

U.S. EPA Region 8 NPDES Inspection Report

National Database Information	
Inspection Date: June 27, 2023	Inspection Type: Compliance Evaluation Inspection
Entry / Exit Time: 9:15 AM - 10:30 PM	NPDES ID: SDG589117 (EPA Region 8 Lagoon General Permit SDG589###)
Major / Non-Major Facility: Non-Major	Program Sector(s): Publicly-Owned Treatment Works (POTW)
NAICS Code: 221320 (Sewage Treatment Facilities)	Inspection ID: 202306_SDG589117
Lead inspector and affiliation: Privacy / U.S. EPA Region 8	
Inspector and affiliation: Privacy / U.S. EPA Region 8	

Facility Location Information	
Site/Facility Name & Location: Takini School Wastewater Treatment Facility Howes, South Dakota 57748 44.638296, -101.843057	Email Report to: Privacy Takini School Privacy

Contact Information	
	Name(s)/Title
Facility Contacts	Privacy / Takini School (present for entire inspection)
	Privacy / Takini School (present for entire inspection)
	Privacy / Mni Wašté Water Company (present for entire inspection)
Indian Health Service Contacts	Privacy / Indian Health Service (not present)
Tribal Government Contacts	Privacy / Cheyenne River Sioux Tribe (not present)
Person/Company meeting definition of "Owner"	Unclear (the NOI lists the Takini School, the Cheyenne River Sioux Tribe, and the Bureau of Indian Education as facility owners in different locations on the NOI)
Person/Company meeting definition of "Operator"	Takini School

Responsible Official(s)	Privacy / Takini School
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Permit / Facility Information	
Permit on site and available: Yes; EPA inspectors provided Takini School representatives a hard-copy of the permit during the inspection	Permit Application Date: Did not evaluate
Effective Date: January 1, 2023	Expiration Date: March 31, 2027
Latitude: 44.638296	Longitude: -101.843057
Receiving Water(s): Non-discharging, but any discharge would flow into tributaries of the Cheyenne River	
Weather Conditions: Partly-cloudy, warm, no precipitation	
Inspector's source of information: Facility representatives and records, EPA records and databases, Google Maps, and inspection observations	

Areas Evaluated During Inspection		
<u>Permit</u>	<u>Self-Monitoring Program</u>	Pretreatment
Records	Compliance Schedule	Pollution Prevention
<u>Facility Site Review</u>	Laboratory	Stormwater
Effluent/Receiving Waters	<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
Privacy Digitally signed by Privacy Date: 2023.09.15 14:35:22 -06'00'	September 6, 2023	U.S. EPA Region 8 Denver, Colorado Privacy
Reviewer Name	Review Date	Contact Information
Privacy	September 7, 2023	U.S. EPA Region 8 Denver, Colorado Privacy
Management Reviewer Name/Signature/Date		Contact Information
Privacy Privacy Date: 2023.09.13 11:33:56 -06'00'		U.S. EPA Region 8 Denver, Colorado Privacy
Privacy		

Inspection Narrative and Facility Description

1.0 Introduction

On Tuesday, June 27, 2023, I, U.S. Environmental Protection Agency (EPA) inspector [Privacy], accompanied by EPA inspector [Privacy] (collectively, “we”), conducted a compliance evaluation inspection of the Takini School Wastewater Treatment Facility (WWTF; facility), located in Ziebach County, South Dakota, within the exterior boundaries of the Cheyenne River Reservation (Reservation). We were accompanied by the individuals identified on pages 1-2 of this report.

Ownership of the facility has not been clarified by the EPA, discussed further in Section 3.0. The inspection was coordinated with the Takini School and Cheyenne River Sioux Tribe Department of Environmental and Natural Resources several weeks in advance, and an inspection notification letter was sent to the Cheyenne River Sioux Tribe on May 18, 2023. The purpose of the inspection was to evaluate compliance with applicable National Pollutant Discharge Elimination System (NPDES) and Clean Water Act (CWA) requirements. Throughout the inspection, we took notes on our discussions and observations in bound checklists. Enclosure 2 is a facility schematic maintained in EPA records; the accuracy of this schematic was not verified during the inspection. Enclosure 3 is a log of photographs taken during the inspection.

2.0 Background

At the time of the inspection, the facility was permitted under the “No Discharge Requirement” (NODIS) conditions of the 2022-2027 EPA Region 8 Lagoon General Permit SDG589### (Permit). The facility was assigned facility-specific NPDES ID SDG589117.

Records pertaining to previous EPA NPDES inspections and other NPDES permitting, and compliance records are maintained in EPA files.

3.0 Inspection Narrative

The inspection began when we arrived at the Takini School in Howes on 06/27/23 at approximately 09:15 AM. We convened with [Privacy] outside the school, presented our inspector credentials, and conducted an opening conference. During the opening conference, we asked questions to the facility representatives to help evaluate compliance with the facility’s permit.

During the opening conference, Takini representatives indicated they were unsure who held the facility’s permit and who should be conducting routine operations and maintenance of the facility. [Privacy] said there has been turnover of personnel at the facility and wanted to clarify permit responsibilities. We noted EPA’s understanding was that the Takini School was the permit holder, but at the request of the facility representatives, we would verify and confirm. A hard copy of the Region 8 Lagoon General Permit was provided to David for reference.

The Takini School Wastewater Treatment Facility serves the school which operates year-round serving approximately 175 students August through May, and approximately 29 students during June/July. In addition, 15-20 houses located in the community north of the Takini School discharge to the facility. The facility is permitted as a no discharge facility under the Permit. Any discharge from the facility is expected to be under emergency circumstances only.

Inspection Narrative and Facility Description

The lagoon system was originally constructed in 1989 according to the NOI. The lagoons are surrounded by a 4' barbed wire fence, with a locked gate at the entrance (Photo 373). In 2007 the two-cell lagoon was modified by splitting the northern cell in two and is now referenced as cell 1 and cell 2. The larger southern cell is cell 3 (Photo 374). Influent can be directed to either cell 3 or cell 1 via a splitter (Photo 375). Facility representatives indicated at the time of the inspection, all influent was being directed to cell 3; standing water visible in cell 1 and cell 2 (Photos 375-376) was due to heavy seasonal rain experienced in the prior week. The valve connecting cell 3 and 2 was closed.

The lagoons receive primarily domestic wastewater from the school and community through a gravity-flow collection system. The cafeteria within the school has a grease trap installed prior to discharge into the collection system. Privacy indicated a new grease trap was installed last year because the previous grease trap was failing, resulting in sewer backups. They were not aware of any routine maintenance schedule for the new grease trap. The homes north of the Takini School tie into the collection system and are also gravity fed to the lagoons, no lift station is associated with this facility. The facility does not accept hauled septic waste.

In terms of maintenance, Privacy indicated the berms are mowed regularly to maintain access to the lagoons. Additionally, Privacy from the Mni Wašté Water Company (MWWC) indicated MWCC jets the lines connecting the community to the Takini Collection system annually, and spot checks manholes along this line routinely to ensure the tribal homes connection to the collection system is clear. Privacy indicated no routine inspections of the lagoon were documented.

Customers and finances were briefly discussed during the opening conference. Privacy indicated the school did not collect or receive any revenue from water or wastewater fees that may have been collected by the MWWC from the 15-20 houses north of the school that are served by the facility. Likewise, MWWC does not receive any compensation for jetting or maintaining the collection system lines leading to the lagoons.

4.0 Post-Inspection Activities and Conclusion

Following the inspection, we were able to verify Takini School representative Privacy, a previous Maintenance Supervisor, submitted the Notice of Intent (NOI) for the Takini School facility in 2020, and recertified intent in May 2022. Permit coverage was then issued to the Takini School on January 1, 2023. The NOI, permit, and coverage letter were emailed to Privacy in a follow-up email correspondence on July 7, 2023.

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

Findings, Corrective Actions, and Recommendations

Finding #1: Representatives of the Takini School, the Permit holder, were generally unaware of the facility's Permit coverage and Permit requirements including, but not limited to, routine O&M, development and implementation of an O&M plan, routine inspections, record generation and retention, adequate staffing and funding, etc.

During the inspection, we briefly discussed some Permit requirements and left a hard-copy of the Permit with facility representatives. On July 7, 2023, I emailed Privacy a copy of the NOI submitted by the school, the Permit coverage authorization letter, a link to where the Permit can be accessed online, and some wastewater compliance, technical, and financial assistance resources.

Permit Requirement:

Part 6.1 of the Permit (Duty to Comply) states:

The Permittee must comply with all conditions of this Permit. Any failure to comply with the Permit may constitute a violation of the Clean Water Act and may be grounds for enforcement action including, but not limited to, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

Corrective Action:

In addition to completing the corrective actions requested below, review the letter of Permit authorization and the Permit in their entirety and ensure all Permit requirements are understood and implemented. No response to the EPA is requested pursuant to this corrective action.

Finding #2: Lagoon inspections reports were not being generated or maintained.

Facility representatives indicated the facility was routinely inspected (frequency not discussed), but these routine lagoon inspections were not being documented. As the Permit holder, Takini School is responsible for conducting routine lagoon inspections.

Permit Requirement:

Part 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;

Findings, Corrective Actions, and Recommendations

- 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."

Corrective Action:

During the inspection, the EPA provided Takini School representative **Privacy** a hard copy of the Permit, and subsequently emailed a copy on 7/7/23. Appendix D of the Permit is an inspection form that can be used to document routine lagoon inspections. In a response to the EPA, provide a copy of a recently completed inspection form for the facility.

Findings, Corrective Actions, and Recommendations

Finding #3: No O&M Manual had been developed for the facility.

Permit Requirement:

Part 6.6 of the Permit (Proper Operation and Maintenance) 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. For Permittees not previously covered under the Region 8 General Permit for Wastewater Lagoon Systems in Indian Country, the Permittee shall, as soon as reasonable and practicable, but no later than six (6) months after the effective date of this Permit, do the following as part of the operation and maintenance program for the wastewater treatment facility:

6.6.1.1. Have a current O & M Manual(s) that describes the proper operational procedures and maintenance requirements of the wastewater treatment facility;

6.6.1.2. Have the O & M Manual(s) readily available to the operator of the wastewater treatment facility and require that the operator become familiar with the manual(s) and any updates;

6.6.1.3. Have a schedule(s) for routine operation and maintenance activities at the wastewater treatment facility; and,

6.6.1.4. Require the operator to perform the routine operation and maintenance requirements in accordance with the schedule(s).

For Permittees renewing coverage under this Permit, the Permittee is expected to have the above listed items (Sections 6.6.1.1. thru 6.6.1.4., which were part of the requirements under the previous Region 8 General Permit for Wastewater Lagoon Systems in Indian Country) completed prior to the coverage date under this Permit. These Permittees shall ensure that each of the items listed above are updated and maintained as part of the operation and maintenance program for the wastewater treatment facility.

In addition to the operation and maintenance items in the manual for the lagoon system, ALL Permittees shall do the following maintenance, at a minimum:

The Permittee shall maintain a log in either paper (e.g. bound notebook) or electronic format containing a summary record of any daily operation and maintenance activities at the wastewater treatment lagoon facility and collection system, that is to be updated on each day operation and maintenance activities are performed. At a minimum, the log shall include the following information:

6.6.1.5. Date and time;

Findings, Corrective Actions, and Recommendations

6.6.1.6. Name and title of person(s) making the log entry;

6.6.1.7. Name of the persons(s) performing the activity;

6.6.1.8. A brief description of any operations and maintenance activity performed on the wastewater treatment lagoon system;

6.6.1.9. The Permittee shall ensure that necessary action to promptly correct the problem of leakage through the dikes is taken and documented in the maintenance log;

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.

6.6.1.14. Other information, as appropriate.

The Permittee shall maintain the daily log 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(s) (see Appendix A for list of Tribes).

Corrective Actions:

Develop and implement an O&M Manual prepared in accordance with Part 6.6 of the Permit. In a response to the EPA, provide a copy of the O&M Manual.

Finding #4:

The fence surrounding the lagoon was a four-foot barbed wire fence. Facility representatives noted in the past children from the school had crawled through the fence to play in the lagoons and presented safety concerns and liability for the school. Additionally, the gate to the lagoon was unlocked at the time of the inspection.

Raw and partially-treated sewage contains bacteria, viruses, protozoa (parasitic organisms), helminths (intestinal worms), and inhaled molds and fungi. As a result, exposure to sewage may cause diseases ranging in severity from mild gastroenteritis (causing stomach cramps and diarrhea) to life-threatening ailments such as cholera, dysentery, infections, hepatitis, and severe gastroenteritis.

Findings, Corrective Actions, and Recommendations
Recommendation: The EPA recommends the Takini School evaluate the feasibility of installing a more secure fence, gate, and lock at the lagoon to prevent any possible safety issues.
Finding #5: School representatives were not aware of any routine maintenance schedule for the new cafeteria grease trap. Recommendation: Contact the manufacturer, vendor, or installer of the grease trap to obtain information on manufacturer-recommended pumping schedules and any other routine maintenance that should be performed for the grease trap.