

REPORT OF COMPLIANCE EVALUATION INSPECTION (CEI)

AT

**Kickapoo Trading Post and Casino – Wastewater Treatment Facility
Kickapoo Housing Site Number 1 – Wastewater Treatment Facility
Kickapoo Tribe in Kansas
Horton (Brown County), Kansas**

National Pollutant Discharge Elimination System Permit Numbers: KS0095192 & KS0095206

July 12-13, 2023

BY

**U. S. ENVIRONMENTAL PROTECTION AGENCY
Region 7
Enforcement and Compliance Assurance Division (ECAD)**

INTRODUCTION

I performed a Compliance Evaluation Inspection (CEI) at the Kickapoo Trading Post and Casino WWTF and the Kickapoo Housing Site Number 1 WWTF at the Kickapoo Tribe in Kansas Reservation located near Horton, Kansas from July 12, 2023, through July 13, 2023. The inspection was authorized by Section 308(a) of the Federal Water Pollution Control Act, as amended. This narrative report presents the findings of the inspections.

PARTICIPANTS

Kickapoo Environmental Office

Nestoria Lopez-Wright, Environmental Director (785) 486-7006

Email: kickapoo.nestor@gmail.com

Josef Carroll, Solid Waste Coordinator (785) 486-2131

Email: Josef.kickapoowater@outlook.com

U. S. Environmental Protection Agency (EPA)

Lantz Tipton (Lead Inspector), Physical Scientist (913) 551-7892

Email: tipton.lantz@epa.gov

Angela Acord, Physical Scientist (913) 551-7892

Email: acord.angela@epa.gov

PROCEDURES

On July 13, 2023, Ms. Acord and I arrived at the Kickapoo Environmental Office at approximately 1:00 p.m. and introduced ourselves to Ms. Lopez-Wright, presented my credentials, and explained the purpose and procedures of the inspection. These procedures included completing the Water Compliance Inspection Report (Attachment 1) (for each treatment facility), a facility walk-through (of each facility) with photographs (Attachment 2), a review of the facilities' self-monitoring records, and an exit interview.

FACILITY DESCRIPTION

The Kickapoo Trading Post and Casino WWTF (NPDES No. KS0095192) and the Kickapoo Housing Site Number 1 (NPDES No. KS0095206) WWTF are owned and operated by the Kickapoo Tribe of Kansas. The legal description for the Trading Post and Casino WWTF is the NE ¼, NE ¼, Section 32, Township 4 South, Range 16 East within Brown County, Kansas. The physical address of the WWTF is listed as the southwest quadrant of the intersection of Highway K20 (110th Street) and Goldfinch Road.

The mailing address, for both treatment facilities, is 824 111th Drive, Horton, Kansas 66439.

The Trading Post and Casino WWTF is a four-cell, controlled discharge lagoon system, designed to treat approximately 50,000 gallons per day or 0.50 million gallons per day (mgd) from a population equivalent of 1,110 persons. The WWTF treats domestic wastewater from the Kickapoo Trading Post, Golden Eagle Casino, 45 housing units, 13 senior housing units (26 apartments), tribal office buildings, the Health Center, other miscellaneous buildings, and the filter backwash water from the tribal drinking water treatment plant. Sanitary wastewater is collected and flows south, by gravity, into Cell #1 of the lagoon system. The four cells operate in a series. Cell #1 is equipped with two surface aerators and is 3.29 acres in size, Cell #2 is 1.1 acres in size, Cell #3 is 0.3 acres in size, and Cell #4 is 2.7 acres in size. The total operating volume is estimated at approximately 11.5 million gallons. The WWTF discharges to an unnamed tributary to the Delaware River at Outfall 001, approximately 200 feet east of the southeast corner of Cell #4. See Attachment 4 for a layout map of the facility. There are no significant industrial users that discharge to the WWTF. Biosolids for the treatment system are retained in Cell #1.

The WWTF's NPDES Permit was issued on July 25, 2019 (Attachment 5a). The permit expires on July 24, 2024.

Table 1a Kickapoo Trading Post and Casino WWTF - provides a summary of the effluent parameters and monitoring frequency:

TABLE 1a - OUTFALL 001 EFFLUENT POLLUTANT PARAMETERS AND MONITORING FREQUENCY				
Effluent Parameters	Parameter Code	Discharge Limits	Monitoring Frequency	Sample Type
Effluent Flow	50050	Monitor and Report Flow in Million Gallons per Day (MGD)	<i>Daily during discharge</i>	Measured or Calculated
Total Flow	82220	Monitor and Report - Million Gallons per Month (MGM)	<i>Final day of drawdown</i>	Measured or Calculated
Duration of Discharge	81381	Total Days of Drawdown Event	<i>Once per drawdown</i>	Measured or Calculated
Five Day Biochemical Oxygen Demand (BODs)	00310	Monthly Average - 30 mg/L Weekly Average - 45 mg/L	(a)	Grab
Total Suspended Solids (TSS)	00530	Monthly Average - 80 mg/L Weekly Average - 120 mg/L	(a)	Grab
pH (d)	00400	6.0 - 9.0 Standard Units	(a) (d)	Grab
Temperature	00011	Monitor and Report - ° F	(a)	Grab
Dissolved Oxygen	00300	Minimum - 5.0 mg/L	(a)	Grab
Oil and Grease	00552	Monthly Average - 10 mg/L Daily Maximum - 15 mg/L	(a)	Grab
<i>E. coli</i> Bacteria (April 1 - October 31)	51041	Geometric Mean - 262 colony forming units (cfu) /100mL	(a)	Grab
<i>E. coli</i> Bacteria (November 1 - March 31)	51041	Geometric Mean - 2,358 colony forming units (cfu) /100mL	(a)	Grab
Ammonia, Total as N (March 1 - October 31)	00610	Daily Maximum - 1.43 mg/L Monthly Average - 0.71 mg/L	(a)	Grab
Ammonia, Total as N (November 1 - February 28 [29])	00610	Daily Maximum - 2.95 mg/L Monthly Average - 1.47 mg/L	(a)	Grab
Nitrogen, Total as N (b)	00600	Monitor and Report - mg/L	(a)	Grab
Phosphorus, Total as P	00665	Monitor and Report - mg/L	(a)	Grab
BODs Percent Removal	81010	Monthly Average Minimum of 85% removal	<i>Each drawdown event</i>	Calculation (c)
Footnotes: (a) Effluent sampling shall be performed the next day after the beginning of the discharge. If the discharge continues for more than two weeks, additional sampling shall be performed after the 14 th day. (b) Total Nitrogen means the sum of Total Kjeldahl Nitrogen, Nitrate Nitrogen, and Nitrite Nitrogen. (c) The Permittee shall use the results of influent and effluent monitoring for BODs to calculate and report percent removal. This information shall be calculated and reported for each period of discharge from the lagoon system. $\text{Percent Removal} = \frac{[\text{Influent BODs Concentration}] - [\text{Effluent BODs Concentration}]}{[\text{Influent BODs Concentration}]}$ (d) The pH must be measured within 15 minutes of collecting the sample.				

TABLE2 INFLUENT MONITORING APPLIES ALL YEAR				
Pollutant Parameters	Parameter Code	Measurement Units	Monitoring Frequency	Sample Type
Influent Flow	50050	Monitor and Report Average Flow in Million Gallons per Day (MGD)	<i>Daily during discharge</i>	Measured or Calculated
Five Day Biochemical Oxygen Demand (BODs)	00310	Monitor and report - mg/L	<i>Quarterly (a)</i>	Grab
Total Suspended Solids (TSS)	00530	Monitor and report - mg/L	<i>Quarterly (a)</i>	Grab
Oil and Grease	00552	Monitor and report - mg/L	<i>Quarterly (a)</i>	Grab
Footnote: (a) Sampling for BODs, TSS, and Oil and Grease shall be performed at the same time as discharge sampling. (i.e. The next day after the beginning of the discharge. If the discharge continues for more than two weeks, additional sampling shall be performed after the 14 th day.) These samplings may be reported as the required quarterly monitored influent values.				

The legal description for the Housing Site Number 1 WWTF is the NW ¼, SE ¼, Section 8, Township 4 South, Range 16 East within Brown County, Kansas. The physical address of the WWTF is at the terminus of 142nd Street. The Housing Site No. 1 WWTF is also a four-cell, that is designed to treat approximately 10,000 gallons per day or 0.10 million gallons per day (mgd) from a population equivalent of 82 persons. The WWTF treats domestic wastewater from the Housing Site #1, Sanitary wastewater is collected from the housing units and flows east, by gravity, into the treatment system. According to the NPDES permit, there are two primary aerated cells followed by a secondary cell. The lagoon system operates in parallel for the two primary cells (Cell #1A and Cell #1B) then in series with a controlled discharge from Cell #4 to an unnamed tributary of the Delaware River. See Attachment 4 for a layout map of the facility. The total volume of the lagoon system is approximately 3.0 million gallons. Biosolids for the treatment system are retained in Cell #1A and #1B.

The WWTF's NPDES Permit was issued on June 18, 2018 (Attachment 5b). The permit expired on June 17, 2023. A renewal application was submitted to EPA Region 7, Water Division's Permits and Loans Branch on December 14, 2022 (Attachment 6).

Table 1b Kickapoo Housing Site No. 1 WWTF - provides a summary of the effluent parameters and monitoring frequency:

TABLE 1b EFFLUENT POLLUTANT PARAMETERS AND MONITORING FREQUENCY				
Effluent Parameters	Parameter Code	Discharge Limits	Measurement Frequency	Sample Type
Effluent Flow	50050	Monitor and Report Flow in Million Gallons per Day (MGD)	<i>Daily during discharge</i>	Measured or Calculated

Total Flow	82220	Monitor and Report - Million Gallons per Month (MGM)	<i>Final day of drawdown</i>	Measured or Calculated
Duration of Discharge	81381	Total Days of Drawdown Event	<i>Once per drawdown</i>	Measured or Calculated
Five Day Biochemical Oxygen Demand (BODs)	00310	Monthly Average - 30 mg/L Weekly Average - 45 mg/L	(a)	Grab
Total Suspended Solids (TSS)	00530	Monthly Average - 30 mg/L Weekly Average - 45 mg/L	(a)	Grab
pH (d)	00400	6.5 - 8.5 Standard Units	(a) (d)	Grab
Temperature	00011	Monitor and Report - ° F	(a)	Grab
Dissolved Oxygen	00300	Minimum - 5.0 mg/L	(a)	Grab
<i>E. coli</i> Bacteria (April 1 - October 31)	51041	Single Sample Maximum - 262 colony forming units (cfu) /100 mL	(a)	Grab
<i>E. coli</i> Bacteria (November 1 - March 31)	51041	Single Sample Maximum - 2,358 colony forming units (cfu) /100 mL	(a)	Grab
Ammonia, Total as N (March 1 - October 31)	00610	Daily Maximum - 4.40 mg/L Monthly Average - 2.19 mg/L	(a)	Grab
Ammonia, Total as N (November 1 - February 28 [29])	00610	Daily Maximum - 8.41 mg/L Monthly Average - 4.19 mg/L	(a)	Grab
BOD ₅ Percent Removal	81010	Monthly Average Minimum of 85% removal	<i>Each drawdown event</i>	Calculation (c)
TSS Percent Removal	81011	Monthly Average Minimum of 85% removal	<i>Each drawdown event</i>	Calculation (c)
Nitrogen, Total as N (b)	00600	Monitor and Report - mg/L	(a)	Grab
Phosphorus, Total as P	00665	Monitor and Report - mg/L	(a)	Grab
Footnotes: (a) Effluent sampling shall be performed the next day after the beginning of the discharge. If the discharge continues for more than one week, additional sampling shall be performed each week thereafter. (b) Total Nitrogen means the sum of Total Kjeldahl Nitrogen, Nitrate Nitrogen, and Nitrite Nitrogen. (c) The Permittee shall use the results of influent and effluent monitoring for BODs and TSS to calculate and report percent removal. This information shall be calculated and reported for each period of discharge from the lagoon system. $\text{Percent Removal} = \frac{[\text{Influent BODs (or TSS) Concentration}] - [\text{Effluent BODs (or TSS) Concentration}]}{[\text{Influent BODs (or TSS) Concentration}]}$ (d) pH must be measured within 15 minutes of taking the sample.				

TABLE 2b INFLUENT MONITORING				
Pollutant Parameters	Parameter Code	Measurement Units	Measurement Frequency	Sample Type
Influent Flow	50050	Monitor and Report Average Flow in Million Gallons per Day (MGD)	<i>Daily during discharge</i>	Measured or Calculated
Five Day Biochemical Oxygen Demand (BODs)	00310	Monitor and report - mg/L	<i>Quarterly (a)</i>	Grab

Total Suspended Solids (TSS)	00530	Monitor and report - mg/L	<i>Quarterly (a)</i>	Grab
Footnote: (a) Sampling for BODs and TSS shall be performed at the same time as discharge sampling (i.e. the day after the beginning of the discharge). These samplings may be reported as the required quarterly monitoring influent values.				

FINDINGS AND OBSERVATIONS

The following findings were noted during the facility walk through and records review portion of the inspection. A complete summary is given in the NPDES Compliance Inspection Report Checklist (Attachment 1a and 1b). These findings were discussed with Ms. Lopez-Wright. during the exit meeting. The findings were also listed in the Notice of Potential Findings (Attachment 3) provided to the Tribe on July 14, 2023.

Records:

Records were maintained on Ms. Lopez-Wright's computer or in her email system, but were not readily available for review. Ms. Lopez-Wright was able to provide records relating to contract laboratory support and Discharge Monitoring Reports. She explained that the DMRs are submitted to EPA Region 7 for entry into the NetDMR system. She was also able to obtain and provide information on when the NPDES permit renewal application was submitted for the Housing Site Number 1 WWTF permit. I asked if the facility records were printed and maintained in a central location for other staff to access and review, and she explained that currently they were not. She explained that her official duties do not allow adequate time to be devoted to WWTF activities and there were no other staff currently assigned to these duties. I also asked if an inspection logbook was maintained, and she was unaware of the location of the logbooks.

Self-Monitoring Data Review:

I obtained spreadsheet summaries of the available Discharge Monitoring Report for each of the WWTFs, Trading Post and Casino and Housing Site No. 1, from January 2019, through July 2023. According to the EPA's Enforcement and Compliance History Online (ECHO) database, the Trading Post and Casino WWTF has been in Significant Non-Compliance, due to failure to report, for the following monitoring periods of: October through December 2022, January through March 2023, and April through June 2023. The specific violations of the facilities effluent and monitoring requirements are included with this report as Attachment 4a.

According to the EPA's ECHO database, the Housing Site No. 1 WWTF has been in Significant Non-Compliance, due to failure to report, for the following monitoring periods of: October through December 2022, January through March 2023, and April through June 2023 and for failure to comply with BOD5 effluent limitations during the July through September 2021 monitoring period. The specific violations of the facilities effluent and monitoring requirements are included with this report as Attachments 4b.

Notices of Non-Compliance:

Since January 2021, the EPA R7 Enforcement and Compliance Assurance Division's Water Branch has issued 7 separate Notices of Non-compliance (Attachment 8) to the Kickapoo Tribe of Kansas notifying of the reporting and effluent parameter non-compliance from the two treatment facilities.

Operation and Maintenance:

Although he did not have direct responsibility or knowledge of the current operations of the WWTF operations, Mr. Carroll escorted Ms. Acord and I during observations of the two treatment facilities. Upon arrival at the Trading Post and Casino WWTF, the security gate was unlocked. I observed the lagoon berms and noted that the vegetation was tall and there were small trees noted to be growing. The eastern bank of Cell #2 had experienced wind and wave erosion and exhibited a nearly vertical slope (photograph #3). Evidence of burrowing animals was observed on the north bank of Cell #2.

As mentioned above, each treatment facility is equipped with surface aerators in the primary contact cells. At the Trading Post and Casino WWTF both aerators in Cell #1 (photograph #2) were not in operation at the time of the inspection and Mr. Carroll was unaware of the last time that they were in operation.

The security gate at the Housing Site No. 1 WWTF was also unlocked. The exterior lagoon berms had recently mowed, but the interior of the berms had tall vegetation. Cells 1A and 1B are each equipped with one surface aerator. Both of the aerators were not operating. In addition, algae covered the surface of Cells 1A and 1B (see photograph #9).

The NPDES permits for each WWTF require a monthly "walk around and visual inspection of each lagoon cell". The permits require the inspections to be maintained in a logbook and to be retained as a record in accordance with the Standard Conditions of the permit. Neither Ms. Lopez-Wright or Mr. Carroll were aware if the inspections had been conducted, where the logbook was maintained, or if the inspections had been conducted.

I asked who was responsible for the day to day operation and maintenance of the treatment facilities and Ms. Lopez-Wright explained that the Tribe does not have an operator assigned and that the employee who normally mowed and conducted maintenance had left in September 2022. She explained that the Tribe has a contract with Meridian Analytical Labs in Wichita, KS, who collects the compliance monitoring samples. She explained that the analytical results are submitted to the Tribe and then she submits the Discharge Monitoring Reports to the EPA. She explained that there have been concerns from the EPA that her duties are not supposed to be dedicated to wastewater only. I asked if the Tribe planned to hire or assign someone to manage the treatment facilities and she explained that it is being considered. Previous EPA inspections have recommended that a certified operator be hired or obtained to oversee WWTF operations. In addition, previous inspections have identified the need for an Operation and Maintenance Manual to provide operating procedures for the facilities.

Flow Measurements:

On July 18, 2023, I contacted Stephanie Leo with Meridian Analytical Labs to determine how flow measurements were collected. Ms. Leo explained that their field staff are instructed to collect the effluent parameters listed in Table 1 of each permit. However, the flow measurements are to be provided by the Tribe (Attachment 9).

I observed the influent manhole of the Trading Post and Casino WWTF, and the flow meter or flow measuring device (see photograph #x) was inoperable. I was unable to locate a flow measurement device at Outfall 001 or at Cell #4. I observed the outfall, below Cell #4 where it discharges to the tributary to the Delaware River, and noted that the WWTF was discharging (see photograph #5) at the time of the inspection. The discharge was slow and at a very low flow rate, but it did not appear to in a controlled discharge manner as prescribed by the NPDES permit.

Mr. Carroll explained that he was unaware of any flow measurement devices for the influent or effluent of the Housing Site No. 1 WWTF. I observed the outfall, below Cell #3 where it discharges to the tributary to the Delaware River, and noted that the WWTF was discharging (see photograph #11) at the time of the inspection. The discharge was slow and at a very low flow rate, but it did not appear to in a controlled discharge manner as prescribed by the NPDES permit.

Housing Site No. 7

During the inspection, observations were conducted of the no discharge and non-NPDES wastewater treatment system at Housing Site No. 7. The reason for the observation was to determine if the lagoon was or had recently discharged to the receiving stream. I observed the lagoon system and noted that the lagoon berms had tall vegetation on the interior and exterior berms. I also noted that the western berms had large willow trees growing on the interior berms. The final cell (Cell #3) was completely dry, and the seal or bottom was visible (see photographs #13 and #14). The system was not discharging at the time of the inspection and there was no evidence of recent discharges.

SUMMARY AND CONCLUSION

The following findings were discussed with system personnel during the inspection and the exit briefing. A NOPF was provided to the Tribe on July 14, 2023 (Attachment 3) for the following:

- 1) The surface aerators of the primary cells, Cell #1 – Trading Post and Casino WWTF and Cells #1A and #1B of the Housing Site No. 1 WWTF, were not being operated.
- 2) Cells #1A and #1B of the Housing Site No. 1 WWTF were covered in algae.
- 3) Tall and woody vegetation was noted on the interior and exterior berms of each facility.
- 4) Cell #2 of the Trading Post and Casino WWTF displayed erosion damage from wind and

waves along the east berm along with damage from burrowing animals on the north berm.

- 5) Security gates at each WWTF were unlocked.
- 6) Each WWTF was discharging at the time of the inspection. *The WWTFs are designed to be operated as a controlled discharge with specific monitoring periods.*
- 7) Ensure records are maintained in shared locations and readily accessible. *Logbooks, analytical data, and compliance monitoring records were unavailable during the inspection.*
- 8) No operator in charge or point of contact for wastewater operations. *Ms. Lopez-Wright explained that she is not responsible for the day to day operations of the WWTFs. At the time of the inspection, there were no staff familiar with or responsible to oversee the WWTF operations. This is a repeat finding from the EPA's 2019 inspection.*

A written response has not been received from the Tribe following the NOPF being provided.

Following a review of the DMR data and after discussions with the contract laboratory additional findings include:

- 1) Measurements for the treatment facilities influent and effluent flows not being measured as required by the NPDES Permits.
- 2) The Tribe is not maintaining a logbook for each facility to document monthly inspections and/or is not conduct monthly inspections as required by the NPDES Permits.
- 3) Ensure the lagoon system for Housing Site No. 7 and other non-NPDES regulated treatment systems on the Reservation are maintained and operated as a no-discharge systems. Ensure these systems are maintained to ensure proper treatment is conducted.

LANTZ
TIPTON
Lantz Tipton
Physical Scientist
ECAD/WB

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JODI
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Jodi Bruno
Manager
ECAD/WB

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Attachments:

1. Water Compliance Inspection Report, Form 3560-3:
 - a. Trading Post and Casino WWTF Checklist (4 pages)
 - b. Housing Site Number 1 WWTF Checklist (4 pages)
2. Digital Photographs with Photo Log (16 pages)
3. Notice of Potential Findings (1 page)

4. Facility Satellite Map/Overview (2 pages)
5. Violation Summary
 - a. Trading Post and Casino WWTF (14 pages)
 - b. Housing Site Number 1 WWTF (7 pages)
6. NPDES permits:
 - a. Trading Post and Casino WWTF Permit (18 pages)
 - b. Housing Site Number 1 WWTF Permit (18 pages)
7. NPDES Permit Renewal Application submittal (1 page)
8. EPA Region 7 – Notices of Non-compliance (13 pages)
9. Meridian Analytical Labs – contact (3 pages)