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

PERMITTEE:	Prairie Wind Casino
FACILITY NAME AND ADDRESS:	Prairie Wind Casino H.C. 49 Box 10 Pine Ridge, South Dakota 57770
PERMIT NUMBER:	SD0034760
RESPONSIBLE OFFICIAL:	Raymond Ecoffey, Facility Manager (605) 867-8932 H.C. 49 Box 10 Pine Ridge, South Dakota 57770
FACILITY CONTACT:	Joey Matsamas, Operator (605) 867-8932 H.C. 49 Box 10 Pine Ridge, South Dakota 57770
PERMIT TYPE:	Minor, Industrial, Non-discharging
TYPE OF TREATMENT:	Facultative Lagoons
FACILITY LOCATION:	Northwest 1/4 of Section 15, Township 37 North, Range 48W Latitude 43.183921N Longitude 102.988274W
DISCHARGE LOCATION(S):	Outfall 001 Latitude 43.183339N Longitude 102.987864W
RECEIVING WATER:	No discharge anticipated: In the event of a discharge, wastewater is expected to enter a tributary of Lower South Branch Blacktail Creek

1. INTRODUCTION

This statement of basis (SoB) is for the issuance of a NPDES permit (Permit) to the Prairie Wind Casino (Casino), for the Prairie Wind Casino Wastewater Treatment Plant (WWTP). The permit establishes discharge limitations for any discharge of wastewater from the facility. 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

The Casino is located on the Pine Ridge Reservation and is owned by the Oglala Sioux Tribe. The WWTP treats and infiltrates wastewater from commercial operations conducted at the Casino.

2.1. Facility Description

The Casino consists of a 78 room hotel, event center and restaurant. The hotel has a pool treated with chlorine water, with water changes conducted approximately every 4 months.

Figure 1 - Aerial Image – Prairie Wind Casino and WWTP

2.2. Treatment Process

The WWTP is a 2-cell lagoon system operated in series. The lagoons were constructed in August of 2000 with a design treatment capacity of 12,754 gallons per day. The lagoons each have a surface area of 1.35 acres at full capacity. The Casino discharges approximately 7,800 gallons of wastewater to the lagoons per day. The system is designed to dispose of treated wastewater through infiltration and evaporation. The lagoons have not been dredged since their construction.

In the event of an emergency, wastewater may be directed to a temporary holding pond located between the Casino and WWTP.

2.3. Chemicals Used

No chemicals or priority pollutants have been identified to have the potential to be present in the Casino's wastewater. The wastewater is expected to contain pollutants typical of commercial establishments. The Casino's pool is disinfected with chlorine which is not likely to pass through the lagoon system. To verify this assumption, the Casino will be required to monitor for total residual chlorine in the event of a discharge from the WWTP.

2.4. Other Wastewater Sources

The Facility has reported that there are no additional users discharging to the WWTP. The facility does not accept wastewater from septage and waste haulers. The facility does not have an R.V. dump station.

3. WATER QUALITY CONSIDERATIONS

3.1. Description of Receiving Water

The WWTP is not designed to discharge wastewater. The primary methods of wastewater disposal are infiltration and evaporation. The WWTP has never reported a discharge. If the WWTP was to discharge, the local topography indicates the discharge would travel approximately 0.5 miles across a mostly flat marshy area before entering an unnamed tributary to the Lower South Branch of Blacktail Creek (See Figure 2). The Oglala Sioux Tribe has not identified beneficial uses or proposed water quality standards for surface waters of the Pine Ridge Reservation

Figure 2 – Expected path of WWTP discharge and receiving water

4. PERMIT HISTORY

The WWTP has been previously permitted under permit numbers: SDG-585019, and most recently, under the Lagoon General Permit (LGP) permit # SDG589519 as a category 2 facility, which requires prior notification to the EPA of planned discharges. After EPA's reissuance of the LGP in 2015, the WWTP was determined to be ineligible for coverage under the LGP because the wastewater is commercial in nature and not from domestic sources.

4.1. Plant Performance and Compliance History

The EPA's inspection history and discharge monitoring reports for the WWTP were reviewed. According to the EPA's records, the WWTP has never conducted a discharge to Waters of the U.S.

5. MAJOR CHANGES FROM PREVIOUS PERMIT

Previously the WWTP was permitted under the LGP (#SDG589519) as a category 2 - Prior Permission Required Before Starting to Discharge. The facility is ineligible for coverage under the LGP because the Casino is commercial in nature and does not treat domestic wastewater. The Permit is an individual permit and will contain effluent limitations at least as stringent as previous permits.

The monitoring and reporting requirements have been modified to reflect the "no-discharge anticipated" status of the WWTP.

6. EFFLUENT LIMITATIONS

6.1. Water Quality Based Effluent Limitations

Section 301 of the CWA requires the EPA to develop NPDES effluent limits through evaluating water quality standards (WQS) and treatment technology standards. In the absence of applicable water quality standards, the EPA must conduct an evaluation of the Federal water quality criteria (WQC) and the assimilative capacity for the receiving stream (see 40 CFR § 304).

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.

As of the writing of the Permit the Oglala Sioux Tribe has not applied for Treatment as a State (TAS) for purposes of establishing WQS or proposed WQS for the Pine Ridge Reservation.

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". To achieve this Congressional goal in the absence of Tribal WQS on the Pine Ridge Reservation, the EPA considers the beneficial uses of the receiving waters to include aquatic life and recreation.

6.2. Technology Based Effluent Limitations

The National Secondary Standards (NSS) for secondary treatment (40 CFR § 133) have been developed by the EPA to be economical and protective of water quality. The NSS were developed for Public Owned Treatment Works treating domestic sewage. The Casino is expected to treat wastewater with characteristics similar to domestic sewage. The NSS will be referenced for guidance in establishing effluent limits. The EPA and Tribes have not developed additional technological based effluent limitations that apply to discharges from the WWTP.

6.3. Effluent limitations

Table 2 outlines the Permit's effluent limitations and basis for development

Table 1 - Effluent Limitations - Outfall 001.

Characteristic	30-Day Average a/	7-Day Average a/	Daily Maximum a/	Limit Basis b/
Biochemical Oxygen Demand (BOD_5), mg/L	30	45	N/A	NSS
Total Suspended Solids (TSS), mg/L	30	45	N/A	NSS
Escherichia coli (E. coli), Number/100 mL	126	N/A	410	WQBEL
Oil and Grease, mg/L	N/A	N/A	10	Previous Permit
Total Residual Chlorine, mg/L c/	.011	N/A	19	WQBEL
The pH of the discharge shall not be less than 6.5 or greater than 9.0 standard units at any time.				WQBEL/NSS

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

b/ NSS: National Secondary Standards, WQBEL: Water Quality Based Effluent limitation.

c/ The minimum limit of analytical reliability in the analysis for total residual chlorine is considered to be 0.05 mg/L. For purposes of this permit and calculating averages and reporting in the DMR form, analytical values less than 0.05 mg/L shall be considered to be in compliance with this permit.

6.4. Effluent limitation development

BOD - There are no water quality standards to apply to the discharge of BOD. The NSS were applied because the wastewater is expected to have similar characteristics to domestic wastewater.

TSS - There are no water quality standards to apply to the discharge of TSS. The NSS were applied because the wastewater is expected to have similar characteristics to domestic wastes.

***E. coli* –** WQBEL based on EPA's Section 304(a) recommended WQC to protect the fishable and swimmable beneficial use of receiving waters.

Oil and Grease - 10mg/L is consistent with the effluent limitations in the previous permit (LGP).

Total Residual Chlorine – This WQBEL is based on EPA's Section 304(a) recommended WQC for aquatic life.

pH – The pH incorporates NSS and WQC. The NSS requires the pH be between 6.0-9.0 standard units at all times. The WQC for aquatic life requires the pH be between 6.5-9.0 standard units. The Permit's effluent for pH will be the most stringent of the applicable standards: pH must be between 6.5-9.0 standard units at all times.

7. MONITORING REQUIREMENTS

7.1. Monitoring locations

Table 2 identifies the location of Outfall 001 where monitoring is required to be conducted when a discharge is necessary.

Table 2 – Monitoring Locations

Outfall Serial Number	Description of Discharge Point	GPS Coordinates
001	Outfall from WWTP	Latitude 43.1833393N Longitude 102.987864W

7.2. Self-Monitoring Requirements - Outfall 001

Monitoring is only required in the event of a discharge. The facility is not anticipated to discharge under normal operating circumstances. In the event a discharge is necessary, the monitoring requirements identified in Table 3 are to be conducted. The monitoring frequency is daily for every constituent. If a discharge lasts longer than three days, the monitoring frequency may be reduced to weekly after the first three daily monitoring events are conducted. For example, a discharge is conducted from October 1-12. Monitoring events are to be conducted October 1,2,3, and 10. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136.3.

Table 3 Monitoring Requirements

Effluent Characteristic	Frequency a/	Sample Type b/
Total Flow, million gallons per day	Daily	Instantaneous
Biochemical Oxygen Demand (BOD_5), mg/L	Daily	Grab
Total Suspended Solids, mg/L	Daily	Grab
Escherichia coli (E. coli), Number/100 mL	Daily	Grab
pH, standard units	Daily	Grab
Oil and grease, mg/L/	Daily	Grab
Dissolved Oxygen (DO), mg/L	Daily	Grab

Total Ammonia Nitrogen (as N), mg/L	Daily	Grab
Total Residual Chlorine (TRC) b/, µg/L	Daily	Grab

a/ In the event that a discharge lasts longer than three days, the monitoring frequency may be reduced to weekly after the first three daily monitoring events are conducted. For example, a discharge is conducted from October 1-12. Monitoring events are to be conducted October 1,2,3, and 10..

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

8. FACILITY INSPECTION REQUIREMENTS

On a weekly basis the permittee shall inspect its wastewater treatment facility. The permittee shall maintain a log, in electronic format or hard copy, recording all information obtained during the inspection. Section 6.5 of the Permit includes specific information to be collected during inspection.

9. REPORTING REQUIRMENTS

With the effective date of this Permit, the Permittee must electronically report DMRs using NetDMR. The DMRs are required to be submitted on an unscheduled basis. DMRs must be submitted within 30 days of discharge. The Permittee must sign and certify all electronic submissions in accordance with the requirements of Section 7.7 of the Permit ("Signatory Requirements"). 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 Oglala Sioux. Currently, the Permittee may submit a copy to the Oglala Sioux by one of three ways: 1.) a paper copy may be mailed, 2.) The email address for Oglala Sioux may be added to the electronic submittal through NetDMR, or 3.) The Permittee may provide Oglala Sioux viewing rights through NetDMR.

Prior to December 21, 2020, all other reports required by the Permit (e.g., Parts 5.9 and 5.10) as well as sewer overflow event reports, shall be signed and certified in accordance with the Signatory Requirements (see Permit Section 7.7), and submitted to the EPA Region 8 Enforcement and Compliance Assurance Water Enforcement Branch and Oglala Sioux Tribe at the addresses given. Effective no later than December 21, 2020, these reports shall be submitted electronically using "NeT". If the NeT tool is not available on December 21, 2020, the reports can continue to be submitted to the addresses above until the tool is available.

10. ENDANGERED SPECIES CONSIDERATIONS

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 EPA has determined that since the WWTP is not designed to discharge under normal operating conditions, activities associated with this facility have are expected to have "No Effect" on listed species and critical habitat. No consultation will be conducted with the FWS.

11. NATIONAL HISTORIC PRESERVATION ACT REQURIEMENTS

During public notice of the Permit the Tribal Historic Preservation Officer will be contacted to ensure that all historic properties are not negatively affected by the conditions of the Permit. See the addendum at the end of this document for more information.

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 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, the EPA does not anticipate any impacts on listed/eligible historic properties or cultural resources due to the Permit issuance and discharge related activities from Outfall 001.

12. MISCELLANEOUS

The effective date and the expiration date of the Permit will be determined upon issuance. This NPDES Permit shall be effective for a fixed term not to exceed 5 years.

Permit drafted by: Paul Garrison, Environmental Engineer, 8WD-CW-W. April 2019.

Permit reviewed by: CWW Permit Tech, May 2019.

ADDENDUM:

PUBLIC NOTICE AND RESPONSE TO COMMENTS

The permit and statement of basis were public noticed in the XXX on date,year. The comment(s) received and the response(s) are provided below.

Comment:

The commenter noted that …

Response:

The following language was added to the final permit…