

U.S. EPA Region 8 NPDES Inspection Report

National Database Information	
Inspection Date: June 26, 2023	Inspection Type: Compliance Evaluation Inspection
Entry / Exit Time: Opening Conference: 08:30 AM / 10:30 AM Site Review: 13:20 PM / 13:55 PM	NPDES ID: SDG589102 (EPA Region 8 Lagoon General Permit SDG589###)
Major / Non-Major Facility: Non-Major	Program Sector(s): Publicly-Owned Treatment Works (POTW)
NAICS Code: 221320 (Sewage Treatment Facilities)	Inspection ID: 202306_SDG589102
Lead inspector and affiliation: Akash Johnson / U.S. EPA Region 8	
Inspector and affiliation: Stephanie Passarelli / U.S. EPA Region 8	

Facility Location Information	
Site/Facility Name & Location: Ridgeview WWTF Ridgeview, South Dakota 57652 45.089705, -100.792678	Email Report to: Leo (Earp) Fischer, Manager Mni Waste' Water Company tricity@lakotanetwork.com

Contact Information	
	Name(s)/Title
Facility Contacts	Leo (Earp) Fischer / Manager / Mni Waste' Water Company (present for opening conference only)
	Lacey Maher / Assistant Manager / Mni Waste' Water Company (present for opening conference only)
	Joe Garreau / Operator / Mni Waste' Water Company (present for entire inspection)
Indian Health Service Contacts	Jason Peterson / Acting Tribal Utility Consultant / Indian Health Service (not present)
Tribal Government Contacts	David Nelson / Environmental Director / Cheyenne River Sioux Tribe (not present)
Person/Company meeting definition of "Owner"	Cheyenne River Sioux Tribe
Person/Company meeting definition of "Operator"	Mni Waste' Water Company (aka Tri-County Water Association)
Responsible Official(s)	Leo (Earp) Fischer / Manager / Mni Waste' Water Company

Permit / Facility Information	
Permit on site and available: Yes	Permit Application Date: Did not evaluate
Effective Date: December 1, 2022	Expiration Date: March 31, 2027
Latitude: 45.089705	Longitude: -100.792678
Receiving Water(s): Did not evaluate; non-discharging lagoon	
Weather Conditions: Partly-cloudy, warm, no precipitation	
Inspector's source of information: Facility representatives and records, EPA records and databases, Google Maps aerial imagery, and inspection 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
Effluent/Receiving Waters	<u>Operations and Maintenance</u>	Combined Sewer Overflow
Flow Measurement	Sludge Handling/Disposal	Sanitary Sewer Overflow

Report Review and Signature		
Lead Inspector Name/Signature/Date	Draft Date	Contact Information
AKASH JOHNSON  Digitally signed by AKASH JOHNSON Date: 2023.09.24 15:02:26 -06'00'	September 6, 2023	U.S. EPA Region 8 Denver, Colorado johnson.akash@epa.gov (303) 312-6067
Reviewer Name	Review Date	Contact Information
Stephanie Passarelli	September 7, 2023	U.S. EPA Region 8 Denver, Colorado passarelli.stephanie@epa.gov (303) 312-6803
Management Reviewer Name/Signature/Date		Contact Information
EMILIO LLAMOZAS  Digitally signed by EMILIO LLAMOZAS Date: 2023.09.07 15:51:31 -06'00'		U.S. EPA Region 8 Denver, Colorado llamozas.emilio@epa.gov (303) 312-6407
Emilio Llamozas, NPDES and Wetlands Enforcement Section Supervisor		

Inspection Narrative and Facility Description

1.0 Introduction

On Monday, June 26, 2023, I, U.S. Environmental Protection Agency (EPA) inspector Akash Johnson, accompanied by EPA inspector Stephanie Passarelli (collectively, “we”), conducted a compliance evaluation inspection of the Ridgeview Wastewater Treatment Facility (WWTF; facility), located near the unincorporated community of Ridgeview, 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 for the respective portions of the inspection.

Ownership of facility components and the Tribal land status of parcels on which the facility is located were not evaluated during the inspection; however, according to facility representatives, the facility is owned by the Cheyenne River Sioux Tribe. The facility is operated by the Mni Waste’ Water Company (MWWC), a Tribally-chartered utility. The inspection was coordinated with the MWWC and 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. Photographs taken during the inspection are included in the enclosed photo log.

2.0 Background

At the time of the inspection, the facility was permitted under the “No Discharge Requirement,” or “NODIS,” conditions of the 2022-2027 EPA Region 8 Lagoon General Permit SDG589### (Permit). The facility was assigned facility-specific NPDES ID SDG589102.

Records pertaining to previous EPA NPDES inspections and other NPDES permitting and compliance records are maintained in EPA files. Records pertaining to facility engineering are primarily maintained by the MWWC and the IHS.

3.0 Inspection Narrative

The inspection began when we arrived at the MWWC offices in Eagle Butte at approximately 08:30 AM. We convened with Leo Fischer, Lacey Maher, and Joe Garreau in a conference room, presented our inspector credentials, and conducted an opening conference. During the opening conference, we asked questions pertaining to the design, operation, and CWA and NPDES compliance of multiple WWTFs operated by the MWWC, including the subject facility.

3.1 MWWC Wastewater Operations

The MWWC operates a regional water treatment plant and distribution system which provides water to multiple communities and users across the region. The MWWC also operates approximately fifteen WWTFs on the Reservation. At the time of the inspection, the MWWC employed ten operators and various managerial and administrative support staff. The majority of MWWC operations are dedicated to the provision of potable water, but all operators perform both water and wastewater duties as-needed.

Joe was the lead MWWC operator for wastewater issues and indicated he held a wastewater collections operator certification from the State of South Dakota. MWWC representatives indicated one additional

Inspection Narrative and Facility Description

operator was certified in wastewater collections, for a total of two operators certified in collections. No MWWC operators were certified in wastewater treatment.

Joe stated all WWTFs operated by the MWWC were inspected at least monthly and provided an example lagoon inspection form the MWWC had been using. We reviewed completed inspection forms for several WWTFs during the opening conference. The frequency of lagoon inspections and inspection forms used are discussed further in Findings 1 and 2. Joe also stated sewer mains for all MWWC-operated WWTFs were jetted annually and manholes were routinely spot-checked for backups.

No SCADA functionality was available at any of the lift stations operated by the MWWC, and operators were often not promptly and remotely alerted to power disruptions, pump failures, or other operational issues that arose at lift stations. MWWC representatives stated power disruptions affecting lift stations were common across the Reservation. Some lift stations had backup generators onsite, but MWWC representatives indicated, even where backup generators were available, lift station controls often did not properly reset when switching between power sources. Joe stated generators were regularly maintained with oil changes, antifreeze, temperature checks, etc.

MWWC customers and finances were briefly discussed during the opening conference. Leo indicated the MWWC was a 501(c)2 nonprofit organization. The MWWC was overseen by a board comprised of members from each of the six Tribal government districts on the Reservation. MWWC representatives indicated the majority of MWWC revenue was derived from user fees, with flat-rate residential water and wastewater fees of approximately \$11 and \$13, respectively, assessed monthly. We did not discuss non-residential users and fees in detail during the opening conference. MWWC representatives indicated they directly served approximately 1,600 water customers and approximately 1,000 wastewater customers. Some of MWWC's water customers are independent municipalities, such as incorporated towns, which may serve hundreds or thousands of additional individuals.

3.2 Facility Description

According to information provided by the MWWC, the facility receives only domestic wastewater and does not accept septage. The facility comprises a collection system, one lift station (located at approximately 45.086254, -100.799252), and a lagoon. Based on our inspection observations, information available in EPA records, and aerial imagery, the lagoon comprises two cells, with influent usually directed into Cell 1, the southern cell. A "starter cell," presumably intended to confine settleable solids, is constructed in the southwest corner of Cell 1. Cell 2, the northern cell, appeared to be generally dry during the inspection. According to information provided by Joe and a facility schematic maintained in EPA records (not fully-verified during the inspection), an outfall is located on the west side of Cell 2. In some aerial imagery, the area west of the lagoon that would receive any discharge from the facility appears to be a marshy, wetland-type, undeveloped area; however, during the inspection, this area appeared generally dry and comprised a cultivated field. MWWC representatives indicated they were not aware of any discharges from the facility over at least the past several years.

3.3 Inspection Observations

We began the onsite portion of the inspection at the lift station (Photograph 364). The lift station featured submersible pumps. Joe stated two pumps were installed, operational, and ran in an alternating fashion. Joe also stated the trash basket at this lift station was emptied approximately weekly. The sump pump in the valve vault did not appear to be working, as standing water several inches deep was observed in the valve vault between the lift station and the lagoon (Photograph 363). During the

Inspection Narrative and Facility Description

inspection, we were not able to discern the source of the water, but Joe surmised it could have been infiltrated groundwater.

We then drove to the lagoon. We intended to drive to the lagoon enclosure, but we observed muddy conditions and standing water from recent rain on the unpaved access road, presenting and potentially hazardous driving conditions. Instead of driving the access road, we parked near the intersection of the access road and Highway 212 and Stephanie and I walked south down the access road to lagoon enclosure. Joe was not able to walk to the enclosure with us, but provided us a key to unlock the enclosure gate. We decided not to enter the lagoon enclosure without Joe, but we did walk along the eastern fence line of the enclosure and observed the lagoon (Photograph 365 and 366).

The inspection concluded when we left the area at approximately 13:55 PM.

4.0 Post-Inspection Activities and Conclusion

After the inspection, I performed a cursory review of aerial imagery and EPA records.

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

Findings, Corrective Actions, and Recommendations

Finding 1:

The MWWC had not renewed written approval from the EPA to conduct inspections on a monthly basis instead of a weekly basis.

The most recent authorization granted to the MWWC by the EPA for monthly inspections was provided under a previous version of the EPA Region 8 Lagoon General Permit.

Permit Requirements:

Part 6.5.1 of the Permit states:

On at least a weekly basis, unless otherwise modified by written approval from EPA, the Permittee shall inspect its wastewater treatment facility. Permission for less frequent inspections must be requested in writing by the Permittee and may be granted on a case-by-case basis where appropriate (e.g. a lagoon located in a remote area where access is a problem during the winter and compliance issues are not present), at the discretion of EPA.

Corrective Action:

If the MWWC would like to request renewal of EPA approval to conduct monthly inspections instead of weekly inspections at this and other MWWC-operated WWTFs, submit a written request to the address shown below:

U.S. Environmental Protection Agency, Region 8
Wastewater Section (8WD – CWW)
1595 Wynkoop Street
Denver, CO 80202

Please also email a copy of the written request to EPA Region 8 Wastewater Section Supervisor, Michael Boeglin, at boeglin.michael@epa.gov, and cc johnson.akash@epa.gov and passarelli.stephanie@epa.gov.

If monthly inspections are not requested, in a response to this report, please provide a narrative affirming the MWWC intends to start conducting weekly inspections at this facility.

Finding 2:

Lagoon inspection forms did not capture all the inspection elements required by the Permit.

Permit Requirements:

Part 6.5 of the Permit (Inspection Requirements) states:

On at least a weekly basis, unless otherwise modified by written approval from EPA, the Permittee shall inspect its wastewater treatment facility. Permission for less frequent inspections must be requested in writing by the Permittee and may be granted on a case-by-case basis where appropriate (e.g. a lagoon located in a remote area where access is a problem during the winter and compliance issues are not present), at the discretion of EPA. The Permittee shall maintain a notebook/logbook recording all

Findings, Corrective Actions, and Recommendations

information obtained during the inspection using indelible ink pens (or inspection logs may be kept in electronic format in accordance with proper record-keeping procedures) and in sufficient detail so that decision logic may be traced back, once reviewed. At a minimum, the notebook/logbook shall include the following (see Appendix D of this Permit for an Example Lagoon Inspection Form):

- 6.5.1.1. Name of facility and permit number;
- 6.5.1.2. Date and time of the inspection;
- 6.5.1.3. Name of the inspector(s);
- 6.5.1.4. The facility's discharge status;
- 6.5.1.5. The flow rate of the discharge, if occurring;
- 6.5.1.6. Determine 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 Sections 3 and 5.4 of this Permit if not already done.);
- 6.5.1.7. If there is any leakage through the dikes;
- 6.5.1.8. If there are any animal burrows in the dike;
- 6.5.1.9. If there is any erosion of the dikes (e.g., rills, cracks or other structural indications of erosion);
- 6.5.1.10. If there are any rooted plants, including weeds or trees growing in the water;
- 6.5.1.11. If the vegetative growth on the dikes need mowing (i.e. no greater than 6" tall or any height that may interfere with monitoring, operation and maintenance of the system);
- 6.5.1.12. Visual observation for visible sheen, floating oil, floating solids and foam;
- 6.5.1.13. Visual observation to check for evidence of illicit septic dumping;
- 6.5.1.14. List the date scheduled for operation and maintenance procedures to be undertaken at the wastewater treatment facility;
- 6.5.1.15. Identification of operational and/or maintenance problems, and a determination of whether proper operation and maintenance procedures are being undertaken at the frequency necessary to maintain working operations and the overall treatment and collection systems of the wastewater treatment lagoon system;
- 6.5.1.16. Recommendations, as appropriate, to remedy identified problems;
- 6.5.1.17. A brief description of any actions taken with regard to problems identified;
- 6.5.1.18. Overall visual observations to identify potential concerns with the "health" of the lagoon system (e.g., water is cloudy, water coloration concerns (e.g. red, black, grey, dark blue-green and cloudy), etc.); and
- 6.5.1.19. Other information, problems identified, or observations, as appropriate.

The Permittee shall maintain the notebook/logbook 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(s) (see Appendix A for list of Tribes).

Problems identified during the inspection (including, but not limited to, those associated with this section of the Permit) shall be corrected at the time of inspection, if possible. If they cannot be corrected at the time of the inspection, the inspector must identify a corrective action to remedy the problem(s), as well as a timeline for completion of the remedy. Corrective actions to remedy problem(s) shall be in line with (and addressed through) proper operation and maintenance (Section 6.6 of this Permit.). All problems identified during inspections, as well as associated corrective actions and timelines, shall be documented in the inspection log.

Findings, Corrective Actions, and Recommendations

Corrective Action:

During the opening conference, we showed Leo, Lacey, and Joe the Example Lagoon Inspection Form included as Appendix D of the Permit, which includes all inspection elements required by the Permit, and they indicated MWWC operators would immediately begin using those forms to complete lagoon inspections.

In a response to this report, provide a copy of a recent inspection report completed for the facility using the Example Lagoon Inspection Form included as Appendix D of the Permit or other form documenting all elements required by Part 6.5 of the Permit.

Finding 3:

The sump pump in the valve vault did not appear to be working, as standing water several inches deep was observed in the valve vault between the lift station and the lagoon (Photograph 363).

During the inspection, we were not able to discern the source of the water.

Permit Requirements:

Part 6.6 of the Permit (Proper Operation and Maintenance) 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 this Permit...

Corrective Action:

Ensure the sump pump installed in the lift station valve vault is operational so that the valve vault remains dry.

In a response to this report, provide a narrative explaining how and when the sump pump was repaired or replaced, and provide a photograph of the dry valve vault.

Finding 4:

No SCADA functionality was available at any of the lift stations operated by the MWWC, and operators were often not promptly and remotely alerted to power disruptions, pump failures, or other operational issues that arose at lift stations.

MWWC representatives stated power disruptions affecting lift stations were common across the Reservation. Some lift stations had backup generators onsite, but MWWC representatives indicated, even where backup generators were available, lift station controls often did not properly reset when switching between power sources.

Findings, Corrective Actions, and Recommendations
Recommendation: The EPA recommends the MWWC evaluate the feasibility of installing SCADA functionality at lift stations. No response is requested pursuant to this recommendation.