

NPDES Inspection Report – Wastewater Treatment Facility

National Database Information	
Inspection Date: August 22, 2024	Inspection Type: CEI – Wastewater Treatment Facility
Entry/Exit Time: 12:30 p.m. – 2:35 p.m.	NPDES ID Number: SDG589519
NAICS Code: 221320	Inspection ID: 202408_SDG589519
Lead inspector and affiliation: [REDACTED] / EPA Region 8	
Inspector and affiliation: [REDACTED] / EPA Region 8	

Facility Location Information	
Site/Facility Name & Location: Prairie Wind Casino Lat/Long: 43.183921, -102.98827 (lagoon) 112 Casino Dr., Pine Ridge, SD 57770	Email Report to: [REDACTED], Facilities Manager [REDACTED]

Contact Information	
	Name(s)/Title
Facility Contacts:	[REDACTED] / Facilities Manager / present during the opening and closing conferences
	[REDACTED] / Maintenance Supervisor / present during the opening conference
	[REDACTED] / Maintenance Worker / present during the opening and closing conferences and the inspection
	[REDACTED] / Maintenance Worker / present during the opening conference and the inspection
Person/Company meeting definition of “Operator”	Prairie Wind Casino
Authorized Official(s)	[REDACTED] / Facilities Manager / Prairie Wind Casino

Permit Information		
Is the permit on site and available? No, the inspector provided a hard copy of the permit during the inspection	Lagoon Category: Potential to discharge, but no discharge authorized (NODIS), according to the authorization of coverage letter.	Monitoring Frequency: N/A
Effective Date: 07/01/2024	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): Unnamed tributary of Lower South Branch Blacktail Creek (source: ECHO)		

Regulatory Inspector's source of information: Individual permit application, ICIS, ECHO, Google Earth Pro, 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
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
Digitally signed b Date: 2024.10.23 06:50:29 -06'00'	9/12/2024	U.S. EPA Region 8 Denver, Colorado
Reviewer Name	Draft Date	Contact Information
	9/13/2024	U.S. EPA Region 8 Denver, Colorado
Management Reviewer Name/Signature/Date		Contact Information
Digitally signed by Date: 2024.10.22 17:54:05 -06'00'		U.S. EPA Region 8 Denver, Colorado
, NPDES and Wetlands Enforcement Section Supervisor		

Inspection Narrative and Site Description

1.0 Introduction

The inspection was conducted at the Prairie Wind Casino wastewater treatment facility (facility; WWTF) located in Oglala Lakota County, South Dakota, to evaluate compliance with 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 announced approximately one month prior to the inspection to coordinate logistics for the inspection.

On the morning of August 22, 2024, U.S. Environmental Protection Agency (EPA) inspectors [REDACTED] and [REDACTED] (collectively, “we”) met with Prairie Wind Casino Facilities Manager, [REDACTED], and three of his staff, [REDACTED], [REDACTED], and [REDACTED]. We presented our credentials and had an opening conference in the Prairie Wind Casino Facility Maintenance office where we explained the purpose of the inspection and discussed the design, operation, and Clean Water Act and NPDES compliance of the WWTF operated by Prairie Wind Casino. After the opening conference, we proceeded with [REDACTED] and [REDACTED] to conduct a site review of the WWTF. Throughout the inspection, we noted our observations in a checklist. Photographs taken during the inspection are included in the attached photo log. After the site review, we returned to the office for a closing conference with [REDACTED] and [REDACTED].

2.0 Facility Operations

During the opening conference we reviewed the records maintained for the facility. The facility records included documentation of weekly lagoon inspections from 2011 through 2021. [REDACTED] that facility staff visually inspect the lagoon daily but had not documented visual inspections since 2021. The facility representatives stated that Prairie Wind Casino hires an outside contractor to spray the lagoon and berms to control cattails and other vegetation. Facility maintenance staff also mow the lagoon berms. The facility files included operation and maintenance (O&M) manuals including basic lagoon standard operating procedures (SOPs) and a troubleshooting guide, as well as a schedule of facility-specific, routine lagoon maintenance activities. However, the staff did not maintain a log of O&M activities.

The WWTF is operated by the casino’s Facility Maintenance team. At the time of the inspection, Prairie Wind Casino employed nine maintenance staff, including the Facilities Manager. None of the staff are certified wastewater operators; however, [REDACTED] had recently attended EPA’s two-day training for wastewater lagoon operators. [REDACTED] stated that he plans to send staff for training to apply pesticides for lagoon maintenance. [REDACTED] stated that he has sufficient staff and resources to operate the WWTF in compliance with the general permit.

3.0 Facility Description and Site Review

The facility is permitted as a no discharge facility under the EPA Region 8 General Permit for Wastewater Lagoon Systems in Indian Country in South Dakota (Permit).

The WWTF serves Prairie Wind Casino, which includes the casino, a 78-room hotel, event center, and restaurant. The facility previously included a chlorinated swimming pool that was periodically drained to the lagoon. The pool was closed in 2020 during the COVID-19 pandemic; at the time of the inspection the facility had no immediate plans to reopen the pool.

The facility is a two-cell lagoon system. Wastewater from the hotel and event center flows by gravity into the lagoon system. Restaurant waste flows through a grease trap before entering the lagoon.

The facility does not accept hauled waste. Wastewater overflows from the primary cell into the secondary cell; however, facility representatives were not aware of the location of transfer piping between the cells. [REDACTED] stated that there is no outfall pipe and the inspectors did not identify an outlet structure for discharges.

After the opening interview, we observed the grease interceptor located on the south side of the casino. The grease interceptor was overflowing at the time of the inspection (photo 1). We then proceeded to the lagoon. When we arrived at the facility the gate was open (photo 2). The facility representatives stated that the gate had been left open in anticipation of the inspection. A lock was present and intact and the gate was closed after the site visit. A single sign located next to the entrance was in poor repair (photo 2); no other signs were present.

We proceeded to walk around the two cells of the lagoon to evaluate berm integrity, vegetation, and the facility's discharge status. The top and outside slopes of the berms were mowed and the inside slopes been treated for vegetation control (photo 4). Cattails were growing in 3 to 4 small areas near the inside slope of the berm in cell 2 (photo 5); the facility representatives stated that the lagoons had recently been treated to control cattail growth. Cattails were also observed near the toe of the outer slope on the north berm of the lagoon (photo 7). Both cells had a blue-green color with some algae growth and no odor. The perimeter fence was down at the northwest corner of the cell 1 (photo 4).

At the end of our inspection, we held a closing conference with [REDACTED] and [REDACTED] where we discussed preliminary findings. The following week on August 27, 2024, the EPA sent an email to [REDACTED] with the preliminary findings from the inspection and resources for documenting inspections and a lagoon troubleshooting guide.

Findings, Corrective Actions and Recommendations

Finding #1: The facility had an active and recurrent sanitary sewer overflow (SSO) at the grease interceptor.

During the opening interview, the facility representatives stated that the grease interceptor for the restaurant kitchen was regularly clogging and overflowing. [REDACTED] stated that there had been 6 to 8 overflows from grease interceptor in the past 3 years due to kitchen staff routinely disposing of cooking oil and other greasy waste down the drain. Facility representatives stated that they had increased the cleaning frequency for the grease interceptor and were adding enzymes weekly to help break down the grease. They stated that the grease interceptor had been cleaned within the past 2 months and that there had been no overflows since then. The inspectors found the grease interceptor overflowing at the time of the inspection (photo 1). Wastewater was flowing south across the ground surface from the interceptor to a facility access road that runs south of the hotel. The wastewater flowed west along the access road for approximately 150 feet before terminating in the vegetation on the side of the roadway. The Permittee had not reported any SSOs to EPA.

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."

Section 5.10.1 of the Permit states, "The Permittee shall report any noncompliance which may endanger health or the environment (including sanitary sewer overflows) as soon as possible, but no later than twenty-four (24) hours from the time the Permittee first became aware of the circumstances. The report shall be made to EPA, Region 8, Superfund & Emergency Management Division (EPA Region 8 24-hr. Emergency Response line) at (303) 293-1788 and the applicable Tribe(s) (see Appendix A for list of Tribes and telephone numbers)."

Section 5.10.3 of the Permit states, "For any noncompliance notification required under Sections 5.10.1 or 5.10.2 of this Permit (above), a written submission shall also be provided to EPA Office of Enforcement and Compliance Assurance Division, Water Enforcement Branch, and to the applicable Tribe(s) within five days of the time that the Permittee becomes aware of the circumstances. The written submission shall be submitted to the addresses indicated in Section 5.6 of this Permit and contain:

- 5.10.3.1. A description of the noncompliance and its cause;
- 5.10.3.2. The period of noncompliance, including exact dates and times;
- 5.10.3.3. The estimated time noncompliance is expected to continue if it has not been corrected; and,
- 5.10.3.4. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- 5.10.3.5. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above as well as the type of event (i.e. combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combine sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather.
- 5.10.3.6. The signed certification statement required by the Signatory Requirements (see Section 7.7 of this Permit)."

Corrective Action:

Ensure that proper operations and maintenance are occurring in the collection system, including the grease interceptor, to prevent SSOs in the future. Ensure that weekly inspections include inspection of the grease interceptor to identify overflows. Ensure that SSOs are reported to the EPA and the Oglala Sioux Tribe Environmental Department in the future per permit requirements. Provide the EPA

with a description of the corrective actions taken to address this finding including photos showing that the grease interceptor has been cleaned. Provide a record of the last grease interceptor cleaning since the EPA inspection. Corrective actions related to reporting SSOs may include a written procedure on what the responsible person will do when an SSO is discovered and a template that will be used when sending the 5-day report to the EPA.

Recommendation:

Consider educating kitchen workers, including all new kitchen workers, on what not to put down the drains and identifying alternative disposal methods that kitchen workers will use to prevent disposal of cooking oil into the sanitary sewer system.

Finding #2: The Permittee was not documenting weekly lagoon inspections.

The facility representative stated that Facility Maintenance Department staff visit the lagoon daily but had not documented the inspections since 2021. The inspection reports reviewed on site did not include the following elements that are required under the current permit: facility name and permit number; facility discharge status; whether a discharge is occurring; presence of leakage, animal burrows, or a visible sheen, floating oil, floating solids or foam; evidence of illicit septic dumping; dates scheduled for operation and maintenance; recommendations and actions taken to remedy operation and maintenance problems, and overall visual observations regarding the overall “health” of the lagoon system. The inspectors provided the facility representatives with a lagoon inspection report template form (Appendix D of the Permit) that the facility representatives could use to document the weekly lagoon inspections.

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 lagoon inspections are documented at least weekly 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 the Oglala Sioux Tribe Environmental Department with 1 month's worth of weekly inspection reports documented since the EPA inspection.

Finding #3: No O&M logs were available.

The Permittee was not properly tracking O&M activities. The facility records included a schedule of routine maintenance activities; however, with the exception of invoices for grease trap cleaning, the Permittee did not maintain records documenting completion of maintenance activities.

Permit Requirement:

Section 6.6.1 of the Permit states, "...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;
- 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."

Corrective Action:

Maintain maintenance logs in accordance with the recordkeeping requirements of the permit. Provide the EPA and Oglala Sioux Tribe Environmental Department with a description of the corrective actions taken to address this finding including a form or template that will be used to document operation and maintenance activities.

Finding #4: The lagoon liner was exposed and damaged.

In several places along the inside slopes of cell 2, the synthetic lagoon liner material was exposed beneath the riprap and the inspectors observed holes in the exposed portions of the liner (photo 6).

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..."

Corrective Action:

Ensure the lagoon liner is protected as indicated in the facility design plans (e.g., protective soil cover). If the design plans are not available, work with a professional engineer or other appropriate technical service provider to determine and implement an appropriate means of protecting the lagoon liner from further damage. Submit to the EPA and the Oglala Sioux Tribe Environmental Department a description of the corrective actions taken as well as photos of the cells showing the work that has been completed to protect the liner. For any work that will take longer than 30 days to complete, submit to the EPA and the Oglala Sioux Tribe Environmental Department with a plan and description of the work to be completed and schedule for completion of the work.

Finding #5: Perimeter fence was damaged/down in several areas and lacked signage.

The perimeter fence was down in the northwest corner of cell 1 (photo 4) and damaged in other areas around the two cells. Only one sign was observed near the gate and it was in poor condition (photo 2).

EPA Guidance:

EPA has developed guidance manuals on the proper operation and maintenance of lagoons. One of the guidance documents is called "Principles of Design and Operations of Wastewater Treatment Pond Systems for Plant Operators, Engineers, and Managers" (August 2011, EPA/600/R-11/088). <https://www.epa.gov/sites/production/files/2014-09/documents/lagoon-pond-treatment-2011.pdf>

This guidance manual suggests on page 9-20, "[t]o discourage use of the ponds for recreation, the entire area should be fenced and warning signs displayed."

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..."

Recommendation:

It is recommended that the fences be repaired around the perimeter of the lagoon. Consider adding legible signage on each side of the lagoon to protect the public and the lagoon by discouraging unauthorized access.

Finding #6: The inspectors observed evidence of a potential leak on the north berm of the lagoon.

Recent and historic aerial imagery dating back to 2010, available through Google Earth, suggest a potential flow path extending northeast from the north berm of the lagoon toward Highway 18 and the unnamed tributary to South Branch Blacktail Creek. [REDACTED] stated that a leak had occurred in 2020 when the lagoon casino and hotel were shut down during the COVID-19 pandemic. [REDACTED] stated that the lagoon had leaked as it dried out but did not leak when it was refilled in 2021 with reopening of the hotel and casino. [REDACTED] stated that the wastewater did not discharge to a surface water. The inspectors observed cattails growing near the toe of the outer slope on north side of the lagoon (photo 7) but did not observe an active leak from the lagoon. The soil was dry in the area around the cattails and there was no discernable odor.

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 recordkeeping 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):

...

6.5.1.7. If there is any leakage through the dikes;

...

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; ...

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 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...

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:

...

6.6.1.9. 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..."

Corrective Action:

Ensure the outside slopes of the lagoon berms are included in weekly inspections, particularly the area where cattails are growing on the north berm, to identify indications of wastewater leaking from the lagoon. If a leak is identified, take immediate steps to correct the problem in accordance with the Permit requirements. If a leak results in a discharge, ensure the discharge is monitored in accordance with the self-monitoring requirements in section 3.2 of the Permit and reported to EPA and the Oglala Sioux Tribe Environmental Department in accordance with the reporting requirements in sections 3.2 and 5.4.2 of the Permit.

Submit to the EPA and the Oglala Sioux Tribe Environmental Department a plan that describes specific lagoon monitoring procedures to determine whether the lagoon is leaking. Monitoring procedures could include, for example, monitoring wastewater levels to determine if the lagoon is losing volume faster than expected based on estimated volume of influent and expected evaporation rates, monitoring the area around the toe of the north berm to identify wet soils or other signs of seepage or leaks, etc. Also include in the plan specific procedures (responsible parties, agency contacts, etc.) that will be followed to report any leaks that are identified.

Finding #7: The facility representatives did not know the location of the transfer piping between the cells or whether an outfall pipe exists.

The facility maintenance workers did not have access to design plans or as-built drawings of the lagoons and the inspectors did not observe any visible infrastructure that indicates the location of the transfer piping between the lagoons. Facility representatives stated that they have not seen an outfall structure and the inspectors did not find an outfall structure during the inspection. Locating the lagoon plans would clarify whether the facility was designed with an outfall structure and, if so, where the outfall might be located. Evidence of a leak in the northern berm of the lagoon (see Finding #6) could indicate a buried outfall structure in that location.

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..."

Corrective Action:

Obtain copies of the lagoon plans and make them available to facility workers to improve their ability to operate and manage the lagoon (e.g., by closing transfer valves if needed to isolate the cells). In a response to EPA and the Oglala Sioux Tribal Environmental Department provide the lagoon plans or as-built drawings, or other documentation showing the locations of transfer piping and the outfall location, if applicable. If the lagoon plans, as-built drawings, or similar documents are not available, describe in the response a plan and timeline for locating the transfer piping and determining whether an outfall structure exists.