



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region08

Ref: 8ENF-W-NW

SENT VIA EMAIL
DIGITAL READ RECEIPT REQUESTED

Heather Petersen
Business Manager
City of Mission
missionchamber@gwtc.net

Re: Inspection Report for the City of Mission Wastewater Treatment Facility, NPDES
Permit No. SDG589601

Dear Ms. Petersen:

On September 21, 2022, representatives of the U.S. Environmental Protection Agency inspected the City of Mission Wastewater Treatment Facility located in Mission, South Dakota to evaluate compliance with the facility's National Pollutant Discharge Elimination System permit for wastewater. The inspection was conducted under the authority of Section 308 of the Clean Water Act (Act). Enclosed is a report of the inspection.

Inspection findings are summarized within the enclosed inspection report in a table titled "Findings, Corrective Actions and Recommendations." Within **thirty (30) days** of receipt of this report, please provide the EPA and Rosebud Sioux Tribe Environmental Program with a summary of corrective actions taken to address each of the findings identified in the report and any information that may change the findings or content of the report. This summary should be sent to:

Stephanie Meyers
meyers.stephanie@epa.gov

James Begeman
James.Begeman@ihs.gov

Ivan Crow Eagle
ivan.croweagle@rst-nsn.gov

Please contact me at 303-312-6938 or meyers.stephanie@epa.gov if you have any questions regarding this letter or the enclosed report.

Sincerely,

**STEPHANIE
MEYERS**

Stephanie Meyers
NPDES and Wetlands Enforcement Section
Enforcement and Compliance Assurance Division

Digitally signed by
STEPHANIE MEYERS
Date: 2022.11.17 17:45:33
-07'00'

Enclosures:

- 1) City of Mission WWTF NPDES Inspection Report – Wastewater Treatment Facility
- 2) City of Mission WWTF Photo Log

cc: Ivan Crow Eagle, Environmental Director, Rosebud Sioux Tribe (via email)
James Begeman, Tribal Utility Consultant, Indian Health Service (via email)

NPDES Inspection Report – Wastewater Treatment Facility

National Database Information	
Inspection Date: September 21, 2022	Inspection Type: CEI - Wastewater Treatment Facility
Entry/Exit Time: 9:00 am / 12:00 pm	NPDES ID Number: SDG589601
NAICS Code: 221320	Inspection ID: 202209 SDG589601
Lead inspector and affiliation: Stephanie Meyers / EPA Region 8	
Inspector and affiliation: Akash Johnson / EPA Region 8	

Facility Location Information	
Site/Facility Name & Location: City of Mission 121 S Main Street Mission, South Dakota 57555	Email Report to: Heather Petersen City of Mission missionchamber@gwtc.net

Contact Information	
	Name(s)/Title
Facility Contacts:	Heather Petersen / Business Manager / City of Mission / present during opening conference
	Kenny Hespe / City Supervisor / City of Mission / present during the inspection
	Don Pettigrew / Operator / City of Mission / present during the opening conference
Indian Health Service Contacts	Orlana Schmidt / Environmental Health Specialist / Indian Health Service (IHS) / present during the inspection
	James Begeman / Tribal Utility Consultant / Indian Health Service (IHS) / present during the inspection
Person/Company meeting definition of “Operator”	City of Mission
Authorized Official(s) (Per NOI)	Heather Petersen / Business Manager / City of Mission

Permit Information		
Is the permit on site and available? Yes	Lagoon Category: Discharge	Monitoring Frequency: Semi-annually
Effective Date: January 1, 2016	December 31, 2020 (Administratively Continued)	Is the Facility under a compliance schedule? No
Is correct contact information indicated on ICIS? Yes	Indicate correct contact information: N/A	
Receiving Water(s): Unnamed tributary of Antelope Creek		
Discharge point location (longitude, latitude): There are two emergency discharge points located on the east side of cell 6 and on the south side of cell 5. There is one seasonal outfall at the northeast side of the constructed wetland. Lat. 43.310528° N, Long. -100.625417° W.		
Regulatory Inspector's source of information: Notice of Intent for the permit, ICIS database, facility records, Indian Health Service records, permit, facility representatives and facility observations.		

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
<u>Effluent/Receiving Waters</u>	<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
Stephanie Meyers	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202	11/7/2022
	303-312-6938	
Reviewer Name	Address/Phone Number	Date
Akash Johnson	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202	11/15/2022
	303-312-6067	
Supervisor Signature/Name	Address/Phone Number	Date
MICHAEL BOEGLIN Digitally signed by MICHAEL BOEGLIN Date: 2022.11.16 17:03:25 -07'00'	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202	11/16/2022
	Michael Boeglin 303-312-6250	

Inspection Narrative and Site Description

The inspection was conducted at the City of Mission Wastewater Treatment Facility (WWTF or facility) located on the Rosebud Reservation, in Mission, South Dakota 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 South Dakota. The inspection was announced several days prior to the inspection, to coordinate logistics for the inspection. On September 21, 2022, U.S. Environmental Protection Agency (EPA) inspectors Akash Johnson and Stephanie Meyers met with Heather Petersen, Don Pettigrew, and Kenny Hespe with the City of Mission (City) at City Hall. Representatives James Begeman and Orlana Schmidt from Indian Health Service (IHS) were also present during the inspection. The EPA inspectors presented their credentials and had an opening conference at City Hall to explain the purpose of the inspection. The inspectors proceeded to ask questions to the facility representatives to help the inspectors evaluate compliance with the facility's permit. Throughout the inspection, the inspectors noted their observations in a checklist. Photographs taken during the inspection are included in the attached photo log.

The City of Mission WWTF serves approximately 3,834 people, including the satellite collection system of the community of Antelope, three grocery/convenience stores, a laundromat, and two fast food restaurants. The WWTF was originally built in 1988 and additional capacity has been constructed throughout the years. The constructed wetland was added in 2003, and cells 1 and 2 were added in 2005. All wastewater from Mission and Antelope is pumped to cells 1 and 2 via one lift station in the collection system, located just west of the decommissioned lagoons in Antelope (lat 43.298735, long - 100.639852). Wastewater then flows to cells 3-6 in sequence, and then to an un-lined constructed wetland. The table below has the operating volume for the cells and wetland, as provided in the 2022 NOI. Wastewater can be discharged through two emergency outfalls if necessary, one located on the eastern side of cell 6 (Outfall 001) and one located the southern side of cell 5 (Outfall 002) On the northeastern side of the constructed wetland there is a seasonal outfall (Outfall 003). No flow measurement devices were installed at any of the outfalls. According to facility representatives, no discharge from the facility had occurred in approximately 20 years.

Cell ID	Area (acres)	Operating Volume (MG)
Cell 1	20	26.6
Cell 2	17.4	23.14
Cell 3	11.2	14.9
Cell 4	8.4	11.17
Cell 5	10.6	14.1
Cell 6	10.1	2.93
Wetland	4.5	2.93
Total	82.2	95.77

The average design flow of the facility is 0.268 million gallons per day (MGD) and the peak design flow is 0.537 MGD. The facility accepts hauled septic waste from rural homes. The septic hauler pumps the septic tanks from rural homes approximately less than ten days a year.

Staff responsible for wastewater operations comprise the individuals present for the inspection, plus supplemental labor crews, as needed. The collection system is cleaned approximately twice per year,

and the entire collection system was video inspected several years prior to the inspection as part of an IHS-funded project. Facility representative estimated approximately 95% of the population served were Tribal members. Residential users are billed \$15 per month for sewer. Commercial sewer billing is based on water use, starting at \$25 per month and increasing for water usage greater than 10,000 gallons per month.

Following the opening conference at City Hall, the inspectors visited the lagoon and lift station. Inspectors first observed cell 1 (photo 48), cell 2 (photo 49), and the splitter box (photo 50) that diverts wastewater equally to both cells. Inspectors then observed cells 3-6 (photo 51) and a splitter box (photo 52) located in the center where all four cells meet that is no longer in use. Wastewater was flowing into all six cells at the time of the inspection. After that, inspectors looked at the constructed wetland (photo 53) and observed the valve vault (photo 54) that controls wastewater discharge from the constructed wetland. Some water was present in the constructed wetland at the time of the inspection, but no water was flowing into the discharge valve vault and the discharge valve was closed, so no water was flowing out of the wetland. Inspectors then drove to the lift station, where they observed the wet well (photo 55), valve vault (photo 56), and control panel (photo 57). At the time of the inspection, there was approximately 1-2 feet of what appeared to be groundwater inside of the valve vault and the sump pump in the valve vault was not functional. Additionally, only one pump (West Pump; Pump 2) was functional at the lift station. Kenny Hespe also stated the lift station alarmed and had to be manually restarted after power outages, but there was no call-out alarm system to alert operators of power outages; they were informed of lift station alarm by nearby residents.

At the end of the inspection on September 21, 2022, the inspectors discussed preliminary findings with Mr. Hespe. On October 17, 2022, the EPA sent an email to Ms. Petersen with the preliminary findings from the inspection.

Findings, Corrective Actions and Recommendations

Finding #1: Weekly lagoon inspections were not being conducted or recorded.

Weekly lagoon inspections were not being conducted or recorded. The inspectors provided the facility representatives with a lagoon inspection report template form that the facility representatives could use to document the weekly lagoon inspections.

Permit requirement:

Part 4.3.1 of the Lagoon General Permit (Permit) states, “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:

- 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 facility's 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 3.2 and 5.4 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 (e.g., rills, cracks or other structural indications of erosion);
- 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.

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).”

Part 5.7 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 this permit, inspection records, notifications to the EPA per this permit, and DMRs, for a period of at least five years from the date of the sample, measurement, report, application or submittal. Records of monitoring required by this permit related to sludge use and disposal activities must be kept at least five years (or longer as required by 40 C.F.R. Part 503). This period may be extended by request of the Director at any time. Data collected on site, data used to prepare the DMR, copies of DMRs, a copy of this NPDES permit, and the notice of intent for permit coverage, must be maintained on site.”

Corrective Action:

Ensure that inspections are conducted on a weekly basis and documented in accordance with the permit. Ensure that inspection reports are kept in accordance with the recordkeeping requirements of the permit. Provide the EPA, the Rosebud Sioux Tribe Environmental Program (Tribe) and IHS with a description of the corrective actions taken to address this finding.

Finding #2: There was only one functional pump at the lift station.

A facility representative indicated a mop head had come through the collection system and into the lift station, which broke one of the pumps several months ago. At the time of the inspection, that pump had not been fixed and only one pump was functional.

Permit Requirement:

Part 6.5 of the 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."

Corrective Action:

Repair or replace the broken pump to ensure there are two functioning pumps at the lift stations. Submit to the EPA, the Tribe and IHS with a description of the corrective actions taken to address this finding.

Finding #3: There was groundwater in the lift station valve vault.

At the time of the inspection, there was approximately 1-2 feet of groundwater inside of the valve vault at the lift station and the sump pump in the valve vault was not functional.

Permit Requirement:

Part 6.5 of the 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."

Corrective Action:

Repair or pump out the lift station valve vault so it is accessible. Submit to the EPA, the Tribe and IHS with a description of the corrective actions taken to address this finding, as well as photos indicating the valve vault is no longer filled with groundwater.

Finding #4: Discharge Monitoring Reports were missing for monitoring period ending on June 30, 2022.

The Discharge Monitoring Reports (DMRs) for the monitoring period ending on June 30, 2022 had not been submitted for Outfalls 001, 002, and 003. These DMRs were due on July 28, 2022.

Permit Requirement:

Part 5.4.2 of the Permit states, "Effluent monitoring results obtained during the previous calendar quarter or semi-annual period shall be summarized and reported on a Discharge Monitoring Report (DMR) Form (EPA No. 3320-1), postmarked no later than the 28th day of the month following the completed reporting period. If no discharge occurs during the reporting period, "no discharge" shall be reported."

Corrective Action:

On October 26, 2022, Ms. Peterson submitted the DMRs for the monitoring period ending on June 30, 2022, for Outfalls 001, 002, and 003. No further action is required.