NPDES Inspection Report – POTW

National Database Information	
Inspection Date: June 30, 2021	**Inspection Type:** CEI – Minor POTW
Entry / Exit Time: 8:00 am / 9:00 am	**NPDES ID Number:** WYG589105
NAICS Code: 22132 (Sewage Treatment Facilities)	**Inspection ID:** 202106_WYG589105
Lead inspector and affiliation: Kristin Ratajczak / U.S. EPA Region 8	
Inspector and affiliation: Jessica Duggan / U.S. EPA Region 8	

Facility Location Information	
Site/Facility Name & Location: Mill Creek Wastewater Treatment Facility Wind River Reservation, Wyoming 42.99639° N, 108.72167° W	**Email Report to:** Mike Quiver, Director Northern Arapaho Utilities (b) (6) [redacted] Mike.quiver@northernarapaho.com

Contact Information	
	Name(s)/Title
Facility Contacts	Mike Quiver, Director, Northern Arapaho Utilities
	Harold Little Bear, Manager, Northern Arapaho Utilities
Tribal Environmental Contact	Steve Babits, Environmental Scientist, Northern Arapaho Tribe Natural Resource Office
Owner	Northern Arapaho Tribe
Operator	Northern Arapaho Utilities
Responsible Official(s)	Mike Quiver, Director, Northern Arapaho Utilities

Permit Information	
Is the permit on site and available? On July 1, 2021, Northern Arapaho Utilities (NAU) obtained a copy of the general permit for maintenance in the main office.	**Individual or General Permit:** General
Lagoon Category: No discharge	**Monitoring Frequency:** N/A
Effective Date: February 3, 2016	**Expiration Date:** December 31, 2020 (administratively continued)
Receiving Water(s): Little Wind River	
Inspector's source of information: EPA records, compliance information from EPA's Integrated Compliance Information System (ICIS), aerial imagery, facility personnel, and site review.	

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

<table>
<tr><th colspan="3">Report Review and Signature</th></tr>
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Inspection Narrative and Site Description

Introduction

On Wednesday, June 30, 2021, U.S. Environmental Protection Agency (EPA) conducted a compliance evaluation inspection at the Mill Creek Wastewater Treatment Facility (the facility, lagoon, or Mill Creek), located on the Wind River Reservation, to evaluate compliance with its National Pollutant Discharge Elimination System (NPDES) permit. The EPA is responsible for implementing the NPDES program in Indian Country within the State of Wyoming. The Northern Arapaho Tribe was notified of the inspection in a letter sent June 7, 2021 and the inspection was announced to the facility two weeks prior to the inspection, to coordinate logistics.

At approximately 8:00 am, EPA inspectors Kristin Ratajczak and Jessica Duggan (jointly referred to as inspectors) met with Mike Quiver, NAU Director; Harold Little Bear, NAU Manager; and Steve Babits represented the Northern Arapaho Tribe Resource Office. Inspectors presented their credentials and held an opening conference to explain the purpose of the inspection. Inspectors proceeded to ask questions to the facility representatives to evaluate compliance with the facility's permit. Mr. Quiver and Mr. Little Bear provided an overview of the lagoon's service area, collection system, and wastewater operations & maintenance (O&M). Throughout the inspection, the inspectors noted their observations in a bound checklist. Photographs taken during the inspection are included in the attached photo log.

Facility Description and Process Overview

The facility is a three-cell lagoon system that serves approximately 30-40 homes. Additionally, hauled septic waste is accepted at the lagoon via discharge to an onsite manhole. Facility representatives indicated occasional jetting is completed in the sewer system, on an as-needed basis. Wastewater generated from the White Hawk housing community gravity flows to the manhole north of the lagoon and from the manhole to Cell 1 for primary treatment (photos 33 and 34). A valve-operated pipe connects Cells 1 and 2 and Cell 2 is used for retention (photos 36 and 37). The only point of discharge is located in Cell 3; however, facility representatives indicated Cell 3 has been abandoned and no discharge had occurred from the lagoon in over 10 years.

Facility Review

Inspectors and facility representatives walked around the perimeter of the cells to evaluate berm integrity and the overall condition of the lagoon system. Inspectors confirmed Cells 2 and 3 were both dry at the time of the inspection, with Cell 3 appearing abandoned, and there was no evidence to suggest a recent discharge had occurred (photos 37 and 38). Additionally, inspectors observed the tops of the berms were recently mowed; however, the interior of the Cells 1 and 2 had excessive vegetation, including cattails and trees (photos 34, 35, and 37). Floating green scum was also present along the edge of Cell 1 (photo 34).

Records Review and Closing

Inspectors planned to evaluate records including weekly inspection logs and an O&M manual; however, NAU representatives indicated that while the lagoon was visited daily, complete inspections were not performed, and no inspection logs were maintained. Additionally, no O&M manual was available for the facility or collection system.

Inspectors held a closing conference on Thursday, July 1, 2021 with Mr. Quiver and Ms. Flora Dewey, NAU Operator, during which preliminary findings for all inspected NAU facilities were presented. Additionally, preliminary findings were transmitted to Mr. Quiver, Mr. Little Bear, Ms. Dewey, Mr. Steve Babits, and Mr. Dean Goggles, via email on July 17, 2021. As of the date of this report, no additional information has been received from the facility. Findings identified pursuant to the inspection are discussed in the Findings, Corrective Actions, and Recommendations section, below.

Findings, Corrective Actions, and Recommendations

Finding 1: Abundant vegetation and cattails were observed in the cells of the lagoon system.

Abundant cattails and biomass were present in both cells of the lagoon (photos 34-37). Additionally, trees were present in Cell 2 (photo 35).

Permit Requirement:

Part 6.5 of the General Permit (Permit) states, "Proper Operation and Maintenance. 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 the permit. However, the permittee shall operate, at a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance. In addition to the operation and maintenance items in the manual for the lagoon system, the permittee shall do the following maintenance:
6.5.1. Take necessary action to promptly correct the problem of leakage through the dikes;
6.5.2. Take necessary action to promptly remove burrowing animals from the dikes;
6.5.3. Promptly repair damage to dikes caused by burrowing animals and/or erosion;
6.5.4. Remove rooted plants, including weeds, from the water on a regular basis or as needed; and
6.5.5. Keep the dikes mowed on a regular basis during the growing season or as needed (e.g., keep growth below 6" in height)."

Corrective Action:

Remove the overgrown vegetation and trees growing in and around Cells 1 and 2. Provide the EPA with photos and a description of the corrective actions taken to address this finding.

Finding 2: The valve connecting the primary and secondary cells was not operational.

The valve connecting Cells 1 and 2 broke during the winter season, causing it to remain open (photo 36). The valve had not been fixed or replaced at the time of the inspection.

Permit Requirement:

Part 6.5 of the General Permit (Permit) states, "Proper Operation and Maintenance. 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 the permit. However, the permittee shall operate, at a

minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance. In addition to the operation and maintenance items in the manual for the lagoon system, the permittee shall do the following maintenance:
6.5.1. Take necessary action to promptly correct the problem of leakage through the dikes;
6.5.2. Take necessary action to promptly remove burrowing animals from the dikes;
6.5.3. Promptly repair damage to dikes caused by burrowing animals and/or erosion;
6.5.4. Remove rooted plants, including weeds, from the water on a regular basis or as needed; and
6.5.5. Keep the dikes mowed on a regular basis during the growing season or as needed (e.g., keep growth below 6" in height)."

Corrective Action:
Fix or replace the valve connecting Cells 1 and 2. Provide the EPA with a description of the corrective actions taken to address this finding.

Finding 3: Weekly inspections were not being conducted and inspection logs were not maintained.
During the inspection, NAU representatives indicated comprehensive weekly inspections were not completed at Mill Creek and inspection logs were not maintained.

Permit requirement:
Part 4.3. of the permit states, "Inspection Requirements
4.3.1. On at least a weekly basis, unless otherwise modified by written approval from the EPA, the permittee shall inspect its wastewater treatment facility. The permittee shall maintain a notebook recording all information obtained during the inspection. At a minimum, the notebook shall include the following information: (see Appendix D for Example Lagoon Inspection Form)
4.3.1.1. Name of facility and permit number;
4.3.1.2. Date and time of the inspection;
4.3.1.3. Name of the inspector(s);
4.3.1.4. The facilities discharge status;
4.3.1.5. The flow rate of the discharge if occurring;
4.3.1.6. 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 Parts 4.2 and 5.4.3 of this permit if not already done.);
4.3.1.7. Is there is any leakage through the dikes;
4.3.1.8. Are there are any animal burrows in the dike;
4.3.1.9. Is there any erosion of the dikes;
4.3.1.10. Are there are any rooted plants, including weeds growing in the water;
4.3.1.11. Does the vegetation growth on the dikes needs mowing (e.g. greater than 6" tall);
4.3.1.12. List the date scheduled for operation and maintenance procedures to be undertaken at the wastewater treatment facility.
4.3.1.13. Identification of operational problems and/or maintenance problems;
4.3.1.14. Recommendations, as appropriate, to remedy identified problems;
4.3.1.15. A brief description of any actions taken with regard to problems identified; and,
4.3.1.16. Other information, as appropriate.
4.3.2. The permittee shall maintain the notebook 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 (see Part 5.10 of this permit).

4.3.3. Problems identified during the inspection shall be listed with corrective action and a time frame to correct the issue. Example: repair cracks in North berm, remove animal and repair burrow, within 7 days. (See Part 6.5 of this permit.)"

Corrective Action:

Inspect the facility on at least a weekly basis, unless otherwise modified by written approval from the EPA. Provide the EPA with a description of the corrective actions taken to address this finding and submit a copy of a recent inspection report.

Finding 4: No O&M manual was maintained for the lagoon system.

The facility did not have an O&M manual for the facility or collection system, nor were records of O&M activities maintained.

EPA Guidance:

The EPA developed guidance manuals on the proper operation and maintenance of lagoons. One of the guidance materials 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), available at https://www.epa.gov/sites/production/files/2014-09/documents/lagoon-pond-treatment-2011.pdf.

Recommendation:

The EPA recommends an O&M manual be developed for the facility. No response to the EPA is requested pursuant to this recommendation.