

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

PERMITTEE: Standing Rock Sioux Tribe

FACILITY NAME AND ADDRESS: Grand River Casino and Resort  
27903 Hwy 12  
Mobridge, South Dakota 57601  
[www.grandrivercasino.com](http://www.grandrivercasino.com)

PERMIT NUMBER: SD-0034752

RESPONSIBLE OFFICIAL: Scott Gates, Maintenance Director  
P.O. Box 639  
Mobridge, South Dakota 57601

FACILITY CONTACT: Scott Gates  
701-455-2597

PERMIT TYPE: New individual coverage, minor, non-POTW

TYPE OF TREATMENT: Facultative Lagoon, three cells

FACILITY LOCATION: 4 Miles west of Mobridge on Hwy 12  
SE 1/4 of Section 35, Township 19 N,  
Range 29 E  
Latitude 45.56141 °N  
Longitude 100.506885 °W  
Corson County

OUTFALL LOCATION: Latitude 45.560223 °N  
Longitude 100.510431 °W

## **1. INTRODUCTION**

This statement of basis (SoB) is for the issuance of a NPDES permit to the Standing Rock Sioux Tribe, for the Grand River Casino and Resort (the Facility). The Permit establishes discharge limitations for any discharge of water 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 Grand River Casino and Resort was previously covered under the EPA National Pollutant Discharge Elimination System (NPDES) Lagoon General Permit (LGP), previous permit number NDG589306. The change from LGP coverage to individual coverage was made to provide more specific and inclusive information on casino and resort characteristics; such as: a detailed fact sheet regarding casino configuration; language specific to the flows from the casino and resort which may include industrial laundry, golf courses, swimming pools, restaurants, gas stations, car washes, RV parks; language on grease trap controls and/or lift station controls; and the ability to include compliance schedules or make modifications, which were not possible under the LGP. With this issuance the Facility will be covered under an individual NPDES permit, SD-0034752.

### **2.1. Facility Description**

The Grand River Casino and Resort features a 40-room lodge and restaurant, with a conference center and event facility, located 4 miles west of Mobridge, South Dakota on Highway 12. The Facility is adjacent to the Bay at Grand River, a 70-site campground with showers, RV dump station, convenience store, and fish cleaning station. While the Bay at Grand River is not connected by any service linkages to the Facility, the Facility does accept septicage from pumper trucks via a manhole located near treatment cell 1 (see Figure 1).

The Facility is situated on the bluff, at approximately ~1,770 feet, 100+ feet in elevation above the shore of Lake Oahe (oh-WAH'-hee). The Facility periodically discharges treated effluent, downhill via 8" PVC piping, to an unnamed dry tributary which discharges into Claymore Creek, an inlet of Lake Oahe. The distance to Claymore Creek is approximately 0.33 miles.

Figure 1 - Aerial Image – Grand River Casino and Resort



Figure 2 - Aerial Image – Topographic map



## 2.2. Treatment Process

The Facility utilizes a three-cell facultative lagoon for treatment of wastewater from the casino, resort, guests and staff, as well as the hauled septage. The wastewater is held in the three-cell facultative wastewater lagoon system; the cells operate in series. Cells 1 (~2.25 acres) and 3 (~.85 acres) were constructed in 2003, cell 2 (~1 acre) was constructed in 2004. All three cells have a polyethylene liner below a bentonite liner, and cell 1 can be bypassed if maintenance is necessary. During the previous permit cycle, the Facility was permitted under a quarterly monitoring schedule. For this Permit issuance the quarterly monitoring requirement will remain.

## 2.3. Chemicals Used

No use of chemicals was reported for the treatment of the wastewater. The lagoon utilizes aerobic and anaerobic natural biological processes for treatment.

# 3. WATER QUALITY CONSIDERATIONS

## 3.1. Description of Receiving Water

The Grand River begins in central South Dakota, continues through the Standing Rock Reservation and flows north into North Dakota in the United States. Formerly the Grand River, Lake Oahe is a large reservoir behind Oahe Dam on the Missouri River. The lake is named for the 1874 Oahe Indian Mission. The dammed lake has an area of 370,000 acres and a maximum depth of 205 ft.

Discharges from the Facility are routed through 8" PVC piping from Cell 3 to the Outfall 001 location where effluent goes into an unnamed ditch. The ditch parallels U.S. Hwy 12 and flows southeast until the junction with Claymore Creek. Claymore Creek is a tributary to the Grand River/Lake Oahe.

The Standing Rock Sioux Tribe does not have approved water quality standards; therefore, the EPA has reviewed the anticipated uses of the lake and made the determination that recreation and agricultural uses need to be protected. The EPA utilized recommended criteria and considered adjoining state water quality standards for the derivation of permit limitations.

The state of South Dakota, which borders the Standing Rock Reservation, has not been granted authority to administer any portions of the Clean Water Act (CWA) within tribal boundaries. Consideration of South Dakota water quality standards does not grant or infer any rights to the state of South Dakota.

# 4. PERMIT HISTORY

This is the first issuance of an individual NPDES permit for this Facility. The Facility was previously permitted under the LGP with a permission to discharge requirement. With the reissuance of the LGP in 2016, casinos were excluded from permit coverage, and therefore, the facility is now being covered individually.

### *Recent Changes*

Previously the Facility's discharge traveled downhill from the third lagoon to a culvert under U.S. Hwy 12, to an unnamed tributary on the northside of the highway. Concerns about the culvert's integrity were noted by the South Dakota Department of Transportation (SDDOT), and in 2017 the Facility made modifications to the discharge pipe and flow. The discharge now travels on the southside of Hwy 12 and does not cross the SDDOT right of way until the confluence with Claymore Creek.

### *Plant Performance and Compliance History*

In the last permit cycle, no discharges were reported.

## **5. MAJOR CHANGES FROM PREVIOUS PERMIT**

The previous 'permission to discharge' requirement from the LGP will not be continued with this individual Permit issuance.

Monitoring requirements for nutrient analysis will be included with this Permit issuance. Nutrient analysis is being included to provide baseline data for future permitting and water quality actions.

## **6. PROPOSED PERMIT LIMITATIONS**

Section 101(a)(2) of the CWA 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 be achieved by July 1, 1983". Section 301 of the CWA requires the EPA to develop NPDES effluent limits through evaluating treatment technology standards and water quality standards (WQS). 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).

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

The National Secondary Standards (NSS) for secondary treatment (40 C.F.R. § 133) have been developed by the EPA to be economical and protective of water quality. While the NSS standards apply only to Publicly Owned Treatment Works (POTWs), the NSS will be referenced for establishing effluent limits based on professional judgement due to the similarity of the treatment system to a POTW. The EPA has not developed additional technological based effluent limitations that apply to discharges on the Standing Rock Reservation. Limitations based on Technology Based Effluent Limitations are noted in Table 1 with TBELs as the limit basis.

### **6.2. Water Quality Based Effluent Limitations (WQBELs)**

The Standing Rock Sioux Tribe has not been approved by the EPA for Treatment as a State (TAS) and does not have established WQSs. Therefore, to achieve the CWA goal in the absence of Tribal WQS on the Reservation, the EPA relied on CWA § 301(b)(1)(C) in establishing WQBELs based on EPA's Section 304(a) recommended WQC to protect the above mentioned expected uses in the receiving waters.

Discharges from the Facility have the potential to reach recreation waters of Lake Oahe. The EPA considers the beneficial uses of the receiving waters to include aquatic life and recreation. Monitoring and limitations on *Escherichia coli* (*E. coli*) will be included in this permit, as well as monitoring for nutrients which may affect the health of Lake Oahe. Limitations based on Section 304(a) recommended WQC are noted in Table 1 with EPA criteria or guidance notations.

The EPA also considered South Dakota's water quality standards for Snake Creek, a similar creek north of Claymore Creek, to evaluate water quality criteria established for the area. SD criteria for the Snake Creek are protective of warmwater marginal fish life propagation and limited-contact recreation. In establishing effluent limits, the EPA utilized professional judgement and EPA Section 304(a) recommended WQC to protect Lake Oahe in the absence of Tribal WQSs, due to the anticipated recreation use on Lake Oahe and expected contaminants in casino effluents. EPA criteria was utilized because State WQS do not apply within the reservation boundaries. Additional factors in this decision are: the dilution in Lake Oahe, the distance to waters of the State, and the intermittent and infrequent nature of discharges from the Facility.

Table 1 - Effluent Limitations - Outfall 001

| Characteristic  | 30-Day Average <u>a/</u> | 7-Day Average <u>a/</u> | Daily Maximum <u>a/</u> | Limit Basis <u>b/</u> |
|---|--------------------------|-------------------------|-------------------------|-----------------------|
| Flow, mgd   | Report                   | N/A                     | Report                  | N/A                   |
| Biochemical Oxygen Demand (BOD <sub>5</sub> ), mg/L                                 | 30                       | 45                      | N/A                     | TBEL                  |
| Total Suspended Solids (TSS), mg/L  | 30                       | 45                      | N/A                     | TBEL                  |
| <i>Escherichia coli</i> ( <i>E. coli</i> ), no./100 mL                              | 126                      | N/A                     | 410                     | PJ <u>b/</u>          |
| Oil and Grease (O&G), mg/L  | N/A                      | N/A                     | 10                      | PJ                    |
| The pH of the discharge shall not be less than 6.5 or greater than 9.0 at any time. |                          |                         |                         | EPA Criteria          |

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

b/ PJ = Professional Judgement

## 7. MONITORING REQUIREMENTS

### 7.1. Self-Monitoring Requirements - Outfalls 001

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

Table 2 - Monitoring plan - Outfall 001

| Effluent Characteristic   | Frequency       | Sample Type <u>a/</u> |
|---------------------------|-----------------|-----------------------|
| Total Flow, mgd <u>b/</u> | Every Discharge | Instantaneous         |

|  |                 |                         |
|--|-----------------|-------------------------|
| Biochemical Oxygen Demand (BOD <sub>5</sub> ), mg/L    | Every Discharge | Grab                    |
| Total Suspended Solids (TSS), mg/L                     | Every Discharge | Grab                    |
| <i>Escherichia coli</i> ( <i>E. coli</i> ), no./100 mL | Every Discharge | Grab                    |
| Ammonia as N, mg/L <u>d/</u>                           | Every Discharge | Grab                    |
| Total Kjeldahl Nitrogen, mg/L <u>d/</u>                | Every Discharge | Grab                    |
| Total Phosphorus, mg/L <u>d/</u>                       | Every Discharge | Grab                    |
| pH, units  | Every Discharge | Instantaneous <u>c/</u> |
| Oil and grease   | Every Discharge | Grab                    |

- a/ See Definitions, Permit 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 million gallons per day) during any discharge and the maximum flow rate observed (in mgd) shall be reported.
- c/ Analysis of pH must be taken in the field within 15 minutes of grab.
- d/ Monitoring for ammonia, nitrogen and phosphorus shall be performed only during the high production season of July through September.

## 8. FACILITY INSPECTION REQUIREMENTS

On a weekly basis, the permittee shall inspect its wastewater treatment facility, unless otherwise modified in writing by the EPA. The Permittee shall maintain daily log in either paper or electronic format in accordance with proper record-keeping procedures and shall make the log available for inspection, upon request, by authorized representatives of the U.S. Environmental Protection Agency or the applicable Tribe.

## 9. REPORTING REQUIREMENTS

Reporting of Monitoring Results: With the effective date of this Permit, the Permittee must electronically report quarterly discharge monitoring reports (DMR) on a quarterly frequency using NetDMR. Electronic submissions by permittees must be sent 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 Standing Rock Sioux Tribe Environmental Department. Currently, the Permittee may submit a copy to the Tribe by one of three ways: 1.) a paper copy may be mailed, 2.) The email address for Tribe may be added to the electronic submittal through NetDMR, or 3.) The Permittee may provide Tribe with viewing rights through NetDMR.

## 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 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 Corson County. The IPaC Trust Resource Report findings are provided below.

Figure 3 – IPaC Map Corson County

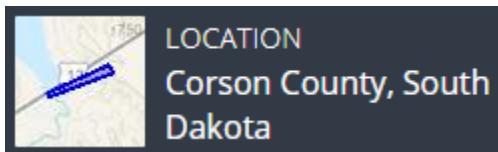


Table 3 – Corson County Endangered species

| Species  | Scientific Name               | Status |
|--|-------------------------------|--------|
| <b>Mammals</b>                                   |                               |        |
| Northern Long-eared Bat                          | <i>Myotis septentrionalis</i> | T      |
| <b>Birds</b>                                     |                               |        |
| Least Tern                                       | <i>Sterna antillarum</i>      | E      |
| Piping Plover CH                                 | <i>Charadrius melanotos</i>   | T      |
| Red Knot   | <i>Calidris canutus rufa</i>  | T      |
| Whooping Crane CH                                | <i>Grus americana</i>         | E      |
| <b>Fish</b>                                      |                               |        |
| Pallid Sturgeon                                  | <i>Scaphirhynchus albus</i>   | E      |
| THERE ARE NO CRITICAL HABITATS AT THIS LOCATION. |                               |        |

Symbols/Acronyms:

T = Threatened

E = Endangered

CH = Critical Habitat Established

### **10.1. Determination**

The EPA has determined that discharges from the Grand River Casino and Resort are *not likely to adversely affect* any of the listed species for Corson County. This determination is based on the following;

- Mammal Populations – Discharges from the Facility are not known to be connected with the transmission of white-nose syndrome, the disease connected to the decline of the Northern Long-eared Bat.
- Bird Populations – The infrequent Facility discharges to the dry tributary are not anticipated to affect the shore habitat for the listed bird populations. Destruction of habitat, disturbance, and predation are not anticipated effects from the discharge.
- Fish Populations – The limitations in the Permit are established to protect aquatic life by limiting the pH, TSS, and BOD. The discharge is not anticipated to destroy or alter Pallid Sturgeon spawning areas or affect the environmental conditions necessary for the fish's survival.

A copy of the Permit and this Statement of Basis were sent to the U.S. FWS requesting concurrence with the EPA's finding that reissuance of this NPDES Permit is *not likely to adversely affect* any of the species listed as threatened or endangered species in Corson County. The U.S. FWS concurred with the EPA's finding on November 21, 2018.

## **11. 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 Grand River Casino and Resort location.

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/or discharges from Outfall 001.

During public notice of this permit the Tribal Historic Preservation Officer was notified of the issuance of the permit. No comments were received regarding NHPA concerns.

## **12. MISCELLANEOUS**

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

VelRey Lozano, 303-312-6128, U.S. EPA Wastewater Unit, October 2018

**ADDENDUM:**

The permit and statement of basis for the Grand River Casino and Resort were public noticed in the Mobridge Tribune on November 28<sup>th</sup>, 2018. No comments were received during the public notice period, no modifications were made to the final permit.