

NPDES Inspection Report – POTW

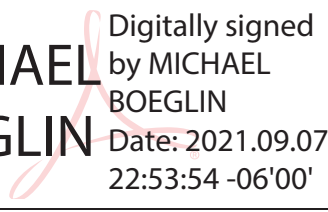
National Database Information	
Inspection Date: June 30, 2021	Inspection Type: CEI – Minor POTW
Entry / Exit Time: 9:15 am / 10:15 am	NPDES ID Number: WYG589106
NAICS Code: 22132 (Sewage Treatment Facilities)	Inspection ID: 202106_WYG589106
Lead inspector and affiliation: Kristin Ratajczak / U.S. EPA Region 8	
Inspector and affiliation: Jessica Duggan / U.S. EPA Region 8	

Facility Location Information	
Site/Facility Name & Location: Ethete Wastewater Lagoon Wind River Reservation, Wyoming 43.03039° N, 108.74669° W	Email Report to: Mike Quiver, Director Northern Arapaho Utilities (b) (6) mike.quiver@northernarapaho.com 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		
<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	Address/Phone Number	Date
Kristin Ratajczak	U.S. EPA Region 8 1595 Wynkoop St 8ENF-W-NW Denver, Colorado 80202 303-312-6310	8/27/2021
Reviewer Name	Address/Phone Number	Date
Jessica Duggan	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202 303-312-6195	9/2/2021
Supervisor Name/Signature	Address/Phone Number	Date
 Digitally signed by MICHAEL BOEGLIN Date: 2021.09.07 22:53:54 -06'00'	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202 303-312-6250	9/7/2021
Michael Boeglin, Section Chief, NPDES & Wetlands Enforcement		

Inspection Narrative and Site Description

Introduction

On Wednesday, June 30, 2021, the U.S. Environmental Protection Agency (EPA) conducted a compliance evaluation inspection at the Ethete Wastewater Treatment Facility (the facility, lagoon, or Ethete), 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 9:15 am, EPA inspectors Kristin Ratajczak and Jessica Duggan (jointly referred to as inspectors) met with Mike Quiver, Northern Arapaho Utilities (NAU) Director; Harold Little Bear, NAU Manager; and Steve Babits represented the Northern Arapaho Tribe Resource Office. Inspectors had presented their credentials and explained the purpose of the inspection to attendees during an inspection occurring earlier that day. Inspectors proceeded with an opening conference, asking questions to 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 checklist. Photographs taken during the inspection are included in the attached photo log.

Facility Description and Process Overview

The facility is a two-cell lagoon system, serving three schools, a laundromat, tribal offices, a senior center, the Little Wind casino, a grocery store, clinic, and approximately 90 homes. There are two lift stations in the collection system; one serves the casino and one is onsite at the lagoon system and both lift stations are maintained by NAU. Comingled wastewater flows into the lagoon lift station and is pumped to Cell 1 for primary treatment. A manual valve connects Cells 1 and 2 and Cell 2 is used as an evaporation pond. The only point of discharge is located in Cell 2; however, facility representatives indicated no discharge had occurred from the lagoon in over 10 years.

Facility Review

Inspectors and facility representatives observed the lagoon lift station and walked around the perimeter of the cells to evaluate berm integrity and the overall condition of the lagoon cells. The wastewater flowing through the lagoon lift station appeared clear at the time of the inspection and NAU representatives indicated there may be leaks from the schools in the service area (photos 39 and 40). In order to access the lagoon cells, NAU representatives had to cut open fencing that had been installed by a neighboring land lessor. Once access was obtained, inspectors observed overgrown vegetation in the lagoon cells and on the cell berms (photos 41 and 42). Additionally, animal burrows were observed on the berms around Cell 1 (photo 43). At the time of the inspection, Cell 2 was dry (photo 45).

Following review of the lagoon lift station and facility, inspectors drove to the casino lift station. The casino lift station was equipped with an overflow alarm system; however, maintenance logs were not kept. At the time of the inspection, the casino lift station was dry with a thick layer of scum present (photo 47). NAU representatives indicated the lift station is usually cleaned monthly and delays in cleaning were due to scheduling issues.

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 lift stations were 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, and Ms. Dewey 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: Overgrown vegetation and animal burrows were observed in and around the lagoon system.

Abundant vegetation was present in and around both cells of the lagoon system (photos 41, 42, 44, and 45). Additionally, animal burrows were present on the berm of Cell 1 (photo 43).

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 growing in and around Cells 1 and 2 and mitigate animal burrows. Provide the EPA with photos and a description of the corrective actions taken to address this finding.

Finding 2: 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 the facility 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 any leakage through the dikes;

4.3.1.8. Are there any animal burrows in the dike;

4.3.1.9. Is there any erosion of the dikes;

4.3.1.10. Are there any rooted plants, including weeds growing in the water;

4.3.1.11. Does the vegetation growth on the dikes need 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 3: The casino lift station had not been maintained.

At the time of the inspection, scum and solids were present in the casino lift station (photo 47). NAU representatives indicated the lift station was usually cleaned monthly and delays in cleaning were due to scheduling issues; however, pumping records were not maintained to support this assertion.

Permit requirements:

Part 6.5 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 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 accumulated scum and solids from the casino lift station and develop a regular pumping schedule. Provide the EPA with photos and a description of the corrective actions taken to address this finding.

Finding 4: The lagoon influent appeared clear at the time of the inspection.

During the inspection, the lagoon influent appeared clear and free from solids. NAU representatives indicated this was likely due to a leak at the school(s) in the service area, though this had not been confirmed nor had steps been taken to mitigate the leak.

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:

Evaluate whether a leak or inflow and infiltration is diluting the lagoon influent and mitigate the source. No response to the EPA is requested pursuant to this recommendation.

Finding 5: NAU did not have easy access to the lagoon system.

In order to access the lagoon cells, NAU representatives had to cut open fencing that had been installed by a neighboring land lessor.

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:

Ensure NAU has control over perimeter fencing and is able access the site to perform O&M. No response to the EPA is requested pursuant to this recommendation.

Finding 6: 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.