

U.S. EPA Region 8 NPDES Inspection Report

National Database Information	
Inspection Date: August 26-27, 2024	Inspection Type: Compliance Evaluation Inspection
Entry / Exit Time: August 26, 2024: 09:00 AM-11:00 AM MT August 27, 2024: 09:00 AM-10:30 AM CT; 14:12 PM-15:22 PM CT	NPDES ID: SDG589402
Major / Non-Major Facility: Non-Major	NPDES Program Sector(s): POTW
NAICS Code: 2213 (Water, Sewage, and Other Systems)	Inspection ID: 202408_SDG589402
Lead inspector and affiliation: Akash Johnson / U.S. EPA Region 8	
Inspector and affiliation: Stephanie Passarelli / U.S. EPA Region 8	

Site/Facility Location Information	
Site/Facility Name & Location: West Brule South WWTF 44.067937, -99.638766 Lyman County, South Dakota Lower Brule Reservation	Send Report to: Mary Jane Gourneau, Director Lower Brule Sioux Tribe EPO mjgourneau@lbst-epo.org

Inspection/Site Contacts	
	Name(s)/Title
Site/Facility Contacts	Kris LaRoche / Lead Wastewater Operator / Lower Brule Sioux Tribe EPO
	Mary Jane Gourneau / Director / Lower Brule Sioux Tribe EPO
	Jarvis Skunk / Solid Waste Director, Assistant Wastewater Operator / Lower Brule Sioux Tribe EPO
	Sheldon Fletcher / CWA 319 and GIS Coordinator / Lower Brule Sioux Tribe EPO
Indian Health Service Contacts	Jason Peterson / Tribal Utility Consultant / IHS Great Plains Area DSFC

Permit/Site Information	
Permit on site and available: No – EPA provided after inspection	Permit Application Date: Did not evaluate
Effective Date: October 1, 2022	Expiration Date: March 31, 2027
Latitude: 44.067937	Longitude: -99.638766
Receiving Water(s): Potentially: wetland-type area south of the facility	
Weather Conditions: During inspection: partly cloudy, no precipitation	
Inspector's source of information: Facility personnel, facility records, IHS personnel, IHS records, EPA records and databases, Google Earth Pro, inspection observations	

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

Report Review and Signature		
Lead Inspector and Report Writer Name/Signature/Final Date		Contact Information
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Inspection Narrative and Site Description

1.0 Introduction

On Monday, August 26, 2024 and Tuesday August 27, 2024, I, U.S. Environmental Protection Agency (EPA) inspector Akash Johnson, and EPA inspector Stephanie Passarelli (collectively, “we”), conducted a compliance evaluation inspection of the West Brule South Wastewater Treatment Facility (WWTF; facility), located in Lyman County, South Dakota, within the exterior boundaries of the Lower Brule (Reservation). The facility was operated by the Lower Brule Sioux Tribe (Tribe) Environmental Protection Office (EPO). Ownership of the facility or underlying lands was not evaluated during the inspection.

The purpose of the inspection was to evaluate compliance with applicable Clean Water Act (CWA) and National Pollutant Discharge Elimination System (NPDES) requirements. The inspection was coordinated with the EPO several weeks in advance. A letter notifying the Tribe of the EPA’s inspection presence on the Reservation was sent on August 5, 2024. We were joined by EPO representatives Kris LaRoche, Lead Wastewater Operator, Mary Jane Gourneau, Director, Jarvis Skunk, Solid Waste Director and Assistant Wastewater Operator, and Sheldon Fletcher, CWA Section 319 and GIS Coordinator, along with Indian Health Service (IHS) Representative Jason Peterson, Tribal Utility Consultant, for respective portions of the inspection described herein. Throughout the inspection, we took notes on our discussions and observations in bound checklists. Photographs taken during the inspection are included in the enclosed photo log.

2.0 Lower Brule Sioux Tribe EPO Wastewater Operations

Some of the information in this section was provided by EPO representatives during the inspection and has not been independently verified by the EPA.

At the time of the inspection, the EPO operated three WWTFs, identified as “Lower Brule,” “West Brule North”, and “West Brule South” (the subject facility). Each of these WWTFs comprised a collection system and lagoon. Approximately 2 weeks prior to the inspection, the EPO hired Kris LaRoche as a full-time Lead Wastewater Operator. Prior to hiring this full-time wastewater position, the EPO did not maintain any dedicated wastewater staff; rather, wastewater operations had been conducted in a part-time capacity by EPO staff whose primary responsibilities pertained to solid waste management. During the inspection, Kris LaRoche indicated he was in the process of becoming familiar with wastewater operations and each of the WWTFs under his purview. Moving forward, the EPO expected there would still be occasional sharing of staffing resources between the solid waste and wastewater programs. No EPO staff maintained wastewater operator licenses or certifications.

The EPO was managed and funded as part of the Tribal government. EPO representatives indicated most wastewater operating costs were paid for by the Tribe, with some purchases exceeding certain dollar amounts requiring solicitation of bids and approval by the Tribal Council. The EPO and the Tribe also worked with IHS, other federal agencies, and technical assistance providers on an ongoing basis to obtain funding and technical assistance related to wastewater projects.

The EPO did not assess or collect any wastewater fees. EPO representatives indicated no residential wastewater fees were assessed on the Reservation. EPO representatives indicated some commercial wastewater fees may have been paid directly to the Tribe, but they were not familiar with how any commercial wastewater fees may have been derived, assessed, or collected.

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EPO representatives indicated additional support for EPO wastewater operations was sometimes available from other Tribal programs, including a Tribally-owned construction company, Lower Brule Rural Water (Rural Water), and the Lower Brule Sioux Tribe Motor Pool. Rural Water operated the Lower Brule Rural Water System, which provided culinary water to several communities across the Reservation. Historically, Rural Water had operated the Lower Brule, West Brule North, and West Brule South WWTFs, but operation of these WWTFs had been turned over to the EPO at least several years prior to the inspection (exact timing not evaluated during the inspection) and Rural Water had little involvement with these WWTFs at the time of the inspection. The Lower Brule Sioux Tribe Motor Pool maintained and operated a pump truck and jetter which could be deployed for EPO wastewater operations upon request.

EPO representatives indicated they had spent the majority of the month preceding the inspection clearing overgrown vegetation from around the lagoons associated with the three WWTFs under their purview. EPO representatives indicated they had made significant progress clearing vegetation from around the lagoons but still intended to complete additional vegetation removal around several lagoons.

3.0 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 SDG589402), under the Discharge (DIS) category, Sub-category C (semi-annual reporting).

The facility comprised a collection system and lagoon serving primarily nearby residences and receiving wastewater pumped from the Lower Brule North WWTF. According to EPO representatives, the only lift station servicing the lagoon conveyed wastewater solely from the Lower Brule North WWTF; all other wastewater from the service area flowed by gravity to the lagoon. Facility users and the collection system were not evaluated during the inspection.

The lagoon comprised a four-cell system with no induced aeration or disinfection. All possible configurations of flow through the lagoon were not evaluated during the inspection. EPO representatives indicated they were unclear as to whether the pumped wastewater from the West Brule North WWTF entered the lagoon separately from or via the same piping as wastewater from the rest of the service area.

At the time of the inspection, Cell 1 was not receiving any influent and was being allowed to dry-out in preparation for an improvement project. We discussed this improvement project and potentially applicable biosolids regulations at various points throughout the inspection. EPO and IHS representatives indicated the scope of the improvement project was intended to comprise general cell rehab, such as berm repair, vegetation removal, fence repair, etc. IHS representatives indicated construction associated with the project was expected to commence sometime in the next several years. IHS representatives indicated offsite sludge removal was not expected to occur during the project. We advised the EPO and IHS representatives present, should sludge removal and disposal activities occur, federal regulations pertaining to the use or disposal of biosolids may apply, found in 40 Code of Federal Regulations Part 503. We also recommended the EPA's "A Plain English Guide to the EPA Part 503 Biosolids Rule" as a resource.

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EPO representatives indicated they were unclear as to the configuration of flow and valves between the cells at the time of the inspection, but referred the easternmost cell as Cell 1, the north-center cell as Cell 2, the northwesternmost cell as Cell 3, and the cell south of Cells 2 and 3 as Cell 4. EPO representatives indicated the primary discharge outlet from the lagoon was located somewhere along the southeastern berms of Cell 4 and would convey effluent into a wetland-type area adjacent southeast of the lagoon. We were not able to locate and observe the outfall in this wetland-type area during the inspection.

EPO representatives indicated the facility was discharged intermittently and the most recent discharge from the facility had occurred sometime around spring 2023, over a year prior to the inspection. After the inspection, on October 23, 2024, I utilized the EPA's internal Integrated Compliance Information System (ICIS) database to perform a cursory review of monitoring data submitted by the EPO for this facility for the 5 years preceding the inspection. A discussion of the most recent reported effluent monitoring results (submitted on the June 2023 Discharge Monitoring Report [DMR]) is included in the Findings, Corrective Actions, and Recommendations section.

4.0 Inspection Narrative

On Monday, August 26, 2024, we conducted a virtual opening conference via Microsoft Teams with Kris LaRoche, Mary Jane Gourneau, Jarvis Skunk, Sheldon Fletcher, and Jason Peterson. During the opening conference, we asked questions pertaining to wastewater operations and Permit requirements at the WWTFs operated by the EPO, including the subject facility.

On Tuesday, August 27, 2024, we met with Kris LaRoche, Mary Jane Gourneau, Jarvis Skunk, and Jason Peterson in-person in the EPO office in Lower Brule, South Dakota. In the EPO office, we continued our opening conference and reviewed some wastewater records and monitoring equipment maintained in the EPO office. We then proceeded with onsite observations at each of the WWTFs operated by the EPO, including the subject facility.

We arrived at the facility at approximately 14:12 PM, after inspecting the Lower Brule and West Brule North WWTFs earlier in the day. Kris LaRoche, Mary Jane Gourneau, Jarvis Skunk, and Jason Peterson accompanied us for the facility walk-through.

We began the facility walk-through at the northern end of the facility, attempting to locate influent piping and manholes (Photograph 22). We did not open any manholes were not able to comprehensively identify all potential influent configurations into the lagoon. We then observed Cell 1, which was drying-out (Photograph 23), and walked portions of the berms around and between Cells 2-4 (Photographs 24-26). Dense vegetation was present within the entirety of the Cell 1 enclosure (Photograph 23). EPO representatives indicated vegetation had intentionally not been recently removed from the Cell 1 enclosure because the cell was not receiving wastewater and vegetation removal was included in the scope of the upcoming improvement project. Around Cells 2-4, vegetation was trimmed along the tops of the berms, but cattails and other vegetation greater than 6 inches in height was present along the interior of the berms (Photographs 24-26). We observed discharge valve structures from Cell 4 (Photograph 27) and attempted to locate the outfall from Cell 4 in the adjacent wetland-type area, but we were not able to identify any outfall structure. We did not evaluate the configuration of any transfer structures between the cells.

The inspection concluded when we left the lagoon at approximately 15:22 PM

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5.0 Post-Inspection Activities and Conclusion

Later in the day of the inspection, I emailed EPO representatives preliminary findings from the inspection, a copy of the Permit and Authorization Letter for the facility, and several compliance, technical, and financial assistance resources. As discussed in Section 3, on October 23, 2024, I utilized the EPA's ICIS database to perform a cursory review of monitoring data submitted by the EPO for this facility for the 5 years preceding the inspection. As also mentioned in Section 3, discussion of the most recent reported effluent monitoring results (submitted on the June 2023 DMR) is included in the Findings, Corrective Actions, and Recommendations section.

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

Findings, Corrective Actions, and Recommendations

Finding 1:

A copy of the facility's NPDES Permit and Permit Authorization Letter were not maintained by the EPO. Later in the day of the inspection, I emailed EPO representatives a copy of the Permit and Authorization Letter for the facility.

Permit Requirements:

Section 5.9 of the Permit (Retention of Records) 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:

Maintain a copy of the facility's NPDES Permit and the Permit Authorization Letter in accordance with the Permit. In a response to the EPA, provide a narrative describing the individuals responsible for maintaining these records and the locations and formats in which these records will be maintained.

Finding 2:

For several reporting periods between Permit issuance and the inspection, influent and receiving stream monitoring had not been conducted or reported as required by the Permit and Permit Authorization Letter.

Permit Requirements:

Findings, Corrective Actions, and Recommendations

Table 3 of the Permit Authorization Letter (Influent Monitoring) states:

Influent sample monitoring shall be required quarterly to allow characterization of influent flow with regard to BOD5, TSS, and calculation of BOD5 and TSS percent removal values.

Influent Characteristic	Sub-category C Frequency a/	Sample Type b/	30-Day Average b/	7-Day Average b/	Daily Maximum b/
BOD5, mg/L c/	Quarterly, d/	Grab	Report only - Results to be used for BOD5 percent removal calculations for compliance with limits specified in Table 1 (above).	N/A	N/A
TSS, mg/L c/	Quarterly, d/	Grab	Report only – Results to be used for TSS percent removal calculations for compliance with limits specified in Table 1 (above).	N/A	N/A

a/ See Section VI. Monitoring Requirements of the Fact Sheet and Section 3.1.4. of the LGP, for additional information on the discharging sub-categories. A Permittee's sub-category will be clearly identified in the authorization of coverage letter.

b/ See Definitions, (Section 1.1. of the LGP) for definition of terms.

c/ The influent samples will be used to calculate the BOD and TSS percent removals for each Sub-category type as indicated in footnote e/ of Table 3 of the LGP.

d/ A sample will be taken at least once each calendar quarter and will be used in the calculation for the 30-day averages for the month in which they are performed. Additional samples may be taken at the Permittee's discretion if a large amount of variability is anticipated in the influent within a quarter. Any additional sample results must be included in the 30-day average influent DMR reporting for the month in which it is performed. If only one sample is taken within a month, that result will be the 30-average for the month.

Table 4 of the Permit Authorization Letter (Receiving Stream Monitoring) states:

Receiving Stream Characteristic	Frequency	Sample Type a/
pH, standard units, c/	b/	Grab
Temperature, °C, c/	b/	Grab
Total Ammonia Nitrogen (as N), mg/L, c/	b/	Grab

a/ See Definitions, Section 1.1. of the LGP, for definition of terms.

b/ Frequency in alignment with the sub-category monitoring requirements outlined in Section 3 of the LGP: Receiving stream monitoring will occur at the time of the discharge and will consist of a single grab sample taken at a location immediately upstream of where the discharge is anticipated to meet the receiving stream.

Findings, Corrective Actions, and Recommendations

c/ Temperature and pH samples shall be collected at the same time as sampling for the total ammonia. Temperature and pH measurements must be analyzed within fifteen (15) minutes of sampling. Where TAS and 8 tribal CWA-approved WQS have not been approved by EPA, EPA R8 will require ammonia and concurrent pH and temperature monitoring of receiving waters in all discharge permits to continue to establish baseline data for determining reasonable potential in future permitting actions.

Section 3.1.4.3 of the Permit (Sub-category C – Semi-annual Reporting) states:

...Receiving stream monitoring, if required, will occur at the time of the discharge and will consist of a single grab sample taken at a location immediately upstream of where the discharge is anticipated to meet the receiving stream, unless otherwise indicated in the facility's permit coverage letter.

Influent monitoring sampling will consist of a single grab sample at a location representative of the influent flow entering the wastewater lagoon treatment system prior to treatment (e.g. an influent structure, upstream manhole that contains flow from the entire service area, or any other representative location), unless otherwise indicated in the facility's permit coverage letter. Influent sample monitoring shall be required quarterly to allow characterization of influent flow with regard to BOD₅, TSS, and flow, and calculation of BOD₅ and TSS percent removal values.

All required influent, effluent and receiving stream monitoring will be indicated in the facility's permit coverage letter.

Section 5.4.1 of the Permit (DISCHARGE [DIS] Reporting Requirements) states:

For discharge facilities, the effluent monitoring results obtained during the previous month, calendar quarter, or semi-annual period, shall be summarized and reported via the NetDMR reporting system by the DMR by no later than the 28th day of the month following the completed reporting period, or on a Discharge Monitoring Report (DMR) Form (EPA No. 3320-1), postmarked no later than the 28th day of the month following the completed reporting period (see example schedules in table below). If no discharge occurs during the reporting period, it shall be reported as "no discharge" in the NetDMR reporting system. If there is no discharge, no flow or access was impeded by snow, ice, flooding, other unsafe conditions, etc.; the information shall be reported on the DMR using the applicable NetDMR no data indicator code (i.e., NODI code), to identify the circumstances of the situation. If the DMR Form (EPA No. 3320-1) is used, "no discharge" shall be indicated on the form if no discharge occurs. See example reporting schedules in Table 9, below.

Table 9. Reporting Requirements

Sub-Category	Frequency of Discharge	Reporting Period	DMR Due Date
A	Continuous discharge or frequency of at least once a month	Monthly (e.g. January)	28th day of the following month (February 28th)
B	Less frequently than monthly but at least once a quarter	Quarterly (e.g. April – June)	28th day following the end of the quarter (July 28th)
C	Less than quarterly	Semi-annually (e.g. July – December)	28th day following the end of 6th month period (January 28th)

Excepting the first reporting period after Permit coverage was issued for the facility, the "Reporting Frequency – Semi-Annually authorized" section of the Permit Authorization letter identifies typical reporting periods for the facility as "January 1st – June 30th" and "July 1st – December 31st".

Findings, Corrective Actions, and Recommendations

Corrective Action 1:

Ensure future influent and receiving stream monitoring and reporting are conducted in accordance with the Permit and Permit Authorization Letter. In a response to the EPA, provide a narrative explaining how the EPO plans to implement these requirements, including individuals responsible for sample collection and field measurements, individuals responsible for NetDMR reporting, the selected influent monitoring location, and the selected receiving stream monitoring location.

Note: If the receiving stream monitoring location exhibits insufficient flow for sampling, a NODI code of “F – Insufficient Flow for Sampling” may be appropriate for use for this parameter in DMRs.

Corrective Action 2:

Review historical required influent and receiving stream monitoring that has not been reported in NetDMR since Permit coverage became effective. If monitoring data is available for any missed reporting periods, enter this data in NetDMR. If no data is available for missed reporting periods, a NODI code of “E – Analysis Not Conducted/No Sample” may be appropriate for use for missing data in DMRs. In a response to the EPA, provide a narrative explaining how and when this corrective action was completed.

Finding 3:

For the effluent discharge reported on the June 2023 DMR, the EPO reported the following numeric limit exceedances:

Monitoring Period End Date	Parameter	Monitoring Location Desc	Units	Limit Value	DMR Value	Stat Base Desc	Over Limit
06/30/2023	BOD, 5-day, 20 deg. C	Effluent Gross	mg/L	30	62.33	30DA AVG	108%
06/30/2023	BOD, 5-day, 20 deg. C	Effluent Gross	mg/L	45	62.33	7 DA AVG	39%
06/30/2023	E. coli	Effluent Gross	#/100mL	126	3347	30DA GM	2,556%
06/30/2023	E. coli	Effluent Gross	#/100mL	410	4110	DAILY MX	902%
06/30/2023	BOD, 5-day, percent removal	Percent Removal	%	65	42.28	MO AV MN	65%
06/30/2023	Solids, suspended percent removal	Percent Removal	%	65	37.5	MO AV MN	79%

Permit Requirements:

The Effluent Limitations and Monitoring Requirements section of the Permit Authorization letter states:

As of the Effective Date of this LGP coverage, the quality of effluent discharged by the facility shall, at a minimum, meet the limitations as set forth below:

Findings, Corrective Actions, and Recommendations

Table 1. Permit Effluent Limitations

Effluent Characteristic	30-Day Average a/	7-Day Average a/	Daily Maximum a/
Flow, mgd	Report only	N/A	Report only
Discharge start date and time	Documentation maintained in facility records by Permittee.		
Discharge end date and time	Documentation maintained in facility records by Permittee.		
Biochemical Oxygen Demand (BOD5), mg/L	30	45	N/A
BOD5, percent removal	≥ 65%	N/A	N/A
Total Suspended Solids (TSS), mg/L	30	45	N/A
TSS, percent removal	≥ 65%	N/A	N/A
<i>Escherichia coli</i> , Number/100 mL b/	126 unless otherwise specified	N/A	410 unless otherwise specified
Total Kjeldahl Nitrogen (TKN), mg/L	Report only	N/A	Report only
Nitrate-Nitrite, mg/L	Report only	N/A	Report only
Total Nitrogen (TN), mg/L	Report only	N/A	Report only
Total Phosphorus (P), mg/L	Report only	N/A	Report only
Total Ammonia Nitrogen (as N) mg/L	Report only	N/A	Report only
Temperature, °C	Report only	N/A	Report only
The pH of the effluent in any single sample or analysis shall have a pH effluent range of 6.5 - 9.0.			
Oil and Grease (visual, mg/L) - Upon visual inspection, there shall be no visible sheen or floating oil detected. The concentration of oil and grease shall not exceed 10 mg/L in any sample. c/			
a/ See Definitions, (Section 1.1. of the LGP) for definition of terms.			

b/ Supplemental effluent limits for *E. coli* shall be applied if a facility's discharge (or potential to discharge) is to waters that have been determined to have potential for primary contact recreation activity uses (including tribal/cultural uses). If it is unclear as to whether a receiving/downstream water has the potential for primary contact recreation, the EPA may apply this requirement to a facility's coverage based on permit writer discretion and information obtained related to the facility's discharge. Per EPA's 2012 recommended *E. coli* criteria for primary contact recreation ("Recreational Water Quality Criteria", Office of Water 820-F-12-058), the 30-day Average is to be calculated using the 30-Day geometric mean. The 30-day geometric mean calculation will be based on the geometric mean from the total number of samples collected during the 30-day period.

The Permittee may collect more samples than the samples specified in the self-monitoring requirements. The daily maximum limitation will be 410 Number/100 mL therefore, the statistical threshold value shall not exceed 410 Number/100 mL as a daily maximum. The 30-day average geometric mean shall not exceed 126 Number/100 mL.

c/ If a visible sheen or floating oil is detected in the discharge, a grab sample shall be taken immediately, analyzed and recorded in accordance with the requirements of 40 CFR Part 136.

Corrective Action:

Evaluate potential causes of these historical numeric effluent limit exceedances and, moving forward, operate the facility in such a manner to ensure future discharges meet applicable numeric effluent limitations. In a response to the EPA, provide a narrative explaining the evaluation process and outcome and any operational changes the EPO plans to implement to maximize treatment efficacy at the facility.

Finding 4:

Operators were unclear as to the configuration of influent piping and manholes, intra-lagoon transfer valves, and the location of the outfall.

Findings, Corrective Actions, and Recommendations

Permit Requirements:

Section 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.

Corrective Action 1:

Identify the locations of all influent manholes and piping/outlets into the lagoon. In a response to the EPA, provide a map, photographs, and GPS coordinates associated with each of these features.

Corrective Action 2:

Identify the locations and configurations of all intra-lagoon transfer valves. In a response to the EPA, provide a map, photographs, GPS coordinates, and configuration status (i.e. open or closed) associated with each of these features.

Corrective Action 3:

Identify the location of the outfall in the wetland-type area adjacent southeast of the lagoon and verify the discharge status of the outfall. In a response to the EPA, provide a map, photographs, GPS coordinates, and configuration status (i.e. discharging or non-discharging) associated with this feature.

Finding 5:

Trees and vegetation greater than 6 inches in height were present along the interior berms of Cells 2-4 (Photographs 24-26).

Dense vegetation was also present throughout the Cell 1 enclosure (Photograph 23), but EPO representatives indicated vegetation had intentionally not recently been removed from the Cell 1 enclosure because the cell was not receiving wastewater and vegetation removal was included in the scope of the upcoming improvement project. IHS representatives indicated construction associated with the project was expected to commence sometime in the next several years.

Permit Requirements:

Section 6.6.1.13 of the Permit states:

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.

Findings, Corrective Actions, and Recommendations

Corrective Action 1:

Reduce vegetation on the interior berms of Cells 2-4 to 6 inches in height or less. In a response to the EPA, provide photographs of the lagoon enclosure indicating this corrective action has been completed and provide the date of completion.

Corrective Action 2:

Ensure vegetation within the Cell 1 enclosure is removed during the upcoming improvement project. No response to the EPA is requested pursuant to this corrective action.

Recommendation:

During the inspection, EPO representatives indicated they were considering applying herbicide to control vegetation on the interior of the lagoon berms. The EPO is advised CWA, NPDES, and Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requirements may apply to the application of pesticides, including herbicides, which may enter waters of the United States. The EPO is also advised application of herbicide at the lagoon may constitute a substantial change in the volume or character of pollutants in facility wastewater, requiring notification to the EPA under Section 7.1 of the Permit (Planned Changes). If the EPO intends to apply herbicide at the lagoon, prior to selecting or applying an herbicide, it is recommended the EPO contact the Region 8 Wastewater (NPDES Permitting) Section to inquire about potentially applicable Permit or other federal requirements relating to this activity. A relevant EPA contact would be Kenley Stone, reachable stone.kenley@epa.gov or (406) 457-5035. No response to the EPA is requested pursuant to this recommendation.

Finding 6:

Weekly facility inspection records did not contain all information required by the Permit.

Permit Requirements:

Section 6.5 of the Permit (Inspection Requirements) 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;

Findings, Corrective Actions, and Recommendations

- 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:

Ensure weekly facility inspections and associated records are comprehensive of all information required by the Permit. In a response to the EPA, provide a record of at least one weekly facility inspection conducted since receipt of this report.

Finding 7:

An Operation and Maintenance (O&M) Manual(s) was not available for the facility.

Findings, Corrective Actions, and Recommendations

Permit Requirements:

Section 6.6.1 of the Permit states:

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.

Corrective Action:

Develop and maintain an O&M Manual(s) for the facility in accordance with the Permit. In a response to the EPA, provide a copy of the O&M Manual(s) developed for the facility.

Finding 8:

EPO staff were unfamiliar with field parameter (e.g. pH, temperature) measurement probe calibration procedures.

Finding 9:

Calibration records for field parameter measurement probes were not available.

Finding 10:

pH calibration solutions were not available.

Permit Requirements:

Section 3.1.2 of the Permit (Self-Monitoring and Reporting Requirements) states:

...Self-monitoring requirements shall be effective immediately as of effective date of the coverage letter and lasting through the effective term of this Permit. Sampling and test procedures for pollutants listed

Findings, Corrective Actions, and Recommendations

in this section shall be in accordance with 40 CFR Part 136, as required in 40 CFR § 122.41(j), unless another method is required under 40 CFR subchapters N or O.

Section 5.9 of the Permit (Retention of Records) 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.

Section 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.

Corrective Action:

Ensure EPO staff responsible for conducting field measurements are trained on how to utilize field parameter measurement probes, including calibration and recordkeeping procedures, and have access to necessary calibration solutions, as needed. In a response to the EPA, provide a narrative explaining how and when this corrective action was completed.