

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: 11:35 AM / 12:40 PM	NPDES ID: SDG589120 (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_SDG589120
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: Elk Pasture WWTF Eagle Butte, South Dakota 57625 44.969928, -101.194774	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: 44.969928	Longitude: -101.194774
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 14:34:51 -06'00'	August 31, 2023	U.S. EPA Region 8 Denver, Colorado johnson.akash@epa.gov (303) 312-6067
Reviewer Name	Review Date	Contact Information
Stephanie Passarelli	September 1, 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 15:12:33 -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 Elk Pasture Wastewater Treatment Facility (WWTF; facility), located near Eagle Butte, South Dakota, on 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 SDG589120.

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

Inspection Narrative and Facility Description

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 on the Notice of Intent (NOI) for Permit coverage, the facility receives only domestic wastewater and does not accept septage. The facility comprises a collection system, three lift stations, and a lagoon. Approximately 1 year prior to the inspection, the facility began receiving wastewater that previously went to the Habitat for Humanity WWTF (NPDES ID: SDG589103). MWWC representatives indicated a project is planned to eventually redirect wastewater from the Fox Ridge WWTF (NPDES ID: SDG589115) to this facility as well.

The three lift stations are located within the collection system and are referred to by MWWC personnel as the "IHS Lift Station," the "Badger Park Lift Station," and the "Badger Park II/Gas Station/Dairy Queen Lift Station." During the inspection, we did not access and observe the lagoon close-up, discussed further in Section 3.3 and Finding 3. Based on our limited inspection observations, information available in EPA records, and information provided by MWWC representatives, the lagoon comprises two cells, influent can be directed into either cell, and each cell features an outfall structure. I am not clear as to whether wastewater can be transferred between the two cells. According to a lagoon schematic maintained in EPA records, included as Enclosure 3, a submerged baffle "starter cell" is constructed within the footprint of Cell 1 around the inlet area (northwest corner of the cell); however, we were not able to verify the existence of this starter cell during this inspection. During the inspection, Joe stated wastewater is usually directed into Cell 1, but it was recently redirected into Cell 2. Joe also stated the outfalls are inspected during routine lagoon inspections, and a trickling discharge through the outfall from Cell 1 was identified by the MWWC through routine inspections last year and was ceased by adjusting a valve. Aside from this incident, MWWC representatives indicated they were not aware of any discharges from the facility over at least the past several years.

Inspection Narrative and Facility Description

3.3 Inspection Observations

We began the onsite portion of the inspection by intending to inspect the lagoon, but Joe advised against utilizing the unpaved access road to the facility, which was sloped, due to muddy and potentially hazardous driving conditions resulting from recent rain, so we did not access and observe the facility close-up. Instead, we observed the facility from an elevated vantage point along County Road 19A approximately a quarter mile from the lagoon, upgradient of where the road sloped down a hillside towards the lagoon. We were able to view the lagoon cells from afar but were not able to observe any details (Photographs 353-354). Joe indicated, during winter months, when snow and ice presented hazardous driving conditions on the access road, facility inspections comprised observations of the lagoon from this location and checking accessible manholes to verify wastewater is flowing through the collection system and into the lagoon, as intended.

We then proceeded to visit the three lift stations, beginning with the IHS Lift Station. The IHS Lift Station featured an influent grinder in the wet well (Photograph 355), two non-submersible pumps in the dry well (Photograph 356), and an onsite generator. The grinder at this lift station was run continuously to treat relatively high flows. Joe stated the pumps were operated in an alternating configuration, pump hours were displayed on a rotary dial in the bottom of the dry-well, and Joe accessed and inspected the dry-well at least once per month.

We then proceeded to the Badger Park lift station (Photograph 359), which also featured an influent grinder in the wet well (Photograph 358), two non-submersible pumps in the dry well (Photograph 357), and an onsite generator. The grinder at this lift station ran at timed intervals.

We then proceeded to the Badger Park II/Gas Station/Dairy Queen Lift Station, which also featured an influent grinder in the wet well (Photograph 361), two non-submersible pumps in the dry well (Photograph 360), and an onsite generator. The grinder at this lift station also ran at timed intervals.

The inspection concluded when we left the area at approximately 11:00.

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:

We were not able to access and observe operating conditions of the lagoon.

We intended to inspect the lagoon, but Joe advised against utilizing the unpaved access road to the facility, which was sloped, due to muddy and potentially hazardous driving conditions resulting from recent rain, so we did not access and observe the facility close-up. Instead, we observed the facility from an elevated vantage point along County Road 19A approximately a quarter mile from the lagoon, upgradient of where the road sloped down a hillside towards the lagoon. We were able to view the lagoon cells from afar but were not able to observe any details (Photographs 353-354).

Permit Requirements:

Part 5.12 of the Permit (Inspection and Entry) states:

The Permittee shall allow EPA or the Tribe(s), or authorized representative (including an authorized contractor acting as a representative of EPA) upon presentation of credentials and other documents as may be required by law, to:

- 5.12.1. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;
- 5.12.2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- 5.12.3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and,
- 5.12.4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

Corrective Action:

In a response to this report, provide photographs of the lagoon showing current operating conditions and indicate the date the photographs were taken. Photographs should include:

- The interior of the influent manhole
- Each lagoon cell, including the starter cell, if applicable
- Each outfall

Findings, Corrective Actions, and Recommendations

Finding 4:

The access road to the facility, which sloped down a hillside, presented hazardous driving conditions when muddy or icy, and the lagoon was not always accessible to MWWC.

Joe indicated, during winter months, when snow and ice presented hazardous driving conditions on the access road, facility inspections comprised observations of the lagoon from afar and checking accessible manholes to verify wastewater is flowing through the collection system and into the lagoon, as intended.

Recommendation:

To ensure operator safety and reliable access to the lagoon, consider an improved or alternative all-weather access road to the facility that minimizes hazardous driving conditions. No response is requested pursuant to this recommendation.

Finding 5:

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.

Recommendation:

The EPA recommends the MWWC evaluate the feasibility of installing SCADA functionality at lift stations. No response is requested pursuant to this recommendation.