decisions.

The 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 supports implementation of federal environmental laws consistent with the federal trust responsibility, the government-to-government relationship, and the EPA's 1984 Indian Policy.

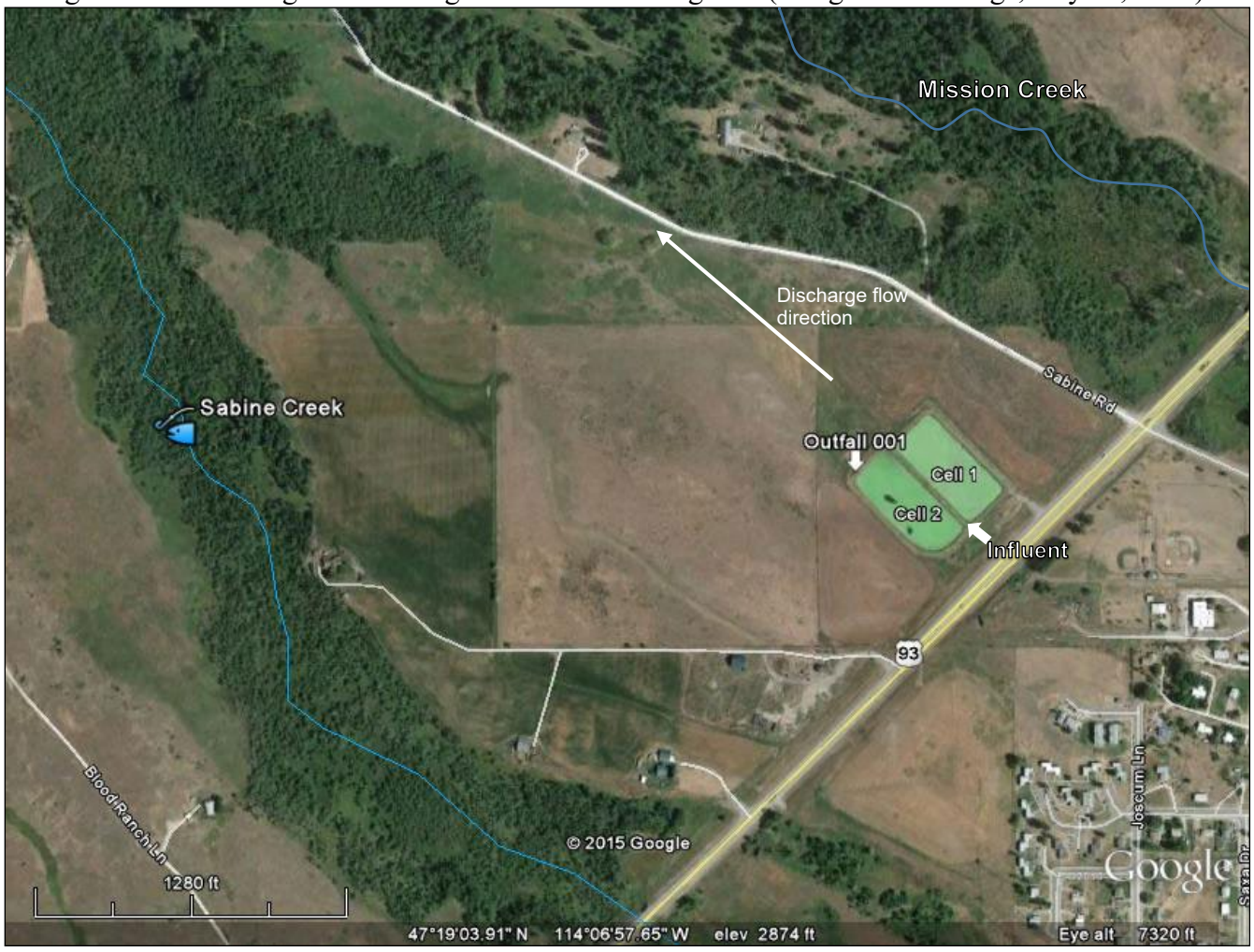
2. BACKGROUND INFORMATION

2.1 Facility Description – Existing Lagoons

The WWTF existing lagoons are located adjacent to Highway 93 approximately one-quarter mile west of Town of St. Ignatius and south of Mission Creek. The lagoons serve about four hundred twenty people and have a design capacity of ninety thousand gallons per day. The system consists of two, two-acre lagoon cells operated in a series with an outfall (001) at the southwest corner of cell two at 47.317805° north latitude and 114.112199° west longitude (Figure 1). The lagoons were originally constructed in 1964 as facultative lagoons. Floating aerators were subsequently added and each cell now contains two aerators. Raw wastewater enters the cells at the center of the southeast berm (Figure 1) and is sequentially routed through cell one and cell two. A portable ultraviolet light system is used to disinfect effluent immediately prior to discharge.

The lagoons discharge two to four times a year and each discharge occurs over a period of about twenty-five days at a typical rate of seventy gallons per minute. During the last five years, the SKHA has discharged treated effluent during the months of February, March, April, May, June, September, October, and November.

Figure 1. Aerial image of the St. Ignatius-Southside lagoons (Google Earth image, July 23, 2013).



2.2. Facility Description – Planned Facility

Due to inability to consistently meet current effluent limitations and a demand for greater capacity, the SKHA is replacing the lagoon system with a continuously discharging moving bed biofilm reactor package plant (MBBR), with construction planned to be complete by the end of 2018. The MBBR will be located in the open area between current cell one and Sabine Road, and will include influent screening, biological treatment, secondary clarification for sludge removal and ultraviolet disinfection. The MBBR is being designed so the discharge will meet the previous Permit effluent limits for ammonia and the National Secondary Standards (NSS) in 40 C.F.R. Part 133 for five-day biochemical oxygen demand (BOD_5) and total suspended solids (TSS). The NSS standards are more stringent than the previous permit which were based on the State of Montana's alternative state limits. According to the SKHA staff engineer, the design capacity of the new system is 75,000 gallons per day and the anticipated discharge amount for the service area will be approximately 45,000 gallons per day. Because the current discharge flows through private land, the outfall location is being moved as part of the construction so the flow path for the discharge will be entirely within land owned by the Confederated Salish and Kootenai Tribes (Tribes or CSKT) with the final receiving water remaining Sabine Creek. The new outfall will be designated Outfall 001A and will be located about one hundred fifty feet

northeast of the existing Outfall 001 at 47.318333° north latitude and 114.111944° west longitude, from which the effluent will flow through the same un-named tributary as the current discharge to Sabine Creek. The SKHA is considering installing low berms along the property boundary to prevent the effluent from flowing onto the adjacent privately-owned property.

2.3 Compliance History and Effluent Characteristics

The EPA conducted a permit compliance inspection on July 15, 2014, that focused on recordkeeping, reporting, and operation/maintenance, and found no deficiencies in those areas. Self-monitoring data within the period of record (POR) from October 1, 2010 to December 31, 2016 indicate consistent compliance with effluent limits for TSS, and oil and grease and only one exceedance for pH. However, there were seven exceedances of the *Escherichia coli* (*E. coli*) limits, eleven exceedances of the BOD_5 30-day limit, and consistent exceedances of the ammonia limits. A summary of effluent data relative to previous Permit limits for the POR is presented in Table 1.

Table 1. Effluent Summary

Parameter	Location	Existing Permit Limit	Minimum Value	Maximum Value	Average Value	Sample Size	Number of Exceedances
BOD_5, mg/L	Influent	N/A	5	388	212	23	N/A
	Effluent	30/45 a/	5	117	39	23	11/8 a/
BOD_5 % Removal	Calculate value	85	57	98	82	23	12
TSS, mg/L	Influent	N/A	12	586	130	23	N/A
	Effluent	100/135 a/	1	72	19	19	0
TSS % Removal	Calculate value	65	20	99	80	23	4
E. coli, no./100 mL	Effluent	126/252 a/	1	867	170	23	7 c/
pH, s.u.	Effluent	6.5-8.5	6.9	8.8	N/A	23	1
Total Ammonia, as N, mg/L (summer)	Effluent	1.17/2.59 b/	1.26	19.40	10.03	7	7/5 b/
Total Ammonia, as N, mg/L (winter)	Effluent	2.99/3.83 b/	0.28	34.70	18.06	16	13/13 b/
Oil and Grease, visual	Effluent	No sheen	No sheen	No sheen	No sheen	22	0

a/ Effluent limit and exceedances expressed as a monthly/weekly average

b/ Effluent limit and exceedances expressed as a monthly average/daily maximum

c/ All exceedances were above 252 no./100mL

3 WATER QUALITY CONSIDERATIONS

3.1 Description of Receiving Waters

3.1.1 Planned MBBR

When the MBBR is constructed in 2018, treated wastewater will flow from the secondary clarifier to the ultraviolet disinfection unit through a v-notch weir and then to the new discharge Outfall 001A, which will be the monitoring point. From Outfall 001A, treated effluent will flow westerly, along an un-named spring-fed ephemeral tributary to Sabine Creek, approximately one-half mile to the northwest. There is no flow data for the unnamed tributary, but the facility reports there is no flow during the summer. Therefore, the critical low flow value for the unnamed tributary to Sabine Creek is zero. Sabine Creek is a tributary of Mission Creek, which joins the Flathead River near the town of Dixon. The projected daily MBBR flow is approximately 45,000 gallons per day or 0.7 cubic feet/second (cfs).

Currently the lagoon system effluent predominately infiltrates in a wetland caused by the discharge and in adjacent fields without overland flow reaching Sabine creek. The MBBR discharge could potentially reach the unnamed tributary to Sabine Creek if it could not adequately infiltrate into the ground as during increased flows or onto frozen ground, or if the discharge flow intercepts a seep that periodically flows into the tributary during the spring months.

3.2 Water Quality Standards

The Tribes have been granted treatment similar to a state (TAS) for CWA 303(c) and have EPA-approved water quality standards (WQS). The most recent changes to the their WQS were approved by the EPA on April 11, 2007.

3.2.1 Sabine Creek

When the MBBR begins operation in 2018, the discharge can potentially reach Sabine Creek and its tributaries, which are classified by the Tribes as B-1 waters. Tribal waters classified B-1 must be maintained suitable for drinking and culinary and food processing purposes after conventional treatment; bathing, swimming and recreation; wildlife (birds, mammals, amphibians and reptiles); the growth and propagation of salmonid fishes and associated aquatic life; and agricultural and industrial water supply purposes.

In addition to the designated uses listed above, section 1.3.7 of the Tribes WQS set the following specific standards for Tribal waters classified as B-1.

a) The geometric mean number of E-coli may not exceed 126 colony-forming units per 100 milliliters, and ten percent of the total samples may not exceed 252 colony-forming units per 100 milliliters during any 30-day period, and the geometric mean number or organisms in the fecal coliform group must not exceed 200 per 100 milliliters, and 10 percent of the total samples during any 30-day period are not to exceed 400 fecal coliforms per 100 milliliters.

b) Dissolved oxygen concentration must not be reduced below the applicable levels set forth in the Tribal Numeric Chart.

c) 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.

d) The maximum allowable increase above naturally occurring turbidity is 5 nephelometric turbidity units.

e) Where naturally occurring water temperatures are in the range of 32°F to 66°F, a 1°F maximum temperature increase is allowed. Where naturally water temperatures are in the range of 66°F to 66.5°F, a 0.5°F maximum temperature increase is allowed. Where naturally occurring water temperatures are above 66.5°F, a 0.5°F maximum temperature increase is allowed. Where naturally occurring water temperatures are above 55°F, a 2°F maximum decrease is allowed. Where natural water temperatures are within the range of 32°F to 55°F, a 2°F maximum decrease is allowed.

f) No increases are allowed above natural concentrations of sediment, contaminated sediment, settleable solids, oils, or floating solids that create or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, fish, or other wildlife.

g) True color must not be increased more than five units above naturally occurring color.

h) For waters classified B-1, concentrations of toxic or deleterious substances which would remain in the water after conventional water treatment may not exceed the maximum contaminant levels set forth in the U.S. EPA National Primary Drinking Water Regulations (40 CFR Part 141), the Tribal Numeric Chart, and the U.S. EPA National Secondary Drinking Water Regulations (40 CFR Part 143). Nor may concentrations of toxic or deleterious substances exceed Tribal Numeric Chart levels.

4. MAJOR CHANGES FROM PREVIOUS PERMIT

The major treatment process change from the lagoons to the MBBR drives effluent limit and other Permit changes for the WWTF as follows:

1. Effluent limits for BOD_5 and TSS are changing to the NSS limits found in 40 C.F.R. 133.102;
2. Ambient pH and temperature monitoring at a downstream location of Sabine Creek is being initiated to provide data for future ammonia limit development;
3. Fecal coliform monitoring is being required to meet the WQS for Sabine Creek; and
4. Total nitrogen and total phosphorus monitoring is being added to provide data for any future determination of nutrient effects on Sabine Creek.
5. Monitoring intervals are being changed to better evaluate the mechanical plant operation.

5. PROPOSED PERMIT LIMITATIONS

5.1 Effluent Limitations

5.1.1. Technology-Based Effluent Limitations (TBELs)

The NSS for secondary treatment of wastewater as listed in 40 C.F.R. Part 133 have been developed by the EPA to be economical and protective of water quality. The NSS will be referenced for establishing effluent limits meeting the minimum level of effluent quality obtainable by secondary treatment. The EPA and Tribes have not developed additional technological based effluent limitations that apply to discharges for this facility.

TBELs represent the minimum level of control that must be imposed by an NPDES permit based on available technology. 40 C.F.R. Part 133 defines the minimum treatment requirements for secondary treatment, or treatment equivalent to secondary treatment (TES), for publicly owned treatment works. Secondary treatment and TES for wastewater is applicable to the parameters of BOD_5, TSS, pH, and percent removal efficacy for BOD_5 and TSS.

Previous permits for this facility established limits for BOD_5 and percent removal efficacy for BOD_5 based on TES promulgated in 40 C.F.R. §§ 133.105(a) and (b). Previous limits for TSS and TSS percent removal efficacy were set at levels equivalent to the Alternative State Requirement in Montana for facilities treating equivalent to secondary treatment under 40 C.F.R. § 133.105(d) because the St. Ignatius-Southside waste stabilization ponds could not consistently achieve the effluent quality required in 40 C.F.R. § 133.105(b).. Under the new permit, effluent limits for BOD_5 and TSS and percent removal for both parameters are based on the more stringent NSS limits promulgated in 40 C.F.R. § 133.102 and will apply to Outfall 001A. The TBEL for pH of 6.0 – 9.0 has not been applied to the MBBR because it is less stringent than the Tribes' WQS of 6.5 – 8.5 for Sabine Creek.

5.1.2. Water Quality-Based Effluent Limitations (WQBELs)

Section 301 of the CWA requires the EPA to develop NPDES effluent limits through evaluating WQS and treatment technology standards. This evaluation is used to establish water quality based effluent limits to ensure protection of the receiving stream's water quality and its existing and designated beneficial uses. Section 101(a)(2) of the Clean Water Act states "it 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." The EPA relied on the Tribes' EPA-approved WQS in establishing WQBELs to protect the designated uses of the receiving waters.

5.1.2.1. Sabine Creek Ammonia WQS

As the MBBR has not been constructed and operated there is no effluent monitoring data for use in developing discharge effluent limitations. Due to the lack of data, the previous Permit's ammonia effluent monitoring data are used to determine reasonable potential (RP) of the MBBR to cause or to contribute to an excursion above the WQS in the un-named tributary to Sabine Creek. Concurrently, the EPA is requiring effluent monitoring for ammonia, as well as receiving water monitoring for time, date, temperature, and pH. The additional ammonia data and receiving stream data collected over the Permit period is for future calculations of reasonable potential and ammonia effluent limits.

Ammonia toxicity levels to aquatic life are dependent on temperature and pH of the receiving water. The Tribes collected temperature and pH data from Sabine Creek as part of the Mission Creek Watershed Assessment, which is attached as Appendix A. The EPA used the data in Appendix A, the Tribes' aquatic life standards for ammonia and the WWTF's temperature and pH data from the ammonia monitoring results and a critical low flow of 0 (zero) cfs for the un-named tributary to set ammonia effluent limits equal to the ammonia WQS for the previous Permit. This Permit uses the previous Permit's ammonia effluent limits, which are the Tribes' calculated ammonia WQS for the un-named tributary to Sabine Creek as shown in Table 2.

Table 2 – Ammonia Water Quality Standards

Limit Condition	Period a/	Salmonids Present	Early Life Stages Present	Ambient Water Data		Ammonia WQBEL (mg/L)
				pH	Temperature °C	
Acute b/	Winter	Yes	N/A	8.2	N/A	3.83
	Summer	Yes	N/A	8.4	N/A	2.59
Chronic c/	Winter	N/A	Yes	8.1	8.8	2.99
	Summer	N/A	N/A d/	8.4	16.3	1.17

N/A not applicable to analysis

a/ winter is the period from November 1 – March 31, summer is the period from April 1 – October 31

b/ calculated using the 95th percentile of the seasonal pH and temperature data

c/ calculated using the 75th percentile of the seasonal pH and temperature data

d/ at 15 °C and above, the criteria for fish early life stages present and absent are the same

5.1.2.3 Anti-Backsliding

Federal regulations 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 was 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 C.F.R. § 122.62 [40 C.F.R. § 122.44(l)(1)]. The existing lagoon system is being removed and replaced with an entirely different treatment system and methodology, which is a material and substantial change to the circumstances on which the previous Permit was based. However, the receiving water remains an un-named tributary with no flow and thus no dilution capacity. Therefore, the effluent limits in the previous Permit are being carried over to this Permit to comply with the anti-backsliding regulatory requirements and an additional limit for fecal coliform is being added to comply with the Tribes' WQS.

5.1.2.3. Compliance Schedule

Compliance schedules are authorized under 40 C.F.R. § 122.47 and are intended to be used when compliance with water quality based effluent limits is not feasible upon permit issuance. They provide a timeline for permittees to meet new or lower effluent limits and must require compliance as soon as possible. The Permittee will have until eighteen months after the effective date of the Permit to optimize MBBR treatment for all effluent parameters. All limitations will become effective eighteen months after the effective date of the Permit. These times are being allowed in order for the SKHA to complete installation of MBBR upgrade and optimize the treatment process to obtain the highest effluent quality.

Since the compliance schedule is longer than one year, the following milestones are required, they must be reported to the EPA (40 C.F.R. § 122.47), and are included in section 1.3.2 of the Permit.

5.1.2.3.1. The Permittee shall submit the following to the Permit issuing authority:

5.1.2.3.1.1. An outline of the startup and operational measures to be taken to achieve compliance with the effluent limitations in Part 1.3.1 of this Permit; and

5.1.2.3.1.2. A schedule for implementing the measures described above (5.1.2.3.1.1). The schedule should include all changes and adjustments in operation of the new system undertaken by the Permittee to optimize the treatment system for the highest effluent quality.

5.1.2.3.1.3. The above items shall be submitted no later than **6 months after the effective date of this Permit**.

5.1.2.3.2. The Permittee shall submit to the EPA progress reports reflecting the project status outlined in sections 5.1.2.3.1.1 and 5.1.2.3.1.2 above no later than **12 months after the effective date of this Permit and every 6 months thereafter**.

5.1.2.3.3. The Permittee shall achieve compliance with the effluent limitations in Part 1.3.1 of the Permit and submit a final report reflecting the project status outlined in sections 5.1.2.3.1.1 and 5.1.2.3.1.2 above by no later than **18 months after the effective date of this Permit**.

5.1.2.3.4. Reports of compliance or noncompliance with, or any progress reports, on interim and final requirements contained in this Compliance Schedule shall be submitted no later than 14 days following the end of each schedule date described above. If noncompliance is being reported, the reason for noncompliance shall be reported and the expected date when compliance will be achieved shall be given. The letter shall include the certification statement given in Part 4.7.4 of this Permit and the letter shall be signed by a principal executive officer.

5.1.3. Final Effluent Limitations

The final effluent limits shown in Table 4 are for the discharge from the MBBR to Outfall 001A and will become effective according to the requirements of the Permit Compliance Schedule in section 1.3.2 of the Permit.

Table 4 – Final Effluent Limits

Effluent Characteristic	30-Day Average a/	7-Day Average a/	Daily Maximum a/	Limit Basis b/
BOD_5, mg/L	30	45	N/A	NSS
TSS, mg/L	30	45	N/A	NSS
% BOD_5 Removal	85	N/A	N/A	NSS
% TSS Removal	85	N/A	N/A	NSS
E. coli, no./100 mL	126	252 c/	N/A	PWQ
Fecal coliform, no./100 mL	200	400 d/	N/A	PWQ

Effluent Characteristic	30-Day Average a/	7-Day Average a/	Daily Maximum a/	Limit Basis b/
Ammonia as Nitrogen, mg/L, winter e/	2.99	N/A	3.83	PWQ
Ammonia as Nitrogen, mg/L, summer e/	1.17	N/A	2.59	PWQ
Oil and Grease, mg/L	N/A	N/A	10	PJ
The pH of the discharge shall not be less than 6.5 or greater than 8.5 at any time.				PWQ

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

b/ NSS = Technology-Based National Secondary Standards from 40 C.F.R. § 133.102; PWQ = Limitation based on protecting water quality. PP = Limitation based on previous Permit.

c/ Based on a statistically sufficient number of samples (not less than 5 samples equally spaced over a month), the geometric mean of the *E. coli* densities shall not exceed 126 per 100 mL. In addition, no more than ten percent of monthly samples shall exceed 252 per 100 mL.

d/ Based on a statistically sufficient number of samples (not less than 5 samples equally spaced over a month), the geometric mean of the fecal coliform densities shall not exceed 200 per 100 mL. In addition, no more than ten percent of monthly samples shall exceed 400 per 100 mL.

e/ winter is the period from November 1 – March 31, summer is the period from April 1 – October 31

6. SELF-MONITORING REQUIREMENTS; OUTFALL 001A AND MONITORING POINT 001R

Monitoring must be conducted according to test procedures approved under 40 C.F.R. Part 136, unless other test procedures have been specified in this Permit. Sludge monitoring procedures shall be those specified in 40 C.F.R. 503, or as specified in the Permit.

6.1. MBBR Discharge Monitoring – Outfall 001A

The following parameters shall be monitored during discharge from the MBBR as shown in Table 4. If no discharge occurs, "no discharge" should be indicated on the Discharge Monitoring Report. Parameters requiring monitoring on a monthly basis shall be monitored during each calendar month or part of a month during which a discharge occurs. Characteristics requiring monitoring on a weekly basis shall be monitored during each calendar week or part of a week during which a discharge occurs. If a discharge event lasts less than one calendar week all effluent and influent characteristics shall be monitored once at a minimum.

Table 5 – MBBR Monitoring Requirements

Parameter	Unit	Location	Frequency	Sample Type a/
Flow	mgd	Outfall 001A	Weekly	Instantaneous b/
BOD_5	mg/L	Influent	Monthly	Grab
	mg/L	Outfall 001A	Weekly	Grab

Parameter	Unit	Location	Frequency	Sample Type a/
	% Removal	N/A	Monthly	Calculated
TSS	mg/L	Influent	Monthly	Grab
	mg/L	Outfall 001A	Weekly	Grab
	% Removal	N/A	Monthly	Calculated
E. coli	No./100 mL	Outfall 001A	Five per month c/	Grab
Fecal Coliform	No./100 mL	Outfall 001A	Five per month c/	Grab
Total Ammonia as N	mg/L	Outfall 001A	Monthly	Grab
Temperature	Degrees Celsius	Outfall 001A	Weekly	Instantaneous
pH	Standard units	Outfall 001A	Monthly	Grab
Oil and Grease	mg/L	Outfall 001A	Monthly	Grab
Total Nitrogen (N)	mg/L	Outfall 001A	Monthly	Grab
Total Phosphorus (P)	mg/L	Outfall 001A	Monthly	Grab

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

b/ 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 gallons per day) during the reporting period and the maximum flow rate observed (in gallons per day) shall be reported.

c/ Samples shall be equally spaced over a calendar month.

6.2. Ambient Monitoring

The self-monitoring requirements in Table 6 apply to Monitoring Point 001R. As discussed above, ambient monitoring for pH, temperature and the date and time of those samples have been added to appropriately calculate the applicable ammonia criteria and assess attainment of the criterion in the receiving water. At a minimum, upon beginning operation of the MBBR, the facility is responsible for monitoring these parameters monthly, on the same day MBBR effluent samples are collected for ammonia analysis. Monitoring of receiving stream parameters shall occur in Sabine Creek. The monitoring point selected, Monitoring Point 001R, is located at the crossing of Old Freight Road over Sabine Creek about two-tenths of a mile south of the intersection of Sabine Road and Old Freight Road, approximate latitude 47.327507° N, longitude 114.139496° W, as described in section 1.2 of the Permit.

Table 6. Monitoring Requirements – Outfall 001R

Effluent Characteristic a/	Frequency b/	Sample Type c/
pH, standard units	Monthly	Instantaneous
Temperature, ºC	Monthly	Instantaneous
Time sample collected	Monthly	Instantaneous
Date sample collected	Monthly	Instantaneous

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/ Ambient monitoring will be done the same day MBBR effluent samples are collected for ammonia analysis.

c/ See Permit Definitions, section 1.1, for definition of terms.

7. REPORTING REQUIREMENTS

With the effective date of this Permit, the Permittee must electronically report monthly discharge monitoring reports (DMR) on a monthly frequency using NetDMR. Electronic submissions by permittees must be submitted to 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. NetDMR is accessed from the internet at https://netdmr.zendesk.com/home.

In addition, the Permittee must submit a copy of the DMR to the Confederated Salish and Kootenai Tribes. Currently, the Permittee may submit a copy to the Confederated Salish and Kootenai Tribes by one of three ways: 1. A paper copy may be mailed. 2. The email address for the Confederated Salish and Kootenai Tribes may be added to the electronic submittal through NetDMR, or 3. The Permittee may provide the Confederated Salish and Kootenai Tribes viewing rights through NetDMR.

8. 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 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 C.F.R. Part 402. When a Federal agency's action may affect a protected 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 IPaC Trust Resource Report findings are provided below for the Facility site. The designated area utilized was taken directly from the IPaC system and covers the Facility location and surrounding area on the Flathead Reservation in Lake County, Montana. The IPaC report shows six endangered species to be considered in the effects analysis for this Permit renewal but no critical habitat within the project area.

Figure 2 – Facility Area

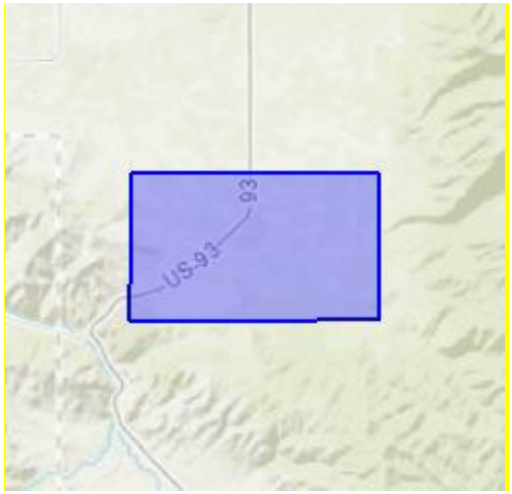


Table 8 – IPaC Species Listing

Species	Scientific Name	Status
Yellow-billed Cuckoo	*Coccyzus americanus*	T
Grizzly Bear	*Ursus arctos horribilis*	T
Canada Lynx	*Lynx canadensis*	T
North American Wolverine	*Gulo gulo luscus*	PT
Bull Trout	*Salvelinus confluentus*	T
Spalding's Catchfly	*Silene spaldingii*	T

Symbols/Acronyms:
T = Threatened
E = Endangered
P = Proposed

8.1 Analysis of Effects

The EPA has determined the reissuance of this NPDES Permit has either No Effect or is Not Likely to Adversely Affect any of the species listed as threatened or endangered for Lake County. The specific determinations for each of the species listed in Table 8, above, are as follows:

8.1.1. Yellow-billed Cuckoo (*Coccyzus americanus*)
The Yellow-billed Cuckoo is listed as threatened in Montana. There is proposed critical habitat for this species but the location of the St. Ignatius Southside WWTF is outside the proposed critical habitat. Yellow-billed Cuckoos use wooded habitat with dense cover and water nearby, including woodlands with low, scrubby, vegetation, overgrown orchards, abandoned farmland, and dense thickets along streams and marshes. In the West, nests are often placed in willows along streams and rivers, with nearby cottonwoods serving as foraging sites. The area surrounding the St. Ignatius Southside WWTF is wooded, with cover and water, however this cover will not be disturbed by the reissuance of this permit. Construction of the MBBR treatment facility will require land disturbance but the site is an open field adjacent to the existing two-cell lagoons. Construction of the MBBR is beyond the scope of this Permit and is overseen by the Salish and Kootenai Housing Authority. This Permit authorizes discharge of treated wastewater to the unnamed tributary of Sabine Creek from the MBBR treatment facility. As the Permit-authorized discharge does not affect any potential habitat of the Yellow-billed Cuckoo and sets effluent limitations protective of water quality, the EPA has determined reissuing this NPDES Permit is Not Likely to Adversely Affect the threatened Yellow-billed Cuckoo.

8.1.2. Grizzly Bear (*Ursus arctos horribilis*)
The Grizzly Bear is listed as threatened in Montana except for the Greater Yellowstone Ecosystem where it is delisted. There is proposed critical habitat for this species but the location of the St. Ignatius Southside WWTF is outside the proposed critical habitat. Grizzly Bears are known to occur in the inter-montane valleys of the northern Rocky Mountains, such as the area of the St. Ignatius-Southside WWTF. In these more populated areas the bears often are often more active nocturnally, bedding down in dense cover during daylight hours. This type of plant cover is found near the St. Ignatius Southside WWTF but as the Permit-authorized discharge does not affect any potential habitat of the Grizzly Bear and sets effluent limitations protective of water quality, the EPA has determined reissuing this NPDES Permit is Not Likely to Adversely Affect the threatened Grizzly Bear.

8.1.3. Canada Lynx (*Lynx canadensis*)
The Canada Lynx is listed as threatened in Montana. There is final critical habitat for the Canada Lynx but the location of the St. Ignatius Southside WWTF is outside the critical habitat. The distribution of lynx in North America is closely associated with the distribution of North American boreal forest. In Canada and Alaska, lynx inhabit the classic boreal forest ecosystem known as the taiga. The range of lynx populations extends south from the classic boreal forest zone into the subalpine forest of the western United States along the North Cascade and Rocky Mountain Ranges in the west. Within these general forest types, lynx are most likely to live in areas that receive deep snow and have high-density populations of snowshoe hares, the principal prey of lynx. The area of the St. Ignatius Southside WWTF is not the type of habitat where the Canada Lynx is likely to be found unless traveling between other, more suitable habitats. Therefore, the EPA has determined reissuing this NPDES Permit will have No Effect on this threatened species.

8.1.4. North American Wolverine (*Gulo gulo luscus*)
The North American Wolverine is listed as proposed, threatened in Montana and no critical habitat has been designated for this species. In Montana, Wolverines are found at high elevations with cold, snowy conditions where the snow remains well into the spring. The Mission Mountains, located just to the east of the St. Ignatius Southside WWTF contain this type of habitat. Tracking of Wolverines has shown they are widely ranging animals and occasionally come down from the high elevations, crossing valleys to other high elevation habitat areas. As the high elevation habitat areas located adjacent to the Mission Mountains lie primarily to the east, Wolverines are more likely to range to the east rather that coming down to the Mission Valley, where the St. Ignatius Southside WWTF is located. For these reasons the EPA has determined the reissuance of this discharge Permit will have No Effect on this proposed, threatened species.

8.1.5. Bull Trout (*Salvelinus confluentis*)
The Bull Trout is threatened in Montana and final critical habitat has been designated but the location of the St. Ignatius Southside WWTF lies outside of the critical habitat. Bull trout have specific habitat requirements that affect their distribution. They need cold water to survive, generally described as the cleanest and coldest of water. They also require stable stream channels, clean spawning and rearing gravel, complex and diverse cover, and unblocked migratory corridors allowing them to go upstream for spawning. The EPA cannot find any documentation of Bull Trout presence in Sabine Creek but they could be present at least seasonally.

The current lagoon treatment system discharges intermittently at 90 gallons per minute or 0.13 million gallons per day. During these discharges, SKHA personnel say the discharge infiltrates into the ground before reaching Sabine Creek. The new, MBBR treatment system is planned to run at 45,000 gallons per day or 0.05 million gallons per day, a maximum capacity of 0.1 million gallons per day. The SKHA staff engineer thinks the MBBR discharge will also infiltrate before reaching Sabine Creek but will not know for sure until the MBBR is operable and discharging. The MBBR is designed to treat wastewater for ammonia removal down to the current WQS, which will improve the quality of the effluent being discharged and the TSS limits in this permit are more stringent than the limits in the previous permit. For these reasons, the EPA has determined that issuing this permit is Not Likely to Adversely Affect this threatened species.

8.1.6. Spalding's Catchfly (*Silene spaldingii*)
Spalding's catchfly is threatened in Montana. This species is found predominantly in the Pacific Northwest bunchgrass grasslands and sagebrush-steppe, and occasionally in open-canopy pine stands, including the Intermontane Valleys of northwestern Montana. While Spalding's catchfly is present on the Flathead Reservation, the locale of the St. Ignatius Southside WWTP is not the type of habitat this species needs. The US FWS species profile for this species shows occurrences in the northern part of the Flathead Reservation, approximately 40 miles away and across the Flathead River from the WWTP location. For this reason, the EPA has determined reissuing this permit will have No Effect on this threatened species.

8.2 Conclusion

Concurrent with public notice, a copy of the draft Permit and this Statement of Basis were sent to the U.S. FWS. The letter requested concurrence with the EPA's finding that reissuance of this NPDES Permit (MT-0029017) for the St. Ignatius Southside wastewater treatment facility will have No Effect on the Canada Lynx and North American Wolverine and is Not Likely to Adversely Affect Grizzly Bear, Yellow-billed Cuckoo, Bull Trout or Spalding's Catchfly, which are the species listed as threatened or endangered for Lake County by the U.S. FWS under the Endangered Species Act. The EPA received no response to the letter sent on September 27, 2018 and considers this concurrence with the Not Likely to Adversely Affect determination.

9. 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 U.S. National Park Service (U.S. NPS) National Register of Historic Places Focus Database was utilized to determine and evaluate resources of concern in the St. Ignatius Southside facility location.

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 U.S. NPS 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.

Title:	St. Ignatius Mission
National Register Information System ID:	73001053
Areas of Significance:	Art, Education, Architecture, Religion
Resource Type:	BUILDING
Asset ID:	099ea152-1980-45c8-97b1-dbb42efea685

Based upon the information provided by the U.S. NPS database, the EPA does not anticipate any impacts on listed/eligible historic properties or cultural resources due to this Permit issuance and facility discharge related activities from Outfalls 001 or 001A.

Concurrent with the public notice of this Permit the EPA notified the Tribal Historic Preservation Officer (THPO) to ensure that no historic properties were negatively affected by the conditions of this Permit. No comments were received from the THPO regarding the permit issuance.

10. MISCELLANEOUS

The effective date and the expiration date of the Permit will be determined at the time of issuing. The Permit will be issued for a period not to exceed five years.

Permit and statement of basis written by David Rise, EPA MOO

ADDENDUM:

PUBLIC NOTICE AND RESPONSE TO COMMENTS

The permit and statement of basis were public noticed in the Missoulian on September 21, 2018. No comments were received during the public notice period.