



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region08

Ref: 8ENF-W-NW

SENT VIA EMAIL
DIGITAL READ RECEIPT REQUESTED

Young Colombe
Sewer Revenue Department Director
Rosebud Sioux Tribe
ycolombe@sicangu.com

Re: Inspection Report for the Spring Creek Community Lagoon System, NPDES Permit No. SDG589609

Dear Mr. Colombe:

On September 20, 2022, representatives of the U.S. Environmental Protection Agency inspected the Spring Creek Community Lagoon System located on the Rosebud Sioux Tribe Reservation in Spring Creek, South Dakota to evaluate compliance with the facility's National Pollutant Discharge Elimination System permits for wastewater. The inspection was conducted under the authority of Section 308 of the Clean Water Act (Act). Enclosed is a report of the inspection.

Inspection findings are summarized within the enclosed inspection report in a table titled "Findings, Corrective Actions and Recommendations." Within **thirty (30) days** of receipt of this report, please provide the EPA, Indian Health Service (IHS), and the Rosebud Sioux Tribe Environmental Program (Tribe) with a summary of corrective actions taken to address each of the findings identified in the report and any information that may change the findings or content of the report. This summary should be sent to:

Stephanie Meyers
meyers.stephanie@epa.gov

James Begeman
James.Begeman@ihs.gov

Ivan Crow Eagle
ivan.croweagle@rst-nsn.gov

Please contact me at 303-312-6938 or meyers.stephanie@epa.gov if you have any questions regarding this letter or the enclosed reports.

Sincerely,

**STEPHANIE
MEYERS**

Digitally signed by
STEPHANIE MEYERS
Date: 2022.11.22
11:43:50 -07'00'

Stephanie Meyers
NPDES and Wetlands Enforcement Section
Enforcement and Compliance Assurance Division

Enclosures:

- 1) Spring Creek Community Lagoon NPDES Inspection Report
- 2) Spring Creek Community Lagoon Photo Log

cc: The Honorable Scott Herman, President, Rosebud Sioux Tribe (via email)
Ivan Crow Eagle, Environmental Director, Rosebud Sioux Tribe (via email)
James Begeman, Tribal Utility Consultant, Indian Health Service (via email)

NPDES Inspection Report – Wastewater

National Database Information	
Inspection Date: September 20, 2022	Inspection Type: CEI - Wastewater Treatment Facility
Entry/Exit Time: 2:15 pm / 2:45 pm	NPDES ID Number: SDG589609
NAICS Code: 221320	Inspection ID: 202209 SDG589609
Lead inspector and affiliation: Stephanie Meyers / EPA Region 8	
Inspector and affiliation: Akash Johnson / EPA Region 8	

Facility Location Information	
Site/Facility Name & Location: Spring Creek Lagoon SE1/4, SEC. 1, T36N, R32W Spring, South Dakota 57572	Email Report to: Young Colombe ycolombe@sicangu.com

Contact Information	
	Name(s)/Title
Facility Contacts:	Young Colombe / Sewer Revenue Department Director / Rosebud Sioux Tribe / present during opening conference (lead)
Indian Health Service Contacts	Chuck Mack / Environmental Health Officer / Indian Health Service (IHS) / present during the inspection
	Erik Anderson / Senior Environmental Engineer / Indian Health Service (IHS) / present during opening conference
	James Begeman / Tribal Utility Consultant / Indian Health Service (IHS) / present during the inspection
Person/Company meeting definition of “Operator”	Rosebud Sioux Tribe (Sewer Revenue Department)
Authorized Official(s) (Per NOI)	Young Colombe / Sewer Revenue Department Director / Rosebud Sioux Tribe

Permit Information		
Is the permit on site and available? Yes	Lagoon Category: Discharge	Monitoring Frequency: Semi-annual
Effective Date: January 1, 2016	Expiration Date: December 31, 2020 (Administratively Continued at time of inspection)	Is the Facility under a compliance schedule? No
Is correct contact information indicated on ICIS? Yes	Indicate correct contact information: N/A	
Receiving Water(s): Little White River		
Discharge point location (longitude, latitude): There is one discharge point located on the west side of the single cell. Lat. 43.120081° N, Long. -101.028281° W		
Regulatory Inspector's source of information: Notice of Intent for the permit, permit, EPA records and databases, Indian Health Service records, facility representatives and facility observations.		

Areas Evaluated During Inspection		
<u>Permit</u>	<u>Self-Monitoring Program</u>	Pretreatment
<u>Records</u>	Compliance Schedule	Pollution Prevention
<u>Facility Site Review</u>	Laboratory	Stormwater
<u>Effluent/Receiving Waters</u>	<u>Operations and Maintenance</u>	Combined Sewer Overflow
Flow Measurement	Sludge Handling/Disposal	Sanitary Sewer Overflow

Report Review and Signature		
Drafter Name	Address/Phone Number	Date
Stephanie Meyers	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202	11/7/2022
	303-312-6938	
Reviewer Name	Address/Phone Number	Date
Akash Johnson	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202	11/14/2022
	303-312-6067	
Supervisor Signature/Name	Address/Phone Number	Date
MICHAEL BOEGLIN Digitally signed by MICHAEL BOEGLIN Date: 2022.11.22 10:11:55 -07'00'	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202	11/22/2022
	Michael Boeglin 303-312-6250	

Inspection Narrative and Site Description

The inspection was conducted at the Spring Creek Community Lagoon (facility) located on the Rosebud Reservation, in Spring Creek, South Dakota to evaluate compliance with its National Pollutant Discharge Elimination System (NPDES) permit. The EPA is responsible for implementing the NPDES program in Indian Country within the State of South Dakota. The inspection was announced approximately one month prior to the inspection, to coordinate logistics for the inspection. On September 20, 2022, U.S. Environmental Protection Agency (EPA) inspectors Akash Johnson and Stephanie Meyers met with Young Colombe with the Rosebud Sioux Tribe Sewer Revenue Department, as well as representatives James Begeman, Chuck Mack, and Erik Anderson with Indian Health Service (IHS). The EPA inspectors had presented their credentials and had an opening conference to explain the purpose of the inspection at the Rosebud Sioux Tribe's Water Resources office in the morning. Later in the day, the inspectors proceeded to inspect the facility and asked questions to the facility representatives to help the inspectors evaluate compliance with the facility's permit. Throughout the inspection, the inspectors noted their observations in a checklist. Photographs taken during the inspection are included in the attached photo log.

At the time of the inspection, the Sewer Revenue Department maintained two full-time operators on staff, dedicated solely to wastewater operations across all communities served, including Spring Creek. Sewer Revenue Department finances were briefly discussed during the opening conference. Young Colombe stated the Housing Authority had historically paid the Sewer Department \$15 per month per housing unit served (approximately 1,100 homes served across the Reservation), the arrangement had ceased several years prior to the inspection, a resolution had recently been passed enabling the Sewer Department to resume charging the Housing Authority for services, but no revenue had been collected since passing of the resolution. Commercial billing and other potential sources of revenue were not discussed at-length during the inspection. Young Colombe managed both the Rosebud Sioux Tribe Rural Water System (Sicangu Mni Wiconi) and Sewer Revenue Department operations, and indicated Sewer Revenue Department finances and other resources (vehicles, personnel, etc.) were managed separately from water system resources. Young Colombe estimated approximately 90% of his time was spent addressing water system issues, with approximately 10% of his time spent on wastewater issues.

The Spring Lagoon System serves approximately 290 people of the Spring Creek Community located on the Rosebud Reservation. The facility is permitted as a discharge facility, under the EPA Region 8 Lagoon General Permit. The facility is discharged on an as-needed basis and, according to facility personnel, has had one discharge event in the past five years. The lagoon system was originally constructed in 1967. In 2001, the collection system was expanded to serve additional homes with the addition of a lift station and sewer main, and an Ecolo-Chief mechanical plant was constructed adjacent to the lagoon, with the intention of conducting primary and secondary treatment in the mechanical plant and tertiary treatment/percolation in the existing lagoon, which was also renovated at the time. However, due to design and operation and maintenance concerns, operation of the mechanical plant ceased by 2008 and the mechanical plant remained offline at the time of the inspection. According to information provided to the EPA in the 2022 NOI for permit renewal, the average design flow of the lagoon is 0.0064 million gallons per day (MGD), the average daily inflow to the lagoon is estimated as 0.022 MGD (greater than the average design flow), and the capacity of the lagoon is estimated at 0.82 MG. The facility does not accept hauled septic waste.

All wastewater from the Spring Creek Community is collected via gravity flow in the lift station, then wastewater from the lift station is pumped to the single cell lagoon system. According to plan sets, approximately 25-30 homes in the eastern portion of the Spring Creek Community are on a gravity sewer where wastewater flows directly to the lagoon. Approximately 20 homes within the western portion of the community are connected to a gravity sewer main, where wastewater then flows to the lift station, then to the lagoon.

The inspectors first inspected the Spring Creek Lift Station (photo 36). Only one pump (Pump 1) of the two pumps present in the lift station was operational at the time of the inspection, as displayed on the lift station's control panel (photo 37).

The inspectors then went to inspect the lagoon cell. The facility is a single-cell lagoon system, and the table below has the operating volume for the cell.

Cell ID	Area (acres)	Operating Volume (MG)
Cell 1	0.72	0.82

The inspectors and facility representatives walked around the lagoon to evaluate berm integrity and the facility's discharge status. During the inspection, wastewater was flowing into the single cell for treatment (photo 39). There is a discharge pipe inside of the cell on the west side, with a three-valve discharge configuration. Facility representatives informed inspectors that the facility does occasionally discharge on an as-needed basis. IHS representatives observed that the facility was not discharging at the time of the inspection. Inspectors also observed the Ecolo-Chief wastewater treatment system on site near the single-cell lagoon, which is no longer operational. Facility representatives indicated that a project was in place to remove the Ecolo-Chief system, as well as a project to install lining in the single-cell lagoon. Information included in the 2022 NOI for permit renewal indicates lagoon renovations could include construction of a new two-cell lagoon to replace the existing system, construction of a new lift station and force main, and abandonment of the existing lagoon and idle mechanical plant.

At the end of the inspection, the inspectors discussed preliminary findings with Mr. Begeman and Mr. Mack. On October 18, 2022, the EPA requested analytical reports containing data reported on Discharge Monitoring Report (DMR) for the monitoring period ending on December 31, 2021 but, as of this report issuance, have not received the DMR data reports.

Findings, Corrective Actions and Recommendations

Finding #1: Weekly lagoon inspections were not being conducted or recorded.

Weekly lagoon inspections were not being conducted. A facility representative indicated only the lift station is visited on Tuesdays and Thursdays each week.

Permit requirement:

Part 4.3.1 of the Lagoon General Permit (Permit) states, “On at least a weekly basis, unless otherwise modified by written approval from the EPA, the permittee shall inspect its wastewater treatment facility. The permittee shall maintain a notebook recording all information obtained during the inspection. At a minimum, the notebook shall include the following:

- 4.3.1.1. Name of facility and permit number;
- 4.3.1.2. Date and time of the inspection;
- 4.3.1.3. Name of the inspector(s);
- 4.3.1.4. The facility's discharge status;
- 4.3.1.5. The flow rate of the discharge if occurring;
- 4.3.1.6. If a discharge is occurring, has occurred since the previous inspection, and/or if a discharge is likely to occur before the next inspection. (Note: If a discharge has occurred or is likely to occur before the next inspection, perform the appropriate monitoring and reporting requirements in Parts 3.2 and 5.4 of this permit if not already done.);
- 4.3.1.7. Is there is any leakage through the dikes;
- 4.3.1.8. Are there are any animal burrows in the dike;
- 4.3.1.9. Is there any erosion of the dikes (e.g., rills, cracks or other structural indications of erosion);
- 4.3.1.10. Are there are any rooted plants, including weeds growing in the water;
- 4.3.1.11. Does the vegetation growth on the dikes needs mowing (e.g. greater than 6” tall);
- 4.3.1.12. List the date scheduled for operation and maintenance procedures to be undertaken at the wastewater treatment facility.
- 4.3.1.13. Identification of operational problems and/or maintenance problems;
- 4.3.1.14. Recommendations, as appropriate, to remedy identified problems;
- 4.3.1.15. A brief description of any actions taken with regard to problems identified; and,
- 4.3.1.16. Other information, as appropriate.

The permittee shall maintain the notebook in accordance with required record-keeping items listed above and shall make the log available for inspection, upon request, by authorized representatives of the U.S. Environmental Protection Agency or the applicable Tribe (see Part 5.10 of this permit).”

Part 5.7 of the Permit states, “The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, inspection records, notifications to the EPA per this permit, and DMRs, for a period of at least five years from the date of the sample, measurement, report, application or submittal. Records of monitoring required by this permit related to sludge use and disposal activities must be kept at least five years (or longer as required by 40 C.F.R. Part 503). This period may be extended by request of the Director at any time. Data collected on site, data used to prepare the DMR, copies of DMRs, a copy of this NPDES permit, and the notice of intent for permit coverage, must be maintained on site.”

Corrective Action:

Ensure that inspections are conducted on a weekly basis and documented in accordance with the permit. Ensure that inspection reports are kept in accordance with the recordkeeping requirements of the permit. Provide the EPA, the Rosebud Sioux Tribe Environmental Program (Tribe) and IHS with a description of the corrective actions taken to address this finding.

Finding #2: There was only one functional pump at the lift station.

At the time of the inspection, inspectors observed only one of the two pumps present was functional in the lift station.

Permit Requirement:

Part 6.5 of the Permit states, "Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, at a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance."

Corrective Action:

Repair or replace the broken pump to ensure there are two functioning pumps at the lift station. Submit to the EPA, the Tribe and IHS with a description of the corrective actions taken to address this finding.

Finding #3: DMR and sampling data was not provided to the EPA.

On October 18, 2022, EPA requested laboratory results, chain of custodies, in-house sampling records, and pH calibration records for the monitoring period ending on December 31, 2021. To date, no records have been received by EPA.

Permit Requirement:

Part 7.5 of the Permit states, "The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit."

Corrective Action:

Provide the EPA the requested DMR records for the monitoring period ending on December 31, 2021.

Finding #4: The gate to the lagoon was left unlocked.

The gate in the southwest corner of the lagoon was unlocked when inspectors arrived to the lagoon system.

Permit requirement:

Part 6.5 of the permit states, "The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance

also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, at a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance.”

Corrective Action:

Ensure all gates to lagoon systems are properly locked for safety and security purposes. Provide the EPA, the Tribe and IHS with a description of the corrective actions taken to address this finding.