

## U.S. EPA Region 8 NPDES Inspection Report

| National Database Information                                                                                                                                          |                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Inspection Date: <b>June 27, 2023</b>                                                                                                                                  | Inspection Type: <b>Compliance Evaluation Inspection</b>        |
| Entry / Exit Time: <b>13:30 – 15:30 and 17:20 – 17:45. The inspectors left the facility at 15:30 and then returned at 17:20 and concluded the inspection at 17:45.</b> | NPDES ID: <b>SD-0020192</b>                                     |
| Major / Non-Major Facility: <b>Non-Major</b>                                                                                                                           | Program Sector(s): <b>Publicly-Owned Treatment Works (POTW)</b> |
| NAICS Code: <b>221320 (Sewage Treatment Facilities)</b>                                                                                                                | Inspection ID: <b>202306_SD0020192</b>                          |
| Lead inspector and affiliation: <b>Akash Johnson / U.S. EPA Region 8</b>                                                                                               |                                                                 |
| Inspector and affiliation: <b>Stephanie Passarelli / U.S. EPA Region 8</b>                                                                                             |                                                                 |

| Facility Location Information                                                                                                                                                                   |                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Site/Facility Name & Location:<br><b>City of Eagle Butte Wastewater Treatment Facility</b><br><b>209 Main Street</b><br><b>Eagle Butte, South Dakota 57625</b><br><b>45.007500, -101.258333</b> | Email Report to:<br><b>James Traversie / Mayor</b><br><b>City of Eagle Butte</b><br><b>rftraversie@cityofeaglebutte.com</b><br><br><b>Kyle Walters / Operator</b><br><b>City of Eagle Butte</b><br><b>jmwalters@cityofeaglebutte.com</b> |

| Contact Information            |                                                                                                  |
|--------------------------------|--------------------------------------------------------------------------------------------------|
|                                | Name(s)/Title                                                                                    |
| Facility Contacts              | <b>Kyle Walters / Wastewater Operator / City of Eagle Butte (present for opening conference)</b> |
|                                | <b>Skylar Larson / Wastewater Operator / City of Eagle Butte (present for entire inspection)</b> |
|                                | <b>Jeanie Walters / Finance Officer / City of Eagle Butte (present for opening conference)</b>   |
|                                | <b>James Traversie / Mayor / City of Eagle Butte (present for opening conference)</b>            |
| Indian Health Service Contacts | <b>Jason Petersen / Acting Tribal Utility Consultant / Indian Health Service (not present)</b>   |
| Tribal Government Contacts     | <b>David Nelson / Environmental Director / Cheyenne River Sioux Tribe (not present)</b>          |

|                                                 |                                                                                                                   |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Person/Company meeting definition of "Owner"    | <b>City of Eagle Butte</b>                                                                                        |
| Person/Company meeting definition of "Operator" | <b>Kyle Walters / Wastewater Operator / City of Eagle Butte</b>                                                   |
| Responsible Official(s)                         | <b>Kyle Walters / Wastewater Operator / City of Eagle Butte<br/>James Traversie / Mayor / City of Eagle Butte</b> |

| <b>Permit / Facility Information</b>                                                                                                                |                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| Permit on site and available: <b>Yes</b>                                                                                                            | Permit Application Date: <b>Did not evaluate</b> |
| Effective Date: <b>July 1, 2021</b>                                                                                                                 | Expiration Date: <b>June 30, 2026</b>            |
| Latitude: <b>45.007500</b>                                                                                                                          | Longitude: <b>-101.258333</b>                    |
| Receiving Water(s): <b>Discharges to an unnamed creek, which flows to Green Grass Creek</b>                                                         |                                                  |
| Weather Conditions: <b>Partly-cloudy, warm, no precipitation</b>                                                                                    |                                                  |
| Inspector's source of information: <b>Facility representatives and records, EPA records and databases, Google Maps, and inspection observations</b> |                                                  |

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

| Report Review and Signature                                                                                                                                                                 |                          |                                                                                                                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Drafter Name                                                                                                                                                                                | Draft Date               | Contact Information                                                                                                                                            |
| <b>STEPHANIE PASSARELLI</b>  Digitally signed by STEPHANIE PASSARELLI<br>Date: 2023.11.09 15:05:17 -07'00' | <b>September 7, 2023</b> | <b>U.S. EPA Region 8</b><br><b>Denver, Colorado</b><br><a href="mailto:passarelli.stephanie@epa.gov">passarelli.stephanie@epa.gov</a><br><b>(303) 312-6803</b> |
| Reviewer Name                                                                                                                                                                               | Review Date              | Contact Information                                                                                                                                            |
| <b>Akash Johnson</b>                                                                                                                                                                        | <b>October 12, 2023</b>  | <b>U.S. EPA Region 8</b><br><b>Denver, Colorado</b><br><a href="mailto:johnson.akash@epa.gov">johnson.akash@epa.gov</a><br><b>(303) 312-6067</b>               |
| Management Reviewer Name/Signature/Date                                                                                                                                                     |                          | Contact Information                                                                                                                                            |
| <b>EMILIO LLAMOZAS</b>  Digitally signed by EMILIO LLAMOZAS<br>Date: 2023.11.06 16:44:32 -07'00'           |                          | <b>U.S. EPA Region 8</b><br><b>Denver, Colorado</b><br><a href="mailto:llamozas.emilio@epa.gov">llamozas.emilio@epa.gov</a><br><b>(303) 312-6407</b>           |
| <b>Emilio Llamozas, NPDES and Wetlands Enforcement Section Supervisor</b>                                                                                                                   |                          |                                                                                                                                                                |

## Inspection Narrative and Facility Description

### 1.0 Introduction

On Tuesday, June 27, 2023, I, U.S. Environmental Protection Agency (EPA) inspector Stephanie Passarelli, accompanied by EPA inspector Akash Johnson (collectively, “we”), conducted a compliance evaluation inspection of the City of Eagle Butte (City) Wastewater Treatment Facility (WWTF; facility), located in Dewey County, South Dakota, within the exterior boundaries of the Cheyenne River Reservation (Reservation). We were accompanied by the individuals identified on pages 1-2 of this report.

The inspection was coordinated with the City and the Cheyenne River Sioux Tribe Department of Environmental and Natural Resources several weeks in advance, and an inspection notification letter was sent to the Cheyenne River Sioux Tribe on May 18, 2023. The purpose of the inspection was to evaluate compliance with applicable National Pollutant Discharge Elimination System (NPDES) and Clean Water Act (CWA) requirements. Throughout the inspection, we took notes on our discussions and observations in bound checklists and logbooks. Enclosure 2 is a facility schematic maintained in EPA records; the accuracy of this schematic was not verified during the inspection. Enclosure 3 is a log of photographs taken during the inspection.

### 2.0 Background

At the time of the inspection, the facility was permitted under an individual permit. The individual permit number is SD-0002192. The previous permit included a provision for “permission to discharge required”, however, this provision has been removed from the current Permit. Currently, the permit contains effluent limitations required to be met at the time of each discharge. Records pertaining to previous EPA NPDES inspections and other NPDES permitting, and compliance records are maintained in EPA files.

### 3.0 Inspection Narrative

The inspection began upon arrival at the City’s offices at 290 Main Street in Eagle Butte on 06/27/23 at approximately 01:30 PM. We convened with Kyle Walters, Skylar Larsen, Mayor James Traversie, and Jeanie Walters in the conference room, presented our inspector credentials, and conducted an opening conference. During the opening conference, we asked questions to the facility representatives to help evaluate compliance with the facility’s permit and performed a cursory review of limited available records.

#### *3.1 City of Eagle Butte Wastewater Operations*

The City operates the wastewater treatment facility, comprising a lagoon, collection system, and two lift stations which provide services to the surrounding community. At the time of inspection, the City’s wastewater operations were handled by two operators, a financial manager, and several supporting administrative staff. The two operators, Kyle and Skylar, indicated they handle both water and wastewater operations and held wastewater collections operator certifications from the State of South Dakota. Operator certifications were not verified during the inspection.

City water and wastewater customers and finances were briefly discussed during the opening conference. City representatives indicated revenue is derived from metered water and flat wastewater user fees of approximately \$34 (base) and \$30 respectively, assessed monthly to the approximately 947 water and wastewater customer accounts, 211 of which are commercial.

## Inspection Narrative and Facility Description

Lagoon and lift station maintenance is conducted at least weekly by the operators, who noted they often inspect operations more frequently (two or three times per week) to check levels at the lagoons and clean and empty baskets at the lift stations. Operators noted instances in the prior year of sewer backups due to a collapsed line and due to debris in the system. Facility representatives indicated the collapsed line was replaced. Cleaning/jetting of collection system lines are performed routinely with the full system being cleaned approximately every three years. No other upgrades or modifications in the recent years were identified.

Operators indicated one of the two lift stations, the “No Heart” Lift Station, which had two pumps and served approximately one-hundred residences, typically experienced a pump failure every 1-3 months, usually due to solids clogging a pump. Operators indicated the second pump would then typically not be able to keep up with pumping demands and would overheat, indicating inadequately sized pumps may have been installed at the lift station. Operators indicated they were typically notified of pump failures at the No Heart Lift Station by a resident who lived nearby and would call the operators when the buzzer and light for the high-level alarm indicated. Operators indicated the other lift station, the “212” Lift Station, only had one pump but typically did not experience operational problems. In October 2021, both lift stations experienced failures due to suspected electrical issues, during which the No Heart Lift Station overflowed. The October 2021 lift station failures were not discussed during the subject inspection, but information on these events is maintained in EPA records.

Discharge Monitoring Reports (DMRs) were not available for review during the opening conference. Facility representative indicated recent turnover with city staffing, and the prior financial representative had destroyed many of the records. It was noted that the City was currently in SNC for not submitting DMRs. Assistance was offered to facility representatives if additional support was needed to submit DMRs required by the individual permit.

### 3.2 Facility Description

The WWTF is a collection system, lagoon, and two lift stations servicing the communities of City and North Eagle Butte (the service area). Wastewater from the service area is transported to the facility by gravity flow, or by force main flow from the two lift stations identified below. Due to time constraints during the inspection, we did not observe or verify the location of either lift station.

| Lift Station Name       | Latitude      | Longitude       |
|-------------------------|---------------|-----------------|
| 212 (main lift station) | 45.006547 ° N | -101.23444 ° W  |
| No Hearts Development   | 45.012992 ° N | -101.247817 ° W |

The lagoon system consists of three cells operating in series (photos 377, 378, 380) and outlined in the following table with information reported in the individual permit Statement of Basis.

| Cell ID | Area (acres)Th |
|---------|----------------|
| Cell 1  | 32.9           |
| Cell 2  | 19.5           |
| Cell 3  | 15.0           |
| Total   | 67.4           |

## Inspection Narrative and Facility Description

Wastewater from the service area enters the facility through an influent manhole located at the southeast corner of cell 1. The lagoons receive primarily domestic wastewater from the service area. However, facility representatives indicated the lagoon also services commercial users, including 21 commercial accounts for local restaurants. A FOG ordinance is in place, and individual restaurant owners with grease trap and fryers are individually responsible for maintenance and inspections of their facilities. Following request and approval, the lagoon facility does also accept hauled septic waste from one user, approximately 500 gallons ten times per year.

The outlet structure is located at the northwest corner of cell 3 (photo 379). Three samples are required to be collected from this outfall during any discharge lasting one week or less, and for a discharge lasting longer than one-week, additional samples are collected each week. The permit also requires receiving stream monitoring to be conducted, samples are to be collected two to three miles north (downstream) of the lagoon where the unnamed receiving drainage meets the Green Grass Creek. Operators indicated they are aware of requirements of sampling receiving stream and had visited the location at the required frequency. However, operators indicated that often no flow was available for them to sample. In reviewing DMRs following the on-site inspection, sample results had not been submitted for several monitoring periods.

The inspectors, along with facility representative Skylar, inspected the three lagoon cells and Outfall 001, and proceeded to the inlet manhole located on the southeast corner of cell 1. Looking into the manhole, it was evident there was no flow entering the lagoon system (Photo 381-382). This prompted Skylar to trace the collection system upgradient and he identified a manhole approximately 500 feet upgradient of the influent manhole where a sanitary sewer overflow (SSO) was occurring (Photo 383, 385). Sewage was flowing from the surcharging manhole (photo 385) into a swale along the east side of cell 1. Flow was draining south through this swale towards the inlet manhole, through a culvert located adjacent to the inlet manhole (photo 386-388), and into the same unnamed receiving water that would receive any effluent from the lagoon further downstream (Photo 392-393).

This unnamed receiving water approached the lagoon from the southeast, flowed west along the southern berms of all three cells, then flowed north along the western berm of cell 3 and continued north under Highway 212; it would receive any discharge from Outfall 001 just prior to flowing under Highway 212. Due to dense vegetation, the inspectors were not able to observe the receiving water upgradient of where the SSO entered it near the southeast corner of Cell 1, but we observed the unnamed receiving water just a dozen feet or so downstream of where it had received the overflowed sewage as it flowed west along the south end of the Cell 1 (Photos 389-391). The flow rate of the receiving stream downstream of sewage entry appeared to be greater than the flow rate of the overflowing sewage, so it is presumed the receiving water comprised flow prior to receiving the overflowed sewage. We did not walk the entirety of the southern berms of Cells 2 or 3 to observe the adjacent receiving water, but we did drive to a downgradient location where the unnamed receiving water flowed under Highway 212 and we confirmed the stream was flowing (at a what appeared to be a greater flow rate than observed near the southeast corner of Cell 1) north through a culvert under Highway 212. We did not observe the unnamed receiving stream downgradient of this location, but permitting documents indicate it would flow into Green Grass Creek.

Upon identifying the SSO, action was immediately taken by Skylar, and soon afterwards Kyle, to deploy a jetter and resolve the cause of the surcharging manhole. The inspectors left the facility at approximately 15:30 to attend another inspection, and returned at approximately 17:20, as Skylar and Kyle were bringing a jetter into the lagoon enclosure. Operators initiated jetting of the collection system starting at the lagoon's influent manhole (Photo 442) and following jetting, flow had resumed

## Inspection Narrative and Facility Description

through the lagoon's influent manhole at approximately 17:40 (Photo 443). Kyle and Skylar indicated the cause of the SSO was suspected to be a blockage of grease, hair, and other matter.

A closing conference was conducted at the lagoon following resolution of the SSO, during which we reminded the facility representatives to make the appropriate noncompliance reporting notifications in accordance with the Permit. The inspection concluded when we left the lagoon at approximately 17:45.

### 4.0 Post-Inspection Activities and Conclusion

Following the inspection, City provided the necessary verbal notification of noncompliance event, and submitted a written report on June 30, 2023 describing in brief the incident and steps taken to resolve the incident.

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

## Findings, Corrective Actions, and Recommendations

**Finding #1:** Records have not been maintained for the required minimum of three years.

DMRs and records for inspections, maintenance activities, were not available at the time of the inspection. Facility representative indicated recent turnover with city staffing, and the prior financial representative had destroyed many of the records.

### Permit requirement:

Part 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 all records are kept in accordance with the recordkeeping requirements of the permit. Provide the EPA and the Cheyenne River Sioux Tribe (Tribe) with a description of the corrective actions taken to address this finding.

**Finding #2:** The facility is in Significant Non-compliance (SNC) because Discharge Monitoring Reports for several monitoring periods have not been submitted or are submitted late.

The Discharge Monitoring Report for monitoring period ending on March 31, 2023 was not submitted. Following the inspection, additional notification was received indicating a DMR for the monitoring period ending June 30, 2023 was not submitted for the influent monitoring (I001-Q). Because of the failure to submit the DMRs the facility is showing up as SNC in the EPA compliance database.

## Findings, Corrective Actions, and Recommendations

### **Permit requirement:**

Part 2.4 of the Permit states, “With the effective date of this Permit, the Permittee must electronically report DMRs quarterly using NetDMR. Electronic submissions by permittees must be submitted quarterly to the EPA Region 8 no later than the 28<sup>th</sup> of the month following the completed reporting period. The Permittee must sign and certify all electronic submissions in accordance with the requirements of section 4.7 of this Permit (“Signatory Requirements”). If no discharge or overflow occurs during the entire monitoring period, it shall be reported on the DMR Form for Outfall 001 that no discharge occurred. If there is no flow at R001, or access is impeded at R001 or I001 by snow, ice, flooding, other unsafe conditions, etc.; the information shall be reported on the DMR for R001 and/or I001 using the most applicable NetDMR no data indicator code (i.e., NODI code) that is available, to identify the circumstances of the situation. NetDMR is accessed from the internet at <https://netdmr.zendesk.com/home>.”

### **Corrective Action:**

Submit DMRs that are past due for the following reporting periods:

- Period ending March 31, 2023, Update monitoring status for Outfall 001, R001, and I001.
- Period ending June 30, 2023. Update monitoring status for Outfall I001.
- Period ending September 30, 2023. Update monitoring status for Outfall 001, R001, and I001 – since the DMR was entered on 09/18/23, which was prior to the end of the monitoring period on 09/30/23.
  - A NODI code 3 for “Special Report Attached” was entered on 09/18/23 for Outfall 001; however, there was no report attached in NetDMR.
  - A NODI code B for “Below Detection Limit” was entered on 09/18/23 for Outfall I001 (influent monitoring); however, NODI code B should only be used if the laboratory results are below the detection limit. This would be highly unlikely since the BOD influent sampling for the facility was 504 mg/L and 364 mg/L for the monitoring periods ending on 03/31/22 and 06/30/22, respectively.
  - A NODI code F for “Insufficient flow for sampling” was entered on 09/18/23 for Outfall R001 (Receiving stream). This would be the correct NODI code if there was insufficient flow for sampling from the receiving stream; however, it needs to be entered after the close of the monitoring period on 09/30/23.

Ensure that all DMRs are submitted in a timely manner in accordance with Part 2.4 of the permit.  
Ensure that DMRs are not submitted before the end of the monitoring period.

Provide the EPA and the Tribe with a description of the corrective actions taken to address this finding and an explanation of how DMRs will be submitted in the future in accordance with the Permit.

**Finding #3:** During the inspection, a SSO event occurred resulting in sewage ultimately reaching surface waters.

For a description of the June 27, 2023 SSO please see section 3.2 Facility Description of the report above.

### **Statutory requirement:**

In order to restore and maintain the integrity of the nation’s waters, section 301(a) of the CWA, 33 U.S.C. § 1311(a), prohibits the discharge of any pollutant by any person into waters of the United States, unless authorized by certain other provisions of the CWA, including section 402 of the CWA, 33 U.S.C. § 1342.

## **Findings, Corrective Actions, and Recommendations**

### **Permit requirement:**

Part 1.2 of the Permit states, “The authorization to discharge provided under the National Pollutant Discharge Elimination System (NPDES) renewal Permit # SD-0020192 is limited to Outfall 001, specifically designated below as the discharge location. Discharges at any location not authorized under an NPDES Permit is a violation of the CWA and could subject the person(s) responsible for such discharge to penalties under Section 309 of the CWA.”

Part 3.6 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 the Permit. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up, auxiliary facilities and/or similar systems, which are installed by a Permittee, when the operation is necessary to achieve and maintain compliance with the conditions of the Permit.”

### **Corrective Action:**

Ensure that the facility performs proper operation and maintenance of the collection system (jetting) to prevent SSOs from occurring in the future. Provide the EPA and the Tribe with a routine jetting schedule for the collection system. The Notice of Noncompliance as required in Part 2.8 of the Permit was provided to EPA for the June 27, 2023 SSO. Additionally, a written submission was also provided to EPA with the required five days.

### **Recommendation:**

The EPA recommends the City evaluate the collection system line leading to lagoon inlet to identify cause of disruption and prevent further incidents from occurring.

**Finding #4: An Operations and Maintenance (O&M) Manual was not available for the operators and was not in use by the facility.**

### **Permit Requirement:**

Part 3.6 of the Permit, Proper Operation and Maintenance (O&M) 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 the Permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up, auxiliary facilities and/or similar systems, which are installed by a Permittee, when the operation is necessary to achieve and maintain compliance with the conditions of the Permit.”

3.6.1 The Permittee shall do the following as part of the operation and maintenance program for the wastewater treatment facility:

- 3.6.1.1 Have a current O & M Manual(s) that describes the proper operational procedures and maintenance requirements of the wastewater treatment facility;
- 3.6.1.2 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;
- 3.6.1.3 Have a schedule(s) for routine operation and maintenance activities at the wastewater treatment facility; and,

## Findings, Corrective Actions, and Recommendations

- 3.6.1.4 Require the operator to perform the routine operation and maintenance requirements in accordance with the schedule(s).
- 3.6.2 The Permittee shall maintain a daily log in either paper (e.g. bound notebook) or electronic format containing a summary record of all operation and maintenance activities at the wastewater treatment facility. At a minimum, the log shall include the following information:
- 3.6.2.1 Date and time;
  - 3.6.2.2 Name and title of person(s) making the log entry;
  - 3.6.2.3 Name of the persons(s) performing the activity;
  - 3.6.2.4 A brief description of the activity; and,
  - 3.6.2.5 Other information, as appropriate.
- 3.6.3 The Permittee shall maintain the daily log in accordance with proper record-keeping procedures and shall make the log available for inspection, upon request, by authorized representatives of the U.S. Environmental Protection Agency or the Cheyenne River Sioux Tribe.

### **Corrective Action:**

Develop and implement an O&M Manual prepared in accordance with Part 3.6 of the Permit. In a response to the EPA and the Tribe, provide a copy of the O&M Manual.

### **Finding #5: The required influent sampling has not been conducted consistently.**

For the monitoring periods ending 9/30/22 and 12/31/22, a NODI-C “no discharge” was submitted on the DMR for the monitoring point I001, indicating there was no discharge at the inlet of cell 1. Please confirm this is the correct description indicating there was no influent into the cells throughout both monitoring periods.

For the monitoring period ending 03/31/23 and 06/30/23, no monitoring data has been submitted for I001.

For the monitoring period ending on 09/30/23, a NODI code B “below detection limit” was submitted on the DMR for the monitoring point I001, indicating that the laboratory result were below the detection limit. This would be highly unlikely since the BOD influent sampling for the facility was 504 mg/L and 364 mg/L for the monitoring periods ending on 03/31/22 and 06/30/22, respectively.

### **Permit requirement:**

Part 1.3.4 Self-Monitoring Requirements – Influent Sampling (I001) states: Influent monitoring sampling will consist of a minimum of a single grab sample at least once per quarter, to be incorporated into calculations for reporting effluent BOD5 percent removal associated with discharges. Influent samples shall be taken at the location designated in Table 1 of the Permit.

Table 5- Baseline Influent Monitoring Requirements

| Influent Characteristic                             | Frequency     | Sample Type a/ |
|-----------------------------------------------------|---------------|----------------|
| Biochemical Oxygen Demand (BOD <sub>5</sub> ), mg/L | Quarterly, b/ | Grab           |

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

b/ A minimum of one BOD grab sample will be taken once each calendar quarter and will be used in the calculation for the 30-day average for the month in which they are performed.

## Findings, Corrective Actions, and Recommendations

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 the sampling is performed. See footnote g/ of Table 3 for additional information/example calculations. If only one sample is taken within a month, that result will be the 30-average for the month.

### **Corrective Action:**

Ensure that all required monitoring is conducted as required by the permit. Provide the EPA and the Tribe with a description of the corrective actions taken to address this finding. Please submit missing monitoring data for I001 for the periods ending 03/31/23 and 06/30/23. Please review and correct the monitoring data for I001 for the periods ending 9/30/22 and 12/31/22. Please review and correct the monitoring data for I001 for the period ending on 9/30/23.

### **Finding #6: Receiving stream monitoring was not being conducted and/or reported consistently.**

Receiving stream monitoring is required to be collected two to three miles north (downstream) of the lagoon where the unnamed receiving drainage meets the Green Grass Creek. The required receiving stream monitoring was either not being conducted, or not reported accurately in submitted DMRs per the permit requirements.

In reviewing prior submitted DMRs, receiving stream monitoring was not submitted for the period ending 09/30/22, and 12/31/22. For both periods a NODI-C code indicating "No discharge" was entered. Sampling is required regardless of the discharge status of the Facility; therefore, the NODI code "No discharge" is not an appropriate NODI code submittal for the receiving stream monitoring. For the monitoring period ending 03/31/23, no monitoring data has been submitted for R001.

For the monitoring period ending on 06/30/22, the facility reported temperature, maximum pH and ammonia for the receiving stream monitoring. However, the minimum pH was reported with a NODI code C "No discharge." If only one pH sample is taken, then that result should be listed for both the maximum and minimum pH.

### **Permit requirement:**

Part 1.3.3 of the Permit states, "Self-Monitoring Requirements – Receiving Stream (R001). **R001 monitoring requirements are effective immediately and last through the effective term of the Permit.** Sampling and test procedures for pollutants listed in this section shall be in accordance with guidelines promulgated by the Administrator in 40 C.F.R. Part 136, as required in 40 C.F.R. § 122.41(j). At a minimum, the following constituents shall be monitored at the frequency and with the type of measurement indicated. Stream monitoring shall be conducted when there is flow at R001 and access is practical and accessible (e.g. access not impeded by snow, ice, flooding, other unsafe conditions, etc.). Any unsafe conditions shall be recorded. **All receiving stream monthly monitored data collected, including detailed location (latitude, longitude), dates and times of the sample collections, shall be recorded and maintained in the Facility's sampling records. Sampling shall be conducted regardless of the discharge status of the Facility.**

**Table 4 – R001 Monitoring Requirements**

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

## Findings, Corrective Actions, and Recommendations

- a/ See Definitions, Section 1.1. of the Permit, for definition of terms.
- b/ 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.

### **Corrective Action:**

Ensure that the Facility is monitoring the receiving stream for appropriate characteristics, frequency, and sample type specified in the Permit. Provide the EPA and the Tribe with a response indicating how the Facility will implement receiving stream monitoring as required by the Permit. Please submit accurate monitoring data for R001 for the monitoring periods ending 06/30/22, 09/30/22, 12/31/22, and 03/31/23.

**Finding #7:** One of the pumps at the “No Heart” lift station appears to be undersized or not properly maintained, resulting in frequent failures, backup and high-level alarms.

### **Permit requirement:**

Part 3.6 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 the Permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up, auxiliary facilities and/or similar systems, which are installed by a Permittee, when the operation is necessary to achieve and maintain compliance with the conditions of the Permit.

### **Corrective Action:**

Ensure the facility lift station pumps are working properly and diagnose the reason for pump failures. Provide the EPA and the Tribe with photos and a description of the corrective action taken to address this finding. Provide a plan and schedule for planned improvements.

### **Recommendation:**

The EPA recommends evaluating possibility of installing a larger pump that can handle the current and potential growth.

**Finding #8:** A backup pump is not installed or available at the “212” Lift Station.

The “212” Lift Station has one operational pump. Operators indicated several failures at the lift station, which leaves the lift station vulnerable to overflow should any operational problems occur with the one pump in place.

### **Permit requirement:**

Part 3.6 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 the Permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up, auxiliary facilities and/or similar systems, which are installed by a Permittee, when the operation is necessary to achieve and maintain compliance with the conditions of the Permit.

### **Recommendation:**

### **Findings, Corrective Actions, and Recommendations**

The EPA recommends a second pump be installed at the “212” lift station to provide redundancy and potentially prevent any overflows in the future.

**Finding #9:** No SCADA functionality was installed at either lift station.

City representatives have no way of being promptly and remotely alerted to power disruptions, pump failures, or other operational issues that could arise at these facilities.

Site representatives indicated power disruptions affecting lift stations were common across the Reservation, and even when backup generators were available, lift stations often did not properly reset when switching between power sources. As demonstrated during this inspection, operators could have been alerted earlier of possible blockage in the collection system. Otherwise, operators rely on intermittent inspections or notifications from the community should a sewer backup or incident occur.

**Recommendation:**

The EPA recommends the City evaluate the feasibility of installing SCADA functionality at the lift stations.