

NPDES Inspection Report – Water Treatment Plant

National Database Information	
Inspection Date: June 29, 2021	Inspection Type: CEI – Minor
Entry / Exit Time: 8:30 am / 2:00 pm	NPDES ID Number: WYDW0001I
NAICS Code: 221310	Inspection ID: 202106_WYDW0001I
Lead inspector and affiliation: Jessica Duggan / U.S. EPA Region 8	
Inspector and affiliation: Kristin Ratajczak / U.S. EPA Region 8	

Facility Location Information	
Site/Facility Name & Location: Fort Washakie Water Treatment Plant 21 Engavo Lane Fort Washakie, Wyoming 82514 43.00591 N, -108.944385 W	Email Report to: Erin Martin, Utility Director Shoshone Utility Organization emartin@easternshoshone.org

Contact Information	
	Name(s)/Title
Facility Contacts:	Erin Martin / Utility Director / Shoshone Utility Organization (present)
Tribal Environmental Contacts	Eastern Shoshone Tribe (not present)
Indian Health Service (IHS) Contacts	Quentin Allen / Engineer Consultant / IHS (not present)
Person/Company meeting definition of “Owner”	Eastern Shoshone Tribe
Person/Company meeting definition of “Operator”	Shoshone Utility Organization
Responsible Official(s)	Erin Martin / Utility Director / Shoshone Utility Organization (present)

Permit / Facility Information	
Is the permit on site and available? Yes	Individual or General Permit: General
Permit Effective Date: October 17, 2019	Permit Expiration Date: June 30, 2024
Lagoon Category: Frequent Discharge (daily)	Monitoring Frequency: Varies; Monthly DMR reporting
Discharge point location (latitude, longitude): Outfall 001 = 43.003333 N, -108.943611 W	
Receiving Water(s): Irrigation ditch that flows to the Lower South Fork Little Wind River	
Inspector’s source of information: EPA records, Permit, Authorization Letter, EPA’s Integrated Compliance Information System (ICIS), aerial imagery, facility representatives, facility records, and site review.	

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>	<u>Laboratory</u>	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	Date	Address/Phone Number
Jessica Duggan	9/13/2021	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202 303-312-6195
Reviewer Name	Date	Address/Phone Number
Kristin Ratajczak	9/13/2021	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202 303-312-6310
Management Reviewer Signature	Date	Address/Phone Number
MICHAEL BOEGLIN  Digitally signed by MICHAEL BOEGLIN Date: 2021.09.14 22:14:49 -06'00'	9/14/2021	U.S. EPA Region 8 1595 Wynkoop Street 8ENF-W-NW Denver, Colorado 80202 303-312-6250
Michael Boeglin, NPDES and Wetlands Enforcement Section Chief		

Inspection Narrative and Site Description

Introduction

On Tuesday, June 29, 2021, U.S. Environmental Protection Agency (EPA) inspectors Jessica Duggan and Kristin Ratajczak (jointly referred to as inspectors), conducted a compliance evaluation inspection at the Fort Washakie Water Treatment Plant (facility, WTP, or lagoon), located approximately 4 miles west of Fort Washakie, Wyoming, on the Wind River Reservation. The purpose of the inspection was to evaluate compliance with the facility's National Pollutant Discharge Elimination System (NPDES) permit. The EPA is responsible for implementing the NPDES program in Indian Country within the State of Wyoming. The facility was covered under the EPA Region 8 NPDES General Permit for Wastewater Discharges Associated with Drinking Waste Production in Indian Country (Permit) with facility-specific NPDES permit number WYDW0001I.

The Eastern Shoshone Tribe (Tribe) was notified of the inspection in a letter sent June 7, 2021, and the inspection was coordinated with the facility approximately two weeks in advance. Indian Health Services (IHS) representatives were notified of the inspection, but were unable to attend. Throughout the inspection, inspectors noted observations and descriptions of photographs in bound checklists reflecting conditions of the permit. Photographs taken during the Fort Washakie WTP inspection are included in the attached photo log (Photos 002 - 008).

Opening Conference and Discussion

EPA inspectors arrived at the Shoshone Utility Organization office at approximately 8:30am and conducted an opening conference with Shoshone Utility Director, Erin Martin for both the Fort Washakie Wastewater Treatment Facility (WWTF) and WTP. Inspectors presented their credentials and held an opening meeting to explain the purpose of the EPA inspections. Inspectors proceeded to ask questions to the facility representative to evaluate compliance with the facility's permit. Mr. Martin provided an overview of the WTP's source water, distribution area, drinking water treatment process, sampling and laboratory data collection, and operations & maintenance (O&M). Facility site visits were conducted after the records review and started with the WTP, then the WWTF.

Facility Description and Process Overview

The WTP supplies drinking water to approximately 3,200 people on the Wind River Reservation and the distribution system includes areas in and around the North Fork of the Little Wind River, Fort Washakie, South Fork of the Little Wind River, Trout Creek, and a casino in Boulder Flats. The WTP uses membrane filtration, equivalent to ultrafiltration, to produce water for domestic uses. The facility is designed to process a maximum of 2.5 million gallons per day (MGD) and this year the maximum demand has been 1.8 MGD.

Raw water is obtained from the South Fork of the Little Wind River and flows through initial wedge screens that are self-cleaning. The WTP has two trains to treat the water; one train is in use while the other train is cleaned. From the wedge screens, water is treated in 1,500-gallon filter basins with Zennon Membrane that has a vacuum on the membrane. Filtered water is collected in a header where sodium hypochlorite is added and then sent to the clear well.

The filters are backwashed every hour with treated water from the clear well. Once a day, the facility conducts a maintenance clean on the membrane filters using 30 ppm sodium hypochlorite and

backwash wastewater is routed to the pond. The facility conducts a recovery clean once a quarter (i.e., every 3-4 months). The recovery clean is a 2-day process that involves soaking the filters with 300 ppm chlorine for 8 hours. The water is neutralized with sodium bisulfate before backwash and discharge to the pond. On the second day, the filters are soaked in a solution of citric acid and hydrochloric acid to a pH <2, for 8 hours. Caustic soda is used to neutralize the water to pH of 7 and checked with a pH meter before it is discharged to the pond.

Wastewater generated from filter backwash activities is stored onsite in a single-cell stabilization pond (Backwash Pond or pond). Included in the wastewater are solids removed from the raw water and chemicals used in the filter cleaning processes. No flocculants or coagulants are used at the facility. Discharge from the Backwash Pond flows by gravity through Outfall 001 to a drainage ditch; discharges are frequent and occur daily in the summer. The drainage ditch eventually flows to the South Fork of the Little Wind River. Compliance samples are collected by one of the three operators from the sample port on the discharge line from the Backwash Pond.

Records Review

Prior to the facility site review, EPA inspectors reviewed records kept in the Shoshone Utilities office. Inspectors evaluated logs for analyses conducted onsite, including total residual chlorine (TRC), pH, temperature, and flow. Discharge Monitoring Reports (DMRs) and records for other analyses required by the permit were also evaluated. Inspectors reviewed DMRs and associated analytical reports and data summary sheets from the 3rd quarter 2020 (July, August, and September 2020) and 1st quarter 2021 (January, February, and March 2021). Additionally, inspectors reviewed the DMR data reported to the EPA through the NetDMR system from January 2020 – June 2021.

The facility was conducting weekly inspections and maintained a notebook of the inspections in the WTP laboratory. The weekly inspection reports identified the O&M need to mow the dikes around the Backwash Pond, but actions to remedy the problem were not taken; otherwise, the logs included the Permit-required information.

The Permit requires O&M manuals and schedules for routine O&M activities at the facility. Inspectors observed O&M manuals and binders for the WTP and equipment used in the Water Treatment Plant laboratory. Schedules for the routine operation and maintenance of the WTP wastewater treatment and lagoon were not observed, as required by Part 5.6.1.3 of the permit.

Facility Review

Inspectors began the site view by reviewing the information kept at the WTP laboratory. The facility representatives conducted analyses for TRC, pH, flow, and temperature in the onsite laboratory. Inspectors noted that the pH 10 buffer solution, used to calibrate the pH meter, expired in March 2021. The pH 4 and pH 7 buffer solutions were within the expiration timeframes. The same pH probe and buffer solutions are used for the WTP and the WWTF.

Inspectors conducted a site visit of the WTP process area and noted the bulk storage area containing two vessels of sodium hypochlorite within secondary containment (photo 002) and the pumps for the cleaning procedure (photo 003). Additionally, inspectors observed a daily membrane backwash cycle (photo 004). Vegetation and trees were observed growing on the dikes of the Backwash Pond (photos

005 - 007). Compliance monitoring samples from the Backwash Pond were conducted by an operator climbing down into a vault to access the sample port valve to collect the sample (photo 008). In the past, the facility had a line from the discharge pipe that enabled operators to collect a sample directly into the laboratory, specifically for the daily total residual chlorine analysis. The facility representative stated there was a break in the line, and manual sample collection from the sample port in the vault was necessary. Inspectors noted the safety concern for an operator to enter the vault, a confined space, to collect the compliance monitoring samples that are required on a daily, weekly, monthly, bi-annually, and annually frequency, depending on the parameter.

Closing and Follow-Up

EPA inspectors conducted a closing conference and discussed preliminary findings with Mr. Martin at the end of the site visit.

On July 9, 2021, EPA sent an email to Mr. Erin Martin with the preliminary findings from the inspection. Findings identified pursuant to the inspection are discussed in the Findings, Corrective Actions, and Recommendations section, below.

Findings, Corrective Actions, and Recommendations

Finding 1: Fort Washakie WTP exceeded the daily maximum limit for TRC seven times from January 2020 – June 2021. Additionally, the total suspended solids daily maximum limit was exceeded in June 2021.

Inspectors reviewed DMRs and associated analytical reports and data summary sheets from the 3rd quarter 2020 (July, August, and September 2020) and 1st quarter 2021 (January, February, and March 2021). Additionally, inspectors reviewed the DMR data reported to the EPA through the NetDMR system from January 2020 – June 2021. Inspectors noted the following daily maximum effluent exceedances of TRC; there were no exceedances of the 30-day average limit for TRC:

Exceedances of Daily Maximum Effluent Limit – Total Residual Chlorine

Parameter	DMR	Collection Date	Measured Concentration, ug/l	Permit Limit, Daily Max, ug/l
TRC	May 2020	Did not obtain daily records	58	50
TRC	June 2020	Did not obtain daily records	71	50
TRC	July 2020	July 7, 2020	67	50
TRC	July 2020	July 22, 2020	77	50
TRC	Sept 2020	Sept 7, 2020	61	50
TRC	Sept 2020	Sept 8, 2020	72	50
TRC	Sept 2020	Sept 20, 2020	110	50

Additionally, the daily maximum limit for total suspended solids (TSS) was reported to be 46 mg/l on the June 2021 DMR. The daily maximum limit for TSS is 45 mg/l.

Permit Requirements:

Part 2.2.1 of the Permit identifies effluent limits that may apply to the facility.

Table 1 details the effluent limits ALL facilities must meet to comply with this Permit

Table 1 – Primary Effluent Limitations

Pollutant	Daily Maximum	30-day average
Total Suspended Solids, mg/L	45	30
The pH of the discharge shall not be less than 6.5 or greater than 9.0 at any time, Standard Units.		

Supplemental Effluent Limitations

Table 2 outlines supplemental effluent limits that may be required to ensure that a facility's discharge complies with applicable water quality standards. The EPA Region 8 will review each NOI to determine if supplemental limitations are necessary, for each facility. The notification of coverage will identify which supplemental effluent limitations are effective.

Table 2 – Supplemental Effluent Limitations

Pollutant	Daily Maximum	30-day average
Total Residual Chlorine, µg/L	19	11
Aluminum, µg/L	750	87
Iron, µg/L	1000	N/A
Arsenic, µg/L	340	150
Arsenic (Drinking), µg/L ¹	10	N/A
E. coli, number/100ml	126	126
Fecal Coliform, number/100ml	400	200
Zinc, mg/L	120	N/A
pH (Ute Mountain Reservation): The pH of the discharge shall not be less than 6.6 or greater than 8.5 at any time, Standard Units ²		
1. The Drinking Arsenic Limit will be applied when the source water contains arsenic and the receiving water has a beneficial use for drinking water supply 2. This pH limit will be applied for discharges on the Ute Mountain Reservation. This will apply when the receiving water has a designated use of Tribal Cultural and/or Drinking Water Source as defined in the Tribal WQS.		

Of the numeric limits indicated in Table 2 of the Permit above, the facility's Authorization to Discharge identifies the following supplemental limits are applicable to the WTP's discharge.

Supplemental Effluent Limitations

The EPA Region 8 has reviewed the information provide in the Facility's NOI (application) and determined that the following supplemental limitations apply. Refer to Section 5.3 of the Fact Sheet for a description of supplemental effluent limitations.

Pollutant	Daily Maximum	30-day average
Total Residual Chlorine ¹ , µg/L	19	11

In the EPA letter, dated February 3, 2020, it states, “For your purposes, the current ML (method minimum level) for measuring chlorine in the approved methods at 40 CFR 136 is 0.05 mg/l.” It goes on to state, “Since it is not possible to accurately measure chlorine below 0.05 mg/l in wastewater, a discharge with concentration below 0.05 mg/l [50 mg/l] is considered in compliance with the effluent limitations.”

Corrective Action:

Ensure the WTP and wastewater cell are being operated in such a manner to meet effluent limitations. Provide the EPA with a description of the corrective actions taken to address this finding and how the facility will meet the effluent limitations in the future.

Finding 2: Shoshone Utilities did not report the daily maximum effluent limit exceedances to the EPA.

The effluent exceedances of the daily maximum limits, as identified in Finding 1, were not reported to the EPA, as required by the Permit. Specifically, the 24-hour notice and written submission within five (5)-days were not provided to the EPA.

Permit Requirements:

Part 4.8 of the Permit states, “Twenty-Four Hour Notice of Noncompliance Reporting:

4.8.1 The Permittee shall report any noncompliance which may endanger health or the environment as soon as possible, but no later than twenty-four (24) hours from the time the Permittee first became aware of the circumstances. The report shall be made to the EPA, Region 8, Superfund & Emergency Management Division at (303) 293-1788 and the Tribe(s) (Appendix A).

4.8.2 The following occurrences of noncompliance shall be reported by telephone to the EPA, Region 8 Enforcement and Compliance Assurance Division Water Enforcement Branch NPDES Enforcement Section at (800) 227-8917 (8:00 a.m. - 4:30 p.m. Mountain Time), and the Tribe(s) (Appendix A) by the first workday following the day the Permittee became aware of the circumstances:

4.8.2.1 Any unanticipated bypass which exceeds any effluent limitation in the Permit (See section 5.8, Bypass of Treatment Facilities.);

4.8.2.2 Any upset which exceeds any effluent limitation in the Permit (See section 5.9, Upset Conditions); or,

4.8.2.3 Violation of a maximum daily discharge limitation for any of the pollutants listed in the Permit to be reported within 24 hours.

4.8.3 A written submission shall also be provided to the U.S. EPA, Office of Enforcement and Compliance Assurance Division Water Enforcement Branch NPDES Enforcement Section, and to the Tribe(s) (Appendix A) within five days of the time that the Permittee becomes aware of the circumstances. The written submission shall contain:

4.8.3.1 A description of the noncompliance and its cause;

4.8.3.2 The period of noncompliance, including dates and times;

4.8.3.3 The estimated time noncompliance is expected to continue if it has not been corrected; and,

4.8.3.4 Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

4.8.4 The EPA may waive the written report on a case-by-case basis for an occurrence of noncompliance listed under section 4.8.2 above, if the incident has been orally reported in accordance with the requirements of section 4.8.2.

4.8.5 Reports shall be submitted to the addresses in section 4.4, Reporting of Monitoring Results.”

Corrective Action:

Ensure noncompliance with maximum daily discharge limits are reported to the EPA within 24 hours of becoming aware of the violation in accordance with the Permit. Also, ensure that follow-up reports are submitted to the EPA within five days of becoming aware of the violation. Provide the EPA with a description of how noncompliance notifications and follow-up reports will be submitted to the EPA in the future, in accordance with the Permit.

Finding 3: The facility did not monitor for thallium in February 2021.

Thallium was missing from the metals analysis conducted for the February 2021 DMR. Titanium was analyzed instead of Thallium.

Permit Requirements:

Part 3.1 of the Permit states, “Table 3 details the monitoring requirements for facilities continuously and frequently discharging wastewater. For the purpose of the DWGP, frequent dischargers are those facilities that discharge wastewater at least once per 30-day period.

Table 3 – Monitoring requirements for continuous and frequent discharge

Parameter	Units	Monitoring Frequency	Type of Sample
Outfall Flow	Gallons and Gallons per day	Daily ¹	Estimate/ Measurement
pH, Standard units	Standard Units	Weekly	Grab
TSS	mg/L	Weekly	Grab
Temperature	°C	Weekly	Grab
Metals ^{2,3}	µg/L	Annually	Grab
TTHMs ⁴	µg/L	Bi-annually	Grab
Total Residual Chlorine ⁵	µg/L	Daily	Grab
<i>E. coli</i> ⁵	Number/100 mL	Quarterly	Grab
Fecal Coliform ⁵	Number/100 mL	Monthly	Grab
Iron ⁵	µg/L	Quarterly	Grab
Arsenic ⁵	µg/L	Monthly	Grab
Aluminum ⁵	µg/L	Monthly	Grab
Hardness ⁶	mg/L as CaCO ₃	Annually ⁶	Grab

Footnote 2 in Table 3 of the Permit lists the Metals parameter required, “antimony, arsenic, beryllium, cadmium, total chromium, copper, lead, nickel, selenium, silver, thallium, and zinc. These parameters must be measured and reported as total recoverable.”

Corrective Action:

Ensure monitoring occurs for all parameters specified in the Permit. Provide the EPA with a description of the corrective actions taken to address this finding.

Finding 4: Sample collection and handling did not meet the standards specified in 40 CFR Part 136.

Inspectors reviewed DMRs and associated analytical reports and data summary sheets from the 3rd quarter 2020 (July, August, and September 2020) and 1st quarter 2021 (January, February, and March 2021). Based on this review, inspectors identified the following instances in which regulatory requirements specified in 40 CFR Part 136 were not followed.

- In the February 2021 DMR, an incorrect method was used for total trihalomethanes (TTHMs). The laboratory used a drinking water method (EPA 524.2) instead of the wastewater method (EPA 624.1) to analyze for the TTHMs compounds (i.e., chloroform, chlorodibromomethane, dichlorobromomethane, and bromoform).
- Samples collected for TTHMs and TSS on February 1, 2021, were received by the laboratory above the temperature preservation requirement of 6°C.
- The sample collected for TSS on June 15, 2021 was received by the laboratory above the temperature preservation requirement of 6°C. The laboratory receipt indicates that the sample was 19.7°C and there was no ice present.
- Acidification was not documented as part of sampling record in the COC for the sample collected for metals analyses on August 11, 2020. While the laboratory receipt indicated samples were received at 1.5°C and on ice, this information was also not on the COC either.

Permit Requirements:

Part 3 of the Permit states, “Effective immediately and lasting through the effective term of this Permit. Sampling and test procedures for pollutants listed in this part shall be in accordance with 40 C.F.R. Part 136, as required in 40 C.F.R. § 122.41(j). At a minimum, the following constituents shall be monitored at the frequency and with the type of measurement indicated; samples or measurements shall be representative of the volume and nature of the monitored discharge. If no discharge occurs during the entire monitoring period, it shall be stated in NetDMR on the copy of record that no discharge or overflow occurred.”

40 CFR Part 136, Table II, outlines the “Required Containers, Preservation Techniques, and Holding Times.”

- TSS samples are required to be preserved to ≤6 °C with a maximum holding time of 7 days.
- Metals samples are required to be preserved with HNO₃ to pH<2, or at least 24 hours prior to analysis, with a maximum holding time of 6 months.

40 CFR Part 136, Table IC, specifies the “List of Approved Test Procedures for Non-Pesticide Organic Compounds” and requires that either EPA 601, EPA 624.1, EPA 1624B, SM 6200 C-2011, or SM 6200 B-2011 be used for TTHM analyses.

Corrective Action:

Ensure that the sampling and analyses are conducted in accordance with the Permit and requirements of 40 CFR Part 136, including preservation requirements. Provide the EPA with a description of the corrective actions taken to address this finding.

Finding 5: Vegetation and trees were growing on the dikes of the Backwash Pond.

During the onsite inspection of the WTP, vegetation and trees were observed growing on the dikes of the Backwash Pond (photos 005 - 007). The weekly inspection reports completed by the operators, identified the operation and maintenance need to mow the dikes around the Backwash Pond, but actions to remedy the problem were not taken.

Permit Requirements:

Part 5.5 of the Permit identifies the Inspection Requirements.

“5.5.2 The Permittee shall maintain a log in either paper or electronic format recording information obtained during the inspection. At a minimum, the log shall include the following:

5.5.2.1 Date and time of the inspection;

5.5.2.2 Name of the inspector(s);

5.5.2.3 The facility's discharge status;

5.5.2.4 The flow rate of the discharge if occurring;

5.5.2.5 Identification of operational problems and/or maintenance problems;

5.5.2.6 Recommendations, as appropriate, to remedy identified problems;

5.5.2.7 A brief description of any actions taken with regard to problems identified; and,

5.5.2.8 Other information, as appropriate.

5.5.2.9 The permittee shall maintain log in either paper or electronic format in accordance with proper record-keeping procedures and shall make the log available for inspection, upon request, by authorized representatives of the U.S. Environmental Protection Agency or the applicable Tribe.

5.5.3 Problems identified during the inspection shall be addressed through proper operation and maintenance. (See Part 5.6 of this Permit.)”

Corrective Action:

Remove trees and mow overgrown vegetation on the dikes. Provide the EPA with photos and a description of the corrective actions taken to address this finding.

Finding 6: Schedules for routine O&M at the facility were not observed.

Part 5.6 of the Permit requires O&M manuals and schedules for routine O&M activities at the WTP. Inspectors noted O&M manuals and binders for the WTP and equipment were located in the WTP laboratory. Schedules for the routine O&M activities for the Backwash Pond were not observed, as required by Part 5.6.1.3 of the permit.

Permit Requirements:

Part 5.6 of the Permit states that, “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 this process is needed to achieve Permit effluent compliance.

5.6.1 The Permittee shall, as soon as reasonable and practicable, but no later than six (6) months after the effective date of this Permit, do the following as part of the operation and maintenance program for the wastewater treatment facility:

5.6.1.1 Have a current operations and maintenance (O & M) Manual(s) that describes the proper operational procedures and maintenance requirements of the wastewater treatment facility;

5.6.1.2 Have the O & M Manual(s) readily available to the operator of the wastewater treatment facility and require that the operator become familiar with the manual(s) and any updates;

5.6.1.3 Have a schedule(s) for routine operation and maintenance activities at the wastewater treatment facility; and,

5.6.1.4 Require the operator to perform the routine operation and maintenance requirements in accordance with the schedule(s).”

Corrective Action:

Ensure a schedule(s) for routine operation and maintenance activities is maintained for the Backwash Pond. Provide the EPA with a description of the corrective actions taken to address this finding.

Finding 7: The sampling port was located in a confined space and access presented a safety concern.

Compliance monitoring samples from the Backwash Pond were collected by an operator climbing down into a vault to access the sample port valve to collect the sample (photo 008). In the past, the facility had a line from the discharge pipe that enabled operators to collect a sample directly into the laboratory, specifically for the daily TRC analysis. The facility representative stated there was a break in the line, and manual sample collection from the sample port in the vault was necessary. Inspectors noted the safety concern for an operator to enter the vault, a confined space, to collect the compliance monitoring samples that are required on a daily, weekly, monthly, bi-annually, and annually frequency, depending on the parameter.

Permit Requirements:

Part 5.6 of the Permit states that, “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 this process is needed to achieve Permit effluent compliance.”

Corrective Action:

Properly operate and maintain the facility, to ensure sample collection can be conducted in a safe manner, and if necessary, fix or repair the broken line to the laboratory. Provide the EPA with a description of the corrective actions taken to address this finding.

Finding 8: Buffer solution (pH 10) used for calibration of the pH meter was expired.

Inspectors reviewed information and records kept at the WTP and laboratory and noted that the pH 10 buffer solution, used to calibrate the pH meter, expired in March 2021. The pH 4 and pH 7 buffer solutions were within the expiration timeframes. The same pH probe and buffer solutions are used for the WTP and the WWTF.

Permit Requirements:

Part 4.2 of the Permit states, “Monitoring Procedures. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136. The Permittee must select a test procedure that is Sufficiently Sensitive (see definitions) for all monitoring conducted in accordance with this Permit.”

40 CFR Part 136 lists test procedures and sample collection requirements. Standard method procedures for pH include calibrating the pH probe with buffer solutions.

Corrective Action:

Ensure pH buffer solutions for the pH meter calibration are not expired. Provide the EPA with a description of the corrective actions taken to address this finding.

Finding 9: Data entry errors were noted on DMRs.

The following DMR data entry errors were noted:

- During the records review, inspectors and Mr. Martin discussed DMR forms. The facility was entering the number of samples collected in the column labeled “# of Ex.” The “# of Ex.” column represents the number of exceedances, or effluent violations, reported by the facility, rather than number of samples.
- The laboratory report for the samples collected on February 1, 2021 indicated the concentration of zinc was 0.02 mg/l; however, the zinc concentration was incorrectly converted and reported as 2 ug/l on the corresponding DMR. The correct conversion would be 20 ug/l.

Permit Requirements:

Part 4.4 of the Permit states, “Reporting of Monitoring Results: With the effective date of this Permit, the permittee must electronically submit discharge monitoring reports (DMRs) quarterly using NetDMR. Submissions must be made to the EPA Region 8 no later than the 28th of the month following the completed reporting period (See Table 5). The Permittee must sign and certify all electronic submissions in accordance with the requirements of section 6.8 of this Permit (“Signatory Requirements”). NetDMR is accessed from the internet at <https://netdmr.zendesk.com/home>.

Corrective Action:

Enter the appropriate number of exceedances in the “# of Ex” column of the DMR form. Ensure the conversion calculations to be entered into the DMR are accurate. No response to the EPA is requested pursuant to this finding.