

NPDES Inspection Report – Wastewater Treatment Facility

National Database Information	
Inspection Date: September 10, 2024	Inspection Type: CEI – Wastewater Treatment Facility
Entry/Exit Time: Opening Conference: 8:00 a.m. - 9:00 a.m. Site Review: 12:30 p.m. - 1:00 p.m.	NPDES ID Number: SDG589804
NAICS Code: 221320	Inspection ID: 202409_SDG589804
Lead inspector and affiliation: Stephanie Passarelli / EPA Region 8	
Inspector and affiliation: Stephanie Meyers / EPA Region 8	

Facility Location Information	
Site/Facility Name & Location: Red Iron Wastewater Treatment Facility Lake Traverse Reservation, South Dakota Lat/Long: 45° 40' 59.0988" N, 97° 20' 8.0988" W	Email Report to: John Cloud, III, Program Manager Lake Traverse Utility Commission johncloud@swonnsn.gov

Contact Information	
	Name(s)/Title
Facility Contacts:	John Cloud, III / Program Manager / Lake Traverse Utility Commission (LTUC) / present during the opening conference
	Enrique Pagan / Operator / LTUC / present during the opening conference
	Jerwyn “JJ” Marks / Operator / LTUC / present during the inspections and closing conference
	Ross Hanson / Environmental Engineer Consultant / Indian Health Service (IHS) / present during the opening conference, inspections and closing conference
	Jon Ireland / Tribal Utility Consultant / Indian Health Service (IHS) / present during inspections and closing conference
Person/Company meeting definition of “Operator”	Sisseton-Wahpeton Oyate Tribe, LTUC
Authorized Official(s)	John Cloud, III / Program Manager / LTUC

Permit Information		
Is the permit on site and available? Yes, digitally	Lagoon Category: No Discharge	Monitoring Frequency: N/A
Effective Date: 01/01/2023	Expiration Date: 3/31/2027	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): No-discharge		
Regulatory Inspector’s source of information: Notice of Intent for the permit, ICIS, ECHO and facility representatives		

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	Draft Date	Contact Information
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Reviewer Name	Draft Date	Contact Information
Stephanie Meyers	11/25/2024	U.S. EPA Region 8 Denver, Colorado meyers.stephanie@epa.gov (303) 312-6938
Management Reviewer Name/Signature/Date		Contact Information
EMILIO LLAMOZAS  Digitally signed by EMILIO LLAMOZAS Date: 2024.12.05 09:52:06 -07'00'		U.S. EPA Region 8 Denver, Colorado llamozas.emilio@epa.gov (303) 312-6407
Emilio Llamozas, NPDES and Wetlands Enforcement Section Supervisor		

Inspection Narrative and Site Description

1.0 Introduction

On Tuesday, September 10, 2024, Environmental Protection Agency (EPA) inspectors Stephanie Passarelli and Stephanie Meyers (inspectors, we), conducted a compliance evaluation inspection of the Red Iron wastewater treatment facility (facility; WWTF) located within the exterior boundaries of the Lake Traverse Reservation in South Dakota. The facility was operated by Sisseton-Wahpeton Oyate Tribe, Lake Traverse Utility Commission (LTUC).

The purpose of the inspection was to evaluate compliance with the Clean Water Act (CWA) and the facility's 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 coordinated with the EPA several weeks in advance. A letter notifying the Tribe of the EPA's inspection presence on the Reservation was sent on August 29, 2024.

The opening conference was held at LTUC offices with John Cloud, III, LTUC Program Manager, Enrique Pagan, LTUC Operator, and Ross Hanson, IHS Environmental Engineer Consultant. We presented our credentials, explained the purpose of the inspection and discussed NPDES compliance and current operations of the multiple WWTFs operated by LTUC, including the subject facility. LTUC and IHS representatives discussed planned and future upgrades of several of the LTUC facilities, and status on the IHS Sanitary Deficiencies System list. Additionally, LTUC representatives shared that there were six staff responsible for wastewater operations and that staffing levels are not currently sufficient.

After the opening conference, inspectors proceeded to conduct site reviews of the WWTFs operated by LTUC, including the subject facility, for the remainder of the day on September 10, 2024. During the field portion of the inspections, inspectors were joined by Ross Hanson, Jon Ireland, and JJ Marks. Throughout the inspection, inspectors noted observations in a checklist. Photographs taken during the inspection are included in the attached photo log.

2.0 Facility Information

At the time of the inspection, NPDES permit coverage for the facility was effective under the EPA Region 8 General Permit for Wastewater Lagoons in Indian Country (Permit) (general NPDES ID SDG589###; facility-specific NPDES ID SDG589804), as Potential to Discharge, but no Discharge (NODIS) authorized.

The facility comprised a collection system and a lagoon. The year the lagoon system was originally built is unknown to LTUC. The average design flow, peak design flow, average design organic treatment capacity, and peak design organic treatment capacity are also unknown to LTUC.

The two-cell lagoon services approximately 60 people on Lake Traverse Reservation, primarily from the Red Iron housing community. Per the Notice of Intent submitted in 2022, the facility currently does not accept hauled septic waste, receiving only domestic wastewater from the housing community, and has no planned improvements. The operating volume for both cells is shown in the table below.

Cell ID	Area (acres)	Operating Volume (MG)
Cell 1	2.25	4.4
Cell 2	0.75	1.5
Total	3.0	5.9

3.0 Inspection Narrative

The inspection commenced at approximately 12:30 p.m. when the group convened at the facility. Inspectors had presented their credentials and conducted an opening conference earlier in the day. The facility comprised a two-cell lagoon serving approximately fifteen single-family homes from the Red Iron Housing community, as noted in the Notice of Intent application and reiterated by LTUC representatives. At the time of the inspection, Cell 1 (Photograph 1) contained wastewater throughout. Inspectors observed dense vegetation and mature trees that had reached heights greater than six inches on the berms surrounding Cell 1 (Photograph 1) and vegetation growing inside the cell walls. Cell 2 appeared dry (Photograph 2) at the time of the inspection, with dense vegetation throughout the cell. Mature trees were growing inside approximately half of Cell 2. Due to dense vegetation and trees, inspectors were unable to access Cell 2 to view the cell and confirm configuration. LTUC representatives indicated the collection system did not include any lift stations. Access to the lagoons was made on foot by crossing a field adjacent to the facility.

The inspection concluded at approximately 1:00 p.m. Following the inspection of the facility, inspectors held a brief closing conference with JJ Marks, Ross Hansen, and Jon Ireland where preliminary findings were discussed.

Findings, requested corrective actions, and recommendations identified pursuant to the inspection are identified in the section below.

Findings, Corrective Actions and Recommendations

Finding #1: The Permittee was not properly conducting nor documenting weekly lagoon inspections.

A facility representative stated that LTUC staff visit each lagoon on a regular basis and maintained inspection logs. However, the inspection logs did not include all required documentation of weekly lagoon inspections, and LTUC staff were not walking the entirety of the lagoons.

Permit requirement:

Section 6.5.1 of the Permit states, “On at least a weekly basis, unless otherwise modified by written approval from EPA, the Permittee shall inspect its wastewater treatment facility. Permission for less frequent inspections must be requested in writing by the Permittee and may be granted on a case-by-case basis where appropriate (e.g. a lagoon located in a remote area where access is a problem during the winter and compliance issues are not present), at the discretion of EPA. The Permittee shall maintain a notebook/logbook recording all information obtained during the inspection using indelible ink pens (or inspection logs may be kept in electronic format in accordance with proper record-keeping procedures) and in sufficient detail so that decision logic may be traced back, once reviewed. At a minimum, the notebook/logbook shall include the following (see Appendix D of this Permit for an Example Lagoon Inspection Form):

- 6.5.1.1. Name of facility and permit number;
- 6.5.1.2. Date and time of the inspection;
- 6.5.1.3. Name of the inspector(s);
- 6.5.1.4. The facility's discharge status;
- 6.5.1.5. The flow rate of the discharge, if occurring;
- 6.5.1.6. Determine 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 Sections 3 and 5.4 of this Permit if not already done.);
- 6.5.1.7. If there is any leakage through the dikes;
- 6.5.1.8. If there are any animal burrows in the dike;
- 6.5.1.9. If there is any erosion of the dikes (e.g., rills, cracks or other structural indications of erosion);
- 6.5.1.10. If there are any rooted plants, including weeds or trees growing in the water;
- 6.5.1.11. If the vegetative growth on the dikes need mowing (i.e. no greater than 6” tall or any height that may interfere with monitoring, operation and maintenance of the system);
- 6.5.1.12. Visual observation for visible sheen, floating oil, floating solids and foam;
- 6.5.1.13. Visual observation to check for evidence of illicit septic dumping;
- 6.5.1.14. List the date scheduled for operation and maintenance procedures to be undertaken at the wastewater treatment facility;
- 6.5.1.15. Identification of operational and/or maintenance problems, and a determination of whether proper operation and maintenance procedures are being undertaken at the frequency necessary to maintain working operations and the overall treatment and collection systems of the wastewater treatment lagoon system;
- 6.5.1.16. Recommendations, as appropriate, to remedy identified problems;
- 6.5.1.17. A brief description of any actions taken with regard to problems identified;
- 6.5.1.18. Overall visual observations to identify potential concerns with the “health” of the lagoon system (e.g., water is cloudy, water coloration concerns (e.g. red, black, grey, dark blue-green and cloudy), etc.); and
- 6.5.1.19. Other information, problems identified, or observations, as appropriate.

The Permittee shall maintain the notebook/logbook 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(s) (see Appendix A for list of Tribes).

Problems identified during the inspection (including, but not limited to, those associated with this section of the Permit) shall be corrected at the time of inspection, if possible. If they cannot be corrected at the time of the inspection, the inspector must identify a corrective action to remedy the problem(s), as well as a timeline for completion of the remedy. Corrective actions to remedy problem(s) shall be in line with (and addressed through) proper operation and maintenance (Section 6.6 of this Permit.). All problems identified during inspections, as well as associated corrective actions and timelines, shall be documented in the inspection log.”

Section 5.9 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 the Permit, for a period of at least three years from the date of the sample, measurement, report or application. Records of monitoring required by the Permit related to sludge use and disposal activities must be kept at least five years (or longer as required by 40 CFR Part 503). This period may be extended by request of the EPA at any time. Data collected on site, data used to prepare the DMR, copies of DMRs, and a copy of this NPDES Permit must be maintained on site.”

Corrective Action:

Ensure that weekly lagoons inspections are conducted and documented in accordance with the permit. Ensure that weekly lagoon inspection reports are retained in accordance with the recordkeeping requirements of the permit. Provide the EPA and IHS with one months’ worth of weekly lagoon inspection reports.

Finding #2: Excessive vegetation and trees were evident throughout the cells.

Excessive vegetation exceeding six inches in height and mature trees were present on the inside slopes and tops of the berms (Photographs 1 and 2).

Permit requirement:

Section 6.6 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 this Permit.

The Permittee shall do the following as part of the operation and maintenance program for the wastewater treatment facility...

6.6.1.10. The Permittee shall ensure that necessary action to promptly remove burrowing animals from the dikes is taken and documented in the maintenance log;

6.6.1.11. The Permittee shall ensure prompt repair of damage to dikes caused by burrowing animals and/or erosion and documentation of all actions in the maintenance log;

6.6.1.12. The Permittee shall ensure removal of rooted plants, including weeds and trees, from the water on a regular basis or as needed and documentation of all actions in the maintenance log; and

6.6.1.13. The Permittee shall ensure that the dikes are kept mowed on a regular basis during the growing season or as needed (i.e., vegetation not greater than 6" tall or any height that may interfere with monitoring, operation and maintenance of the system) and that documentation of all actions taken are recorded in the maintenance log..."

Corrective Action:

Remove the overgrown vegetation and trees from the inside and around the berms in all cells in accordance with Section 6.6 and relevant subparts of the Permit. In a response to the EPA and the IHS provide photographs once the vegetation and trees have been removed, and provide date of completion.

Finding #3: The facility does not have enough staff or funding.

During the opening conference, staffing and funding resources were discussed. It is apparent based on that conversation as well as field observations that this facility does not have adequate staff or funding to fully comply with the permit.

Permit requirement:

Section 6.6.2 of the Permit states, "Staffing and Funding: The Permittee shall provide adequate staff and funding to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with the terms and conditions of this Permit. The level of staffing needed, in numbers, training and experience, shall be determined taking into account the work involved in operating the system, conducting maintenance, and complying with this Permit."

Corrective Action:

Develop a staffing and funding plan (plan) that includes the number of staff needed to comply with the permit, staff retention plan (competitive pay and proper training), SOPs for collection of outstanding fees, and evaluation of alternative funding sources. The plan should include deadlines for accomplishing each of the items listed in the plan. Provide the EPA and the IHS with a copy of the plan.

Finding #4: Access to the facility

During the inspection, the lagoons were accessed by crossing a field on foot, no access road was available. Without consistent access to the lagoons available, in particularly during the winter months, facility inspectors would not be able to conduct the required weekly lagoon inspections.

Recommendation:

Ensure the lagoon system is easily and safely accessible at all times throughout the year to conduct check operations and conduct required weekly inspections. In a response to the EPA, provide a narrative explaining how access to the lagoon has been restored.