REGION 8
DENVER, CO 80202

Ref: 8 Montana

SENT VIA EMAIL
DIGITAL READ RECEIPT REQUESTED

Ashley Walker
City of Polson
106 1st Street East
Polson, Montana 59860
Wss2@cityofpolson.com

Re: Inspection Report for City of Polson/Water Resource Recovery Facility, NPDES Permit No. MT0020599

Dear Ashley Walker:

On November 14, 2023, representatives of the U.S. Environmental Protection Agency and Confederated Salish & Kootenai Tribes inspected the City of Polson's Water Resource Recovery Facility in Polson, Montana, to evaluate compliance with the site's National Pollutant Discharge Elimination System permit for wastewater discharge. The inspection was conducted under the authority of Section 308 of the Clean Water 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 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:

Lisa-kay Prideaux
U.S. EPA Region 8 – Montana Office
Prideaux.lisakay@epa.gov

Chauncey Means
CSKT Acting Environmental Director
Chauncey.means@cskt.org

Please contact me at 406-457-5022 or Prideaux.Lisakay@epa.gov if you have any questions regarding this letter or the enclosed report.

Sincerely,

Prideaux, LisaKay

Digitally signed by Prideaux, LisaKay
Date: 2024.02.27 12:21:55 -07'00'

Lisa-kay Prideaux
NPDES and Wetlands Enforcement Section
Enforcement and Compliance Assurance Division

Enclosures:

NPDES Inspection Report – POTW
Photo Log

cc (electronic):

The Honorable Mike Dolson, Chairman, Confederated Salish and Kootenai Tribes
Chauncey Means, Acting Environmental Director, Confederated Salish and Kootenai Tribes
Evan Smith, Water Quality Regulatory Specialist, Confederated Salish and Kootenai Tribes
Brandon Parker, Water and Sewer Operator, City of Polson

NPDES Stormwater Inspection Report

National Database Information	
Inspection Date: **November 14, 2023**	Inspection Type: **CEI, Minor POTW**
Entry/Exit Time: **13:00 / 16:30**	NPDES ID Number: **MT0020559**
NAICS Code: **221320 (Sewage Treatment Facilities)**	Inspection ID: **202311_MT0020559**
Lead inspector and affiliation: **Lisa-kay Prideaux, U.S. EPA Region 8, Montana Office**	
Inspector and affiliation: **Evan Smith, Confederated Salish and Kootenai Tribe**	

Facility Location Information (*Name/Location/ Mailing Address*)	
Site/Facility Name & Location: **Polson Water Resource Recovery Facility** 36010 Kerr Dam Road Polson, Montana 59860	E-mail Report to: **Ashley Walker** 106 1st Street East Polson, Montana 59860 Wss2@cityofpolson.com

Contact Information	
	Name(s)/Title
Facility Contacts:	**Brandon Parker, Operator (present)**
	Ashley Walker, Water and Sewer Superintendent (present)
Person/Company meeting definition of "Operator" per the Permit	**Ashley Walker – Water and Sewer Superintendent**
Authorized Official(s)	**Ashley Walker – Water and Sewer Superintendent**

Permit Information	
Is the permit on site and available? **Yes**	
Effective Date: **September 1, 2019**	Expiration Date: **August 31, 2024**
Facility Latitude: **47.68650°N**	Facility Longitude: **-114.17860°W**
Receiving Water(s): **Flathead River**	
Regulatory Inspector's source of information: **Permit, Statement of basis, previous inspection, Integrated Compliance Information Systems (ICIS), Enforcement & Compliance History Online (ECHO), facility representatives and field observations.**	

Areas Evaluated During Inspection		
Permit	***Effluent/Receiving Waters***	*Compliance Schedule*
Records/Reports	***Flow Measurement***	*Pollution Prevention*
Facility Site Review	***Self-Monitoring Program***	***Laboratory***

Report Review and Signature		
Drafter: Lisa-kay Prideaux	Address/Phone Number	Date
Prideaux, LisaKay Digitally signed by Prideaux, LisaKay Date: 2024.02.27 12:22:26 -07'00'	**U.S. EPA Region 8, Montana Operations Office** **10 West 15th Street, Suite 3200** **Helena, Montana 59626** **406-457-5022**	2/27/2024
Reviewer Name: Brit Rustad	Address/Phone Number	Date
Brit Rustad	**U.S. EPA Region 8** **1595 Wynkoop Street** **8ENF-W-NW** **Denver, Colorado 80202** **303-312-6885**	2/16/2024
Management Signature/Name	Address/Phone Number	Date
EMILIO LLAMOZAS Digitally signed by EMILIO LLAMOZAS Date: 2024.02.27 12:13:32 -07'00'	**U.S. EPA Region 8** **1595 Wynkoop Street** **8ENF-W-NW** **Denver, Colorado 80202**	2/26/2024
Emilio Llamozas	**303-312-6407**	

Inspection Narrative and Site Description

Entry/Introduction

On Tuesday, November 14, 2023, I, U.S. Environmental Protection Agency (EPA) inspector Lisa-kay Prideaux, along with Confederated Salish and Kootenai Tribal inspector Evan Smith, conducted a compliance evaluation inspection of the Polson Water Resource Reclamation Facility (WRRF; the facility), located in Polson, Montana, to evaluate compliance with the facility's National Pollutant Discharge Elimination System (NPDES) Permit No. MT0020599 (Permit). The facility was owned and operated by the City of Polson (City). The inspection was coordinated with the City several weeks in advance. Throughout the inspection, I noted observations in bound notebooks and checklists which reflected conditions of the Permit. Photographs taken during the inspection are included in the attached photo log and are maintained by EPA in accordance with the Quality Assurance Field Activities Procedure and Standard Operating Procedure.

The inspection commenced at approximately 13:00, when we arrived at the facility and met with facility representatives Ashley Walker, City Water and Sewer Superintendent, and Brandon Parker, City Water and Sewer Operator. The group convened around a conference table in the control building where I presented my credentials and outlined the intended format and scope of the inspection. We then began the discussion portion of the inspection, where Facility representatives provided an overview of the newly constructed WRRF, plans for abandoning the lagoon, information on the

facility's collection system, and a description of the new WRRF treatment process.

The WRRF was originally constructed as a three-cell lagoon system in 1981 and had a design flow of 0.650 million gallons per day (mgd). A fourth polishing cell was added later. In 2017, to address ongoing noncompliance with effluent limitations, the City began upgrading the WRRF to a mechanical sequencing batch reactors (SBR) activated sludge plant with plans to ultimately decommission the entire lagoon system. Construction of the SBR plant was completed in the spring of 2019 and the City began discharging from the new facility on April 25, 2019. The mechanical WRRF has a design flow of 0.92 mgd. The upgraded WRRF includes dual rotary drum fine screens and vortex grit removal facilities, SBR tanks for biological treatment and solids separation, post-equalization effluent capacity, ultraviolet (UV) disinfection, aerobic sludge digestion and sludge dewatering and drying facilities. The treated effluent discharge to the Flathead River uses the same outfall (Outfall 001) as the one previously used for the lagoon system. From April 25, 2019, until early June 2019, the City discharged from both the lagoon and SBR plant and conducted effluent monitoring of the combined effluent stream. The pipe for Outfall 001 extends into the Flathead River approximately 500 feet from the shoreline and 10 feet under the water's surface. The WRRF utilizes natural biological processes for treatment of the wastewater and UV light is utilized for disinfection prior to discharge. The newly upgraded WRRF includes the ability to inject chlorine in the influent as well as spray the surface scum in the SBR tanks for the purposes of filamentous bacteria control. No other chemicals are used in the treatment process.

The City operates eleven lift stations in the collection system, with three primary lift stations conveying all flow to the WRRF. Mr. Walker stated all lift stations are checked daily. The collection system is comprised mostly (approximately 70%) of PVC piping, with very little Asbestos/cement piping left, and the rest comprised of clay/tile. Representatives indicated the original infrastructure is over 100 years old and the portions of clay tile line are susceptible to collapse and root blockages, and they are continually evaluating and replacing piping as needed. Representatives indicated approximately half of the collection system is cleaned each year.

<u>Records Review</u>

The following records were requested for review in an email dated November 08, 2023, prior to the inspection. Records were made available to review on-site, as well as copies made with a review of the records off-site on December 28, 2023, December 29, 2023, and January 09, 2024.

- Copy of NPDES permit #MT0020599
- Effluent flow values for monitoring periods ending July 1, 2023, through September 30, 2023
  - Evaluated records for required reporting values, and percent removal calculations for biochemical oxygen demand and total suspended solids.
- In-house results for pH for monitoring periods ending July 1, 2023, through September 30, 2023
  - Evaluated records for reported minimum and maximum concentration values.
- In-house results for *Escherichia coli* (*E. coli*) bacteria for monitoring periods ending July 1, 2023, through September 30, 2023
  - Evaluated records for reported geometric mean values.
- Laboratory analytical results for biochemical oxygen demand, total suspended solids, nitrate + nitrite, total ammonia, total kjeldahl nitrogen, and total phosphorus for monitoring periods ending July 1, 2023, through September 30, 2023

- Evaluated records for reported concentration values.
- Chain of Custody and Laboratory Analytical Reports for monitoring periods ending July 1, 2023, through September 30, 2023
  - Evaluated records for proper sample relinquish methods, analytical methods, and required reporting limits.
- Records of Laboratory Equipment and Controls, including records of equipment calibration
- Quality Assurance Records for Process Control Monitoring
- Sanitary sewer overflow (SSO) events
- Historic effluent violations from September 1, 2019, to present (current permit cycle)

Facility Site Evaluation

After the facility records review, we walked through the wastewater treatment process. We started with the on-site lift station (photo 780) bringing influent into the headworks building. Mr. Parker stated the influent is measured at the three primary off-site lift stations where in-line Mag Meters are installed and connected to the facility SCADA system for display. The headworks building included two 3-mm flow regulated vertical bar screens (photo 781), with an emergency bypass channel and manual bar screen, and a cyclone grit removal system (photo 784). All water from the screening and grit washers flows back to the influent stream prior to the bar screens. All remaining materials are transferred to the Lake County Landfill; screening material weekly, grit material quarterly (photo 782). All influent then flows into a splitter box passing by the automatic composite sampler (kept at 4°C) (photo 783) which is programed to collect samples based on flow. From the splitter box, wastewater is directed to one of two SBR trains (east and west); each train is identical (photos 785 & 786). Each train cycles through filling, aeration and mixing occuring at specific intervals, and settling prior to being emptied via gravity into an equalization basin and starting the process over. The facility has static aeration as well as jet aeration in each cell. Supernatant is removed and pumped to the aerobic digesters as well as any scum decanted off the surface. Treated waste from the equalization basin flows to the UV building. Flow through the UV units is metered to ensure enough contact time. The facility has two UV units with 4 banks of 8 bulbs each (photo 787); the units are self-cleaning and is a redundant system with each unit operating for six hours prior to switching. After UV treatment, treated wastewater flows past an in-line Mag Meter effluent flow meter and out the outfall pipe to the Flathead River. The wasted supernatant goes to one of two aerobic digesters prior to being pumped to a wastewater dewatering bag located in the old drying beds (photo 788). The facility has five drying beds with three dewatering bags full at the time of the inspection. Mr. Parker stated they keep one drying bed open for emergencies and will use up to four bags at a time depending on time of year. Dewatered leachate is captured and piped back to the headworks influent stream. We did not observe any off-site lift stations during the inspection.

Closing Conference

A closing conference was held on-site with Mr. Parker and Mr. Walker, during which I discussed preliminary findings, as well as the process for the inspection report. The inspection concluded at approximately 16:30.

Findings, Corrective Actions and Recommendations

Finding #1: Failure to collect required daily pH samples.
Specifically, the facility did not collect daily pH samples on July 4, 2023, or September 4, 2023.

Permit requirement:
Part 1.5 Table 3, in conjunction with footnote /h/, of the NPDES permit requires pH samples to be collected at the frequency of daily, Monday through Friday.

Corrective Action:
The facility is required to collect and analyze pollutants outlined in Part 1.5 of NPDES permit MT0020559 at the required frequency. In the response to this report, provide EPA with a description of the corrective actions taken to address this finding.

Finding #2: Failure to properly preserve samples.
The facility is not properly preserving biochemical oxygen demand, total suspended solids, nitrate + nitrite, total ammonia, total kjeldahl nitrogen, and total phosphorus samples. Specifically, the laboratory failed to record the temperature at which the sample was received for samples collected on the following dates: August 9, 2023, August 23, 2023, August 30, 2023, September 6, 2023, and September 27, 2023.

Permit requirement:
Monitoring and reporting are required to be completed per Part 2.2 of the NPDES permit MT0020559: Monitoring must be conducted according to test procedures approved under 40 C.F.R. Part 136, unless other test procedures have been specified in this Permit. Without the temperature received, it is unclear if the sample meets sample preservation requirements as described in 40 C.F.R. Part 136.

Corrective Action:
Ensure the laboratory records the temperature of the biochemical oxygen demand, total suspended solids, nitrate + nitrite, total ammonia, total kjeldahl nitrogen, and total phosphorus samples received, and the facility retains a copy to verify preservation temperatures are being achieved. In the response to this report, provide EPA with a description of the corrective actions taken to address this finding.