

NPDES Wastewater Lagoon Inspection Report

National Database Information	
Inspection Date: July 25, 2024	Inspection Type: CEI
Entry/Exit Time: 12:45/13:23	NPDES ID Number: MTU000710
NAICS Code: 221300 Sewage Treatment Facility	Inspection ID: 202407_MTU000710
Lead inspector and affiliation: Lisa-kay Prideaux / EPA Region 8 Montana Operations Office	

Facility Location Information	
Site/Facility Name & Location: Town of Frazer Wastewater Lagoons Big Leggins Road 48.057095°N; -106.052727°W	Email Report to: Mitchell Youngman Director, Enterprise Tribal Utilities (b) (6)

Contact Information	
	Name(s)/Title
Facility Contacts:	Maurice Bighorn Jr. – Wastewater Operator, Enterprise Tribal Utilities (present)
Person/Company meeting definition of “Operator”	Enterprise Tribal Utilities
Authorized Official(s)	Mitchell Youngman - Director, Enterprise Tribal Utilities (not present)
Tribe Representative(s)	Bill McDonald – Assiniboine and Sioux Tribes, Office of Environmental Protection (present) Tyler Smith – Assiniboine and Sioux Tribes, Office of Environmental Protection (present)
Indian Health Service Representative(s)	None present

Permit Information		
Is the permit on site and available? Unpermitted	Lagoon Category: N/A	Monitoring Frequency: N/A
Effective Date: Unpermitted	Expiration Date: Unpermitted	Is the Facility under a compliance schedule? No
Is correct contact information indicated on ICIS? N/A	Indicate correct contact information: Authorized Official: Mitchell Youngman – Director of Enterprise Tribal Utilities	
Receiving Water(s): No Discharge		
Discharge point location (longitude, latitude): No Discharge		

Regulatory Inspector's source of information: Clean Water Act, NPDES regulations, Integrated Compliance Information System (ICIS), Enforcement & Compliance History Online (ECHO), previous inspection report and correspondence, facility representatives and facility observations.

Areas Evaluated During Inspection

<u>Permit</u>	<u>Effluent/Receiving Waters</u>	<u>Compliance Schedule</u>
<u>Records/Reports</u>	<u>Flow Measurement</u>	<u>Discharge Monitoring Reports</u>
<u>Facility Site Review</u>	<u>Monitoring Program</u>	<u>Lift Station Operation and Maintenance</u>
<u>Collection System Review</u>	<u>Lagoon Self- Inspections</u>	<u>Preventive and Emergency Operation and Maintenance</u>

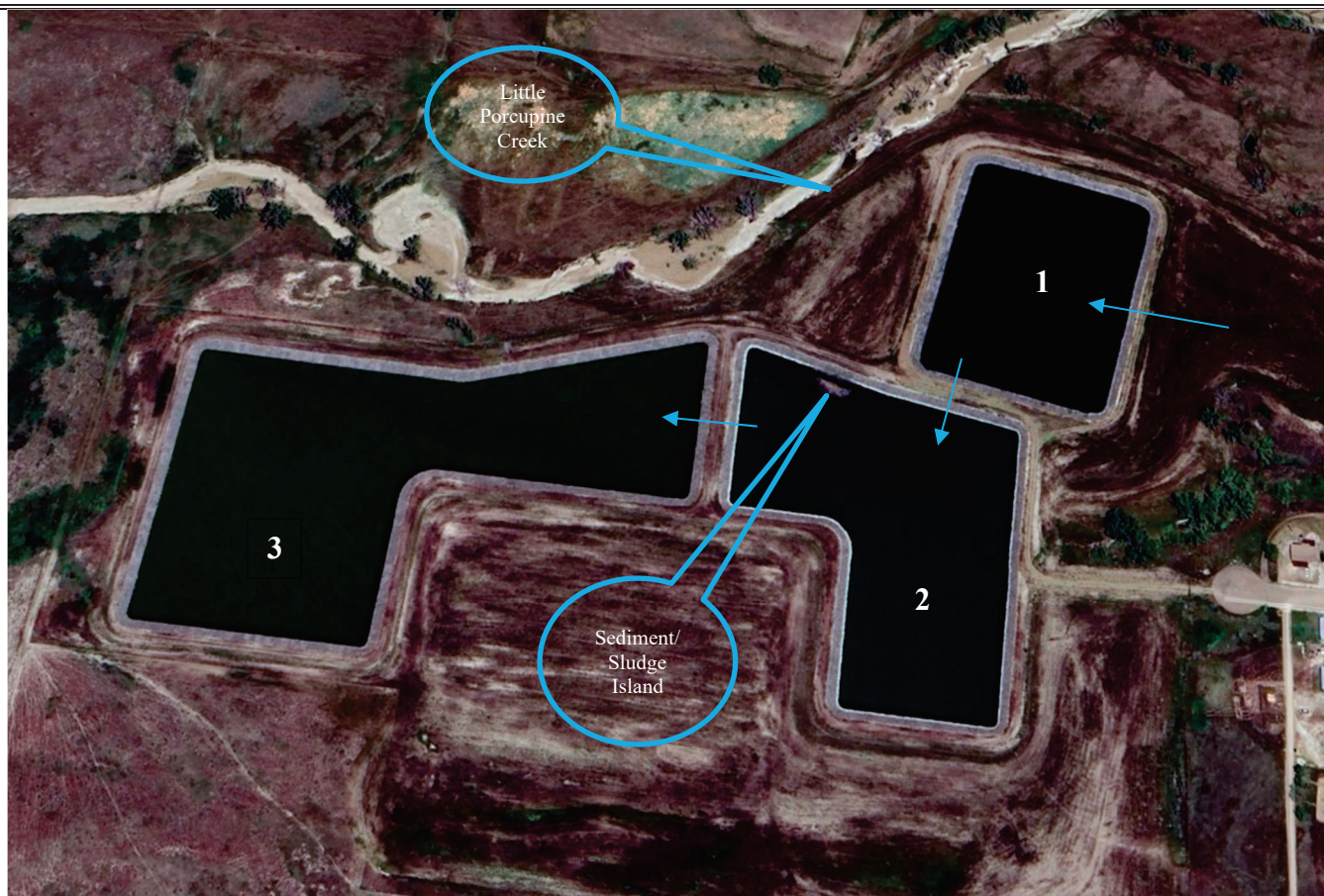
Report Review and Signature

Drafter Signature/Name: Lisa-kay Prideaux	Date	Address/Phone Number
 Digitally signed by Prideaux, LisaKay Date: 2024.12.10 09:33:14 -07'00'	11.27.2024	U.S. EPA Region 8 Helena, Montana Prideaux.lisakay@epa.gov 406-457-5022
Reviewer Name	Date	Address/Phone Number
Akash Johnson	12.05.2024	U.S. EPA Region 8 Denver, Colorado Johnson.Akash@epa.gov 303-312-6067
Management Signature/Name	Date	Address/Phone Number
 Digitally signed by EMILIO LLAMOZAS Date: 2024.12.10 09:14:07 -07'00'	12/10/2024	U.S. EPA Region 8 Denver, Colorado Llamozas.emilio@epa.gov 303-312-6407
Emilio Llamozas, NPDES and Wetlands Enforcement Section Supervisor		

Inspection Narrative and Site Description

On Thursday July 25, 2024, I, U.S. Environmental Protection Agency (EPA) inspector Lisa-kay Prideaux, along with Bill MacDonald of the Assiniboine and Sioux Tribes Office of Environmental Protection, conducted a compliance evaluation inspection of the at the Town of Frazer (an unincorporated community) Wastewater Treatment Facility (facility) located at the end of Big Leggings Road in Frazer, Montana to evaluate compliance with the Clean Water Act (CWA) and EPA regulations. According to the previous inspection report, the facility is owned by the Fort Peck Assiniboine and Sioux Tribes (Tribes) and operated by Fort Peck Enterprise Tribal Utilities (Enterprise). The inspection was coordinated with the Tribes several weeks in advance. I presented credentials to Maurice Bighorn Jr. representing Enterprise, and Tyler Smith of the Tribes Office of Environmental Protection, who also joined the inspection. I held an opening conference to explain the purpose of the inspection. I then proceeded to ask questions of to help me evaluate the facility's discharge status, and to obtain facility information. Throughout the inspection, I noted observations in a field notebook. Photographs taken during the inspection are included in the attached photo log and are maintained by EPA in accordance with the Quality Assurance Field Activities Procedure and Standard Operating Procedure.

Once at the facility, the inspector gathered information from Maurice Bighorn and Tyler Smith regarding the history and current status of the wastewater facility, collection system, and contributing community. The facility's lagoon system is an unpermitted three-cell lined facultative lagoon system. All wastewater flows to the lagoon via gravity only. The collection system was not evaluated during the inspection. A cursory review of Indian Health Service (IHS) records for this facility indicates the IHS and the Tribes are considering future collection system improvements. The facility receives wastewater from the Town of Frazer, a population of approximately 420 people. The EPA has not evaluated how many residences or businesses in Frazer are served by the facility vs. septic. The facility was originally constructed as a 2-cell facultative lagoon system, with what appeared to be a discharge drain (historic aerial photographs) to the north and potentially entering Charley Creek. The facility upgraded in 2022 to a 3-cell, lined and riprapped facultative lagoon system with no ability to discharge. Cell 1 is approximately 4.42-acres, Cell 2 is approximately 6-acres, and cell 3 is approximately 9.16-acres. The facility receives domestic waste only and does not receive trucked in or dumped RV waste.



The site visit included driving and walking around lagoon cell 1 (photos 95, 96 and 97), cell 2 (photos 98 and 99), and cell 3 (photo 102). The inspector observed vegetation and small shrub growth within the lined and riprapped slopes inside of each of the lagoon cell dike walls (noted in the photos). The inspector noted a mound of remnant sediment from the construction of the new lagoon cells which created an island in the northwest portion of cell 2 (photos 100 and 101). This 'island' is potentially accumulating sludge waste due to the dark mat of soft material (as seen in photo 101) not having the appearance of typical sediment. The island was noted to be established with mature vegetation, indicating the length of time the island has been breaking through the surface of the lagoon. The inspector also observed significant amount of algae creating a mat on the top of most of cell 3. North of the lagoon cells is Little Porcupine Creek; however, no discharge pipe between cell 3 and Little Porcupine Creek was observed.

Findings and Recommendations

Finding #1: The facility did not have coverage under the EPA 2022 Lagoon General Permit.

The facility should submit a Notice of Intent (NOI) to obtain coverage as a "No-Discharge" facility under EPA Region 8's General Permit for Wastewater Lagoon Systems in Indian Country, Permit No. MTG589### (the permit), and comply with all relevant permit requirements.

Permit Requirements:

Section 1.2 of the permit ("Introduction") states: "This Region 8 General Permit for Wastewater Lagoon Systems in Indian Country (Permit) is intended for the permitting of wastewater lagoon systems that treat primarily domestic sewage (an average total influent flow consisting of ~80% or greater domestic sewage) and are located within the boundaries of the specified Region 8 Indian Reservations or otherwise in Indian country as defined in Section 1.1 Definitions of this permit."

Section 1.5 of the permit (Categories and Subcategories of Coverage) indicates authorization for coverage under this permit will be limited to one of the following two categories of wastewater lagoon systems:

DISCHARGE (DIS) - Authorization to Discharge. No prior notification is required before starting to discharge;

NO DISCHARGE (NODIS) - No Authorization to Discharge. The lagoon system is required to have no discharge.

The basic requirements for each of the categories are specified in Section 1.5, of the permit. If additional water quality-based effluent limitations are necessary to comply with applicable water quality standards, those requirements will be specified in the written notice of authorization of coverage or subsequent letter from the EPA.

Section 2.1 of the permit ("Obtaining Authorization for Coverage Under this Permit" states:

2.1.1 To obtain authorization under this permit, a facility must:

Submit a complete and accurate NOI using an EPA notice of intent form for coverage under this Permit. The "NPDES 2020 Lagoon General Permit Notice of Intent Form" is located electronically at: <https://www.epa.gov/npdes-permits/region-8-npdes-lagoon-general-permit>

Facilities may also contact EPA's Region 8 Office (EPA contact information is available at the website provided in the following paragraph) and request a hardcopy NOI be mailed to them. Once completed, the form can be submitted to EPA as indicated in Section 2.4 of this Permit.

The NPDES Lagoon General Permit Notice of Intent Form can also be requested from EPA's Region 8 Office. Contacts for Region 8 are listed at the following website: <https://www.epa.gov/npdes-permits/forms/contact-us-about-npdes-permits-around-nation>

Once completed, the form can be printed out, signed, and submitted to the EPA at the address given in Section 2.4 of the permit:

Unless otherwise authorized by EPA, the signed Notice of Intent form (hardcopy) must be sent to the address listed below:

U.S. Environmental Protection Agency, Region 8

Wastewater Section (8WD-CWW)

1595 Wynkoop Street Denver, CO 80202-1129

In addition to submitting the signed hardcopy, a copy may be submitted electronically as provided in the submission instructions at: <https://www.epa.gov/npdes-permits/region-8-npdes-lagoon-general-permit>

A relevant EPA contact to address questions regarding submittal of the NOI is Kenley Stone, reachable at stone.kenley@epa.gov or (406) 457-5035, or Alysia Tien at tien.alysia@epa.gov or (303) 312-7021.

Corrective Actions:

Submit required NOI documentation to obtain coverage under the Region 8 General Permit for Wastewater Lagoon Systems in Indian Country. In your response to the EPA, provide a timeline to address the corrective action and projected date of completion.

Finding #2: Unmaintained vegetation within lagoon cells.

Specifically, the facility's lagoon dike walls had sporadic unmaintained vegetation within the lined and riprapped areas (photos 95-99, and 102). Excessive vegetation/grasses, shrub growth, and woody vegetation are starting to take root. Heavy thick roots within the lining from the wrong type of flora can compromise the integrity and greatly inhibit or degrade the dike walls, creating leaks and potential erosion issues under the liner. Planting grasses or other shallow-rooted vegetation on top and outside the dikes for ground cover are encouraged for stability, with a recommended maintenance schedule of at least annual cutting to ensure the assessment of potential erosion, leaks, slumps, and burrowing animal damage.

EPA Guidance:

EPA has developed guidance manuals on the proper operation and maintenance of lagoons. One of the guidance materials is titled 'Principles of Design and Operations of Wastewater Treatment Pond Systems for Plant Operators, Engineers, and Managers' (August 2011, EOA/600/R-11/088).

Part 9.4.2.3 of this guidance manual indicates the following:

- To maintain wave action, a pond should be free of weeds in the water or tall weeds on the banks.
- Dikes should be well seeded with grasses above the water line. Grass should be mowed regularly to prevent soil erosion and insect problems.

Recommendation:

EPA recommends the vegetation in and around the lagoon cells be reduced and maintained below 6-inches in height such that the berms can be inspected for leakage, animal burrows, and erosion. Proper vegetation height also allows for the wind to naturally generate wave action to mix and aerate the lagoon contents for effective treatment of the wastewater. EPA also recommends removing all heavy thick woody vegetation growing within the lagoon cells, as this is a source to create leaks and erosion and can be a food source for rodents.

Finding #3: Sediment accumulation in lagoon cell 2.

Specifically, lagoon cell 2 has an 'island' of sediment, which was left in place after construction, within and on top of the pond liner (photos 100 and 101). This sediment pile is not part of the pond design and therefore is taking away from the capacity for both volume and treatment. The pile also creates an area for sludge to build-up which has the potential to create additional issues for the lagoon cell and operations, such as short-circuiting.

Recommendation:

EPA recommends the removal of the sediment island. Caution must be taken to not create holes in the liner below and around the sediment pile.