U.S. EPA Region 8 NPDES Desk Audit Report

National Database Information	
Inspection Date: December 10, 2021	Evaluation Type: Desk Audit
NPDES ID Number: MT0030562	Type of Facility: Water Treatment Plant; Minor
Permit Issuing Authority: EPA	Name of receiving water(s): Cut Bank Creek
Permit Effective Date: June 1, 2017	Permit Expiration Date: December 31, 2021
Latitude: 48.642222° N	Longitude: -112.344722° W
Evaluator and affiliation: Lisa-kay Prideaux – U.S. EPA	

Facility Location Information (*Name/Location/ Mailing Address*)	
Site/Facility Name & Location: **Cut Bank Water Treatment Plant** **82 Pendergrass Road** **Cut Bank, Montana 59427**	Desk Audit Recipient Mailing Address: **Mayor Kim Winchell** **221 West Main Street** **Cut Bank, Montana 59427**

Contact Information	
	Name(s)/Title
Facility Contact(s):	John Damberger – Water Plant Foreman

Desk Audit Review and Signature		
Drafter Name	Date	Address/Phone Number
Lisa-kay Prideaux	**12.22.2021**	**U.S. EPA Region 8** **8MO** **10 West 15th Street** **Helena, Montana 59626** **406-457-5022**
Supervisor Signature/Name		Address/Phone Number
MICHAEL BOEGLIN Digitally signed by MICHAEL BOEGLIN Date: 2021.12.29 15:26:27 -07'00'		**U.S. EPA Region 8** **8ENF-W-NW** **1595 Wynkoop Street** **Denver, Colorado 80202** **303-312-6250**
NPDES and Wetlands Enforcement Section Chief		

Evaluation Narrative

Introduction and Background

The City of Cut Bank's Water Treatment Plant (facility) is located near the border of the Blackfeet Reservation just across Cut Bank Creek from the City of Cut Bank. The facility is currently under an individual NPDES permit, which expired on December 31, 2021, and is administratively extended until a new permit is issued. The City submitted a notice of intent (NOI) for coverage under the Drinking Water General Permit on November 29, 2021.

Facility Overview

The treatment plant was originally constructed in the 1950's with the latest upgrade in 2000. Raw water is obtained from Cut Bank Creek via nine perforated intake pipes that are buried in coarse rock at a depth of 3-6 feet down in the creek bed. Water may be stored in a reservoir tank (36-million-gallon capacity) until treatment but is typically pumped directly from the creek to the facility. Prior to 2000, the single intake pipe was located on the creek bottom and would frequently freeze in the winter months; therefore, the facility was not able to draw water for treatment and distribution. In 2000, the facility upgraded to multiple subsurface pipes. With the additional pipes under the creek bottom, the chance of freezing was minimalized; however not eliminated. The facility would like to use water stored in their reservoir tank during times when the creek is freezing. The facility would also like to siphon the surface water off the treatment ponds and store it in the reservoir tank for re-use. The reservoir tank would also need the addition of aeration to the current sonar system (to break up algae) prior to being able to re-treat the water through the facility.

The treatment process includes a flocculation tank using alum, settling (in a settling basin), course and fine filtration units, and storage. Chlorination is added at two points in the treatment process; pre-chlorination occurs between settling and filtration, and post-chlorination (to drinking water standards), occurs as finished water enters the clear well prior to distribution. Up to 1.5 million gallons per day (mgd) of treated water is produced. The filters are backwashed with finished water to remove the flocculation residue daily in the summer months, and once every 3-4 days during the winter. Backwash water drains to a two-cell, infiltration-percolation (IP) system east of the facility. Sludge from the settling basin and backwash effluent are drained to one cell; discharge is switched to the other cell when the first cell reaches capacity. The treatment cells each have a discharge pipe that join and discharge through a v-notch weir prior to the outfall (001). Due to infiltration and evaporation of the ponds, the facility has not discharged since March 2007 and foresees a discharge as an emergency only. Sludge is cleaned from the ponds approximately every 3-5 years and is disposed of in a drying bed at the City's wastewater treatment plant.

Desk Audit Methods

The EPA contacted John Damberger on May 17, 2021, indicating a desk audit would take place, explained the process, records to be requested, timeline for submittals and review, and potential closing conference date. A follow-up email was sent with the list of records requested and a deadline of May 28, 2021 indicated for submittal. Requested information was not submitted. EPA issued a 308-information request letter on September 29, 2021, with a submittal due date of October 29, 2021. At the request of the city, the deadline for submittal was extended until November 12, 2021. All information was submitted by November 19, 2021. A closing conference occurred with John Damberger on December 10, 2021.

Data Review

The following records were requested from the facility for review:

1.) Permit
   a. Copy of the National Pollutant Discharge Elimination System (NPDES) Permit #MT0030562
   b. Copy of the Statement of Basis for NPDES Permit #MT0030562
2.) Discharge monitoring reports (DMRs) (January 1, 2021 through November 30, 2021)
   a. Original laboratory analysis forms

b. In-house analysis forms (including flow, pH, DO)
c. Calculation sheets

3.) Equipment records (January 1, 2021 through November 30, 2021)
   a. Calibration records (flow meter, pH meter, DO meter)
   b. Maintenance records for sampling equipment

4.) Treatment plant records
   a. Operations and Maintenance manual (O&M) (Front page, page with latest update identified if not first page, and table of contents)
   b. Standard Operating Procedures (SOPs) (for operations, sampling, maintenance list only)
   c. Schedule for routine O&M activities
   d. Daily logbook of O&M activities (January 1, 2021 through November 30, 2021)
   e. Noncompliance reports

Data Review Observations

The facility has effluent limits for TSS, TRC, pH, and Total Recoverable Aluminum. The facility has weekly self-monitoring for effluent flow, pH, TRC, TSS and total recoverable Aluminum. The facility has submitted monthly pH values from the discharge to the treatment cells but has not discharged from the cells since prior to January 2018.

Part 2.4 of NPDES Permit #MT0030562 states if the facility is discharging from Outfall 001, effluent monitoring results obtained must be submitted on a DMR no later than the 28th of the month following the reporting period; however, it also states if **no discharge occurs** during the reporting period, no reporting is required. Even though the facility is obtaining pH samples, because they are not from a discharge at the outfall location, DMRs are not required to be submitted; however, if the facility discharges and samples are collected at the outfall, DMRs must be submitted by the deadline required.

There are no special conditions, compliance schedules or narrative conditions within the current permit. The facility has an operations and maintenance program to include a manual with the 2000 upgrades and as-built engineering drawings. The facility also has a maintenance schedule in place for system cleanings and mechanical maintenance, which are documented and retained.

The facility currently has three (3) certified operators: John Damberger-Water Plant Forman, Vince Burley-Water Plant Operator, and Doug Dezort-Water Plant Operator.

Findings, Corrective Actions and Recommendations

Finding #1:
Effluent samples were not representative of the volume and nature of the effluent discharged. Specifically, the pH samples collected and reported for the period of records reviewed by EPA were not collected from the effluent discharge at Outfall 001. The pH samples collected were taken from the discharge to the treatment cells, not from the treatment cells to the receiving stream. The pH samples collected would be considered a sample of operational control for internal compliance only.

Permit Requirement:

- Part 3.1 of the NPDES permit MT0030562 requires the facility to comply with all conditions of the permit.
- Part 1.3.2 and 2.1 of NPDES permit MT0030562 requires all samples taken in compliance with monitoring requirements must be representative of the volume and nature of the discharge.

Corrective Action:
Ensure all samples collected for the purposes of reporting compliance are obtained from the discharge occurring at the designated outfall location. In response to this report, please provide EPA with a summary of corrective actions taken to address this finding.

Recommendation #1:
The facility was late submitting six (6) Discharge Monitoring Reports (DMR) since January 1, 2021. Specifically, for the following monitoring periods, the facility submitted DMRs past the required submittal deadline:

DMR Monitoring period & location	DMR due date	DMR Submitted	Days late
March 31, 2021 (001-A)	April 28, 2021	April 29, 2021	1 day
May 31, 2021 (001-A)	June 28, 2021	October 7, 2021	101 days
June 30, 2021 (001-A)	July 28, 2021	October 7, 2021	71 days
July 31, 2021 (001-A)	August 28, 2021	October 7, 2021	40 days
August 31, 2021 (001-A)	September 28, 2021	October 7, 2021	9 days
October 31, 2021 (001-A)	November 28, 2021	December 1, 2021	3 days

Permit requirements:

- Part 2.4 of NPDES Permit #MT0030562 states if the facility is discharging from Outfall 001, effluent monitoring results obtained must be submitted on a DMR no later than the 28th of the month following the reporting period. If **no discharge occurs** during the reporting period, no reporting is required.
- 40 C.F.R. §123.45(a)(2)(i) states, a violation must be classified as "Category I Noncompliance" if certain criteria are met. Applicable criteria include reporting violations; these include failure to submit a complete, required report (e.g., discharge monitoring report) within 30 days after the date required.
- Reporting of monitoring results is required to be completed, and all DMRs are required to be submitted as required in Title 40 of the Code of Federal Regulations, Part 122.41(l)(4)(i). *Please note: the EPA considers the submittal of late, missing, or incomplete DMRs to be reportable noncompliance (RNC). Although RNC is not as severe as significant noncompliance (SNC), RNC is considered a violation or noncompliance event that may represent operation and maintenance problems, design inadequacies, improper treatment, or operations mismanagement.*

Recommendation:
Per your current permit, if a discharge does not occur, submittal of a DMR is not required. If a discharge occurs and samples are collected and analyzed, a DMR must be submitted by the 28th of the month following the reporting period.