U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION III WATER BRANCH, ENFORCEMENT
AND COMPLIANCE ASSURANCE DIVISION
CLEAN WATER ACT
COMPLIANCE INSPECTION REPORT

for

Name of Facility: United States Geological Survey Leetown Science Center
Facility Address: 11649 Leetown Road, Kearneysville, WV 25430
Mailing Address: 11649 Leetown Road, Kearneysville, WV 25430

Report Prepared on: April 21, 2022 By: _____
Date *Signature*
Environmental Scientist (PG Environmental)

Report Final as of: _____ By: _____, EPA
Date *Signature*

General Information

Type of Inspection:	Wastewater Treatment Facility CEI
Owner:	United States Department of the Interior (DOI)
Operator:	DOI – United States Geological Survey (USGS)
Permittee:	DOI
NPDES Permit No:	WV0005649
NPDES Permit Effective Date:	October 1, 2018
NPDES Permit Expiration Date:	June 30, 2023
Receiving Water:	Hopewell Run, tributary to Opequon Creek and the Potomac River
Latitude and Longitude:	39.35165, -77.93091

On-Site Facility Inspection Overview

On March 16, 2022, representatives from U.S. Environmental Protection Agency (EPA) Region III, and EPA's contract inspector from PG Environmental (the EPA Inspection Team), conducted a compliance evaluation inspection at the Leetown Science Center (Facility) in Kearneysville, West Virginia. DOI is identified as the Permittee and owns the Facility. DOI-USGS operates the Facility.

Approximate Entry Time: 9:30 AM (EDT) **Approximate Exit Time:** 1:30 PM (EDT)

Unique Project Identifier (UPI): 3E22WN049A

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Appendix C: NPDES Permit No. WV0005649

I. INTRODUCTION

On March 16, 2022, representatives from U.S. Environmental Protection Agency (EPA) Region III and EPA's contract inspector from PG Environmental (hereinafter, collectively referred to as the EPA Inspection Team) inspected the Leetown Science Center (Facility) in Kearneysville, West Virginia. The United States Department of the Interior (DOI) is identified as the Permittee and owns the Facility. The DOI – United States Geological Survey (USGS) operates the Facility. Facility discharges are covered under National Pollutant Discharge Elimination System (NPDES) Permit No. WV0005649 (hereinafter, the Permit; refer to Appendix C).

The primary purpose of the inspection was to review basic fish research processes at the Leetown Science Center, evaluate operations related to the waste streams and treatment onsite, review the accuracy and reliability of the Permittee's self-monitoring and reporting program, and obtain information that will assist EPA in assessing the Permittee's compliance with the requirements of the Permit. The weather at the time of the inspection was mild and sunny.

The Facility is a fish research center managed by DOI-USGS. Water used in the fish culture laboratory facilities and supporting research ponds is sourced from local springs, including Bell Spring (Reservoirs A1, A2, and A3), Owens Spring (Reservoir B), and the Grey and Blue Springs (degasser and fish culture labs). Discharges from the Facility enter the east and south branches of Hopewell Run through three outlets.

The Facility's sanitary wastewater is collected and treated at the onsite treatment plant and combined in a settling/oxidation pond (K-pond) with fish culture process water and process flow from a neighboring United States Department of Agriculture (USDA) fish hatchery. The K-pond discharges through Outlet 001 to the east branch of Hopewell Run. Process water from 21 onsite aquaculture research ponds (sourced from Reservoirs A1, A2, and A3; no chemistry added) are collected in one of two settling basins, which discharge through Outlets 002 and 003 to the south branch of Hopewell Run.

II. INSPECTION PROCESS

Inspection Opening Conference

The EPA Inspection Team arrived at the Facility at 9:30 AM (EDT) for the inspection. Jake Albright of PG Environmental displayed his Clean Water Act (CWA) inspector credential to Mr. Roy Dodson (Facilities Operations Specialist) and Mr. Dave Weller (Maintenance Mechanic) at the outset of the inspection and explained the purpose of the inspection was to observe compliance with the Permit. The EPA Inspection Team informed the Permittee that any information that the Facility deemed to be confidential business information ("CBI") should be identified to EPA representatives during the inspection and it would be handled as CBI according to EPA's CBI procedures. Table 1 describes the individuals that participated in the inspection.

Table 1. Inspection Attendee List

Name	Affiliation	Telephone	Email
EPA Region III Inspectors and Contractors			
Jake Albright	PG Environmental	(703) 956-1957	jake.albright@pgenv.com
Monica Crosby	EPA Region III	(410) 305-2930	crosby.monica@epa.gov
Angela Weisel	EPA Region III	(215) 814-2124	weisel.angela@epa.gov
Eddie Simas	EPA Region III	(215) 814-2120	simas.edward@epa.gov
Facility Representative			
Roy Dodson, Facilities Operations Specialist	DOI-USGS	(304) 724-4457	rdodson@usgs.gov
Dave Weller, Maintenance Mechanic	DOI-USGS	(304) 724-4476	dweller@usgs.gov

Facility Site Walk

As part of the inspection process, the EPA Inspection Team visually observed the Facility's reservoir systems, including Reservoirs A1, A2, A3, and B (refer to Appendix A, Photographs 1, 2, 3, and 5). Reservoirs A1 through A3 feed the research ponds; water collected in Reservoir B was not being used at the time of the inspection and was flowing into Hopewell Run. Facility representatives stated that if an emergency or maintenance activity required redirection of treated water, it could be pumped to Reservoir B; however, the Facility had never had to do this. The EPA Inspection Team also observed the degasser unit that treats spring water to remove nitrogen prior to being used in the fish culture labs (refer to Appendix A, Photograph 4).

After observing the reservoirs, the EPA Inspection Team observed K-pond and associated screening and ultraviolet (UV) light disinfection system, Outlet 001, and the 21 research ponds with associated settling ponds that discharge to Outlets 002 and 003 (refer to Appendix A, Photographs 6 through 17).

K-pond combines flow from the fish culture laboratories, the USDA facility, and treated sanitary wastewater effluent from the onsite treatment plant. K-pond water flows through a rotary screen and UV light disinfection before discharging through Outlet 001 to Hopewell Run.

The research ponds were not in use at the time of the inspection; some contained water, and some were drained.

The settling pond connected to Outlet 002 was not in use at the time of the inspection, and Outlet 002 was not discharging. Outlet 003 was discharging from the settling pond at the time of the inspection.

Finally, the EPA Inspection Team inspected the onsite wastewater treatment plant, which consisted of an influent flow equalization tank, anoxic tank, aeration tank, post-anoxic tank, re-aeration tank, clarifier, sludge holding tank, fixed media filter, and chlorination and dechlorination via manual tablet feeders (refer to Appendix A, Photographs 18 through 20). As described above, treated wastewater is sent to K-pond, and subsequently treated through additional screening and UV light disinfection prior to discharging through Outlet 001.

A Facility diagram is included in Appendix B, Exhibit 1.

Records Review

The EPA Inspection Team conducted a records review to evaluate the Permittee's compliance with the Permit. Most of the records and reports required by the Permit were available for review prior to, during, or after the inspection. Plant equipment operation and maintenance (O&M) manuals and calibration records were reviewed onsite. The Permittee's electronic discharge monitoring reports (eDMRs) and related laboratory data were reviewed onsite as well as obtained electronically after the onsite inspection. The following were reviewed:

- eDMRs, contract laboratory results, and chain of custodies (January 2019 through January 2022)
- Facility Data in EPA's Integrated Compliance Information System (ICIS) Database (October 1, 2018, through January 31, 2022)
- Facility nutrient summary letters to West Virginia Department of Environmental Quality (DEQ; November 3, 2020 and March 17, 2022)
- Facility Best Management Practices (BMP) Plan (March 2017)
- Facility Groundwater Protection Plan (updated July 2014)
- EPA's Enforcement and Compliance History Online (ECHO) Detailed Facility Report

Summary of Observations

The following section summarizes the EPA Inspection Team's observations relative to the Permittee's Permit requirements, including the status of certain treatment units, operation and maintenance practices, and the Permittee's monitoring and reporting documentation.

Discharge Limitations and Monitoring Requirements

Section A.001 of the Permit defines discharge limitations for Outlet 001. Section A.002 of the Permit defines discharge limitations for Outlet 002. Section A.003 of the Permit defines discharge limitations for Outlet 003.

Observation 1. Based on a review of EPA's ICIS database and the Facility's eDMR submittals, the EPA Inspection Team observed 4 effluent limit exceedances from Outlet 001, 13 effluent limit exceedances from Outlet 002, and 22 effluent limit exceedances from Outlet 003 between October 1, 2018, and January 31, 2022 (refer to Appendix B, Exhibit 2 for the ICIS Data and Tables 2, 3, and 4 for a summary of exceedances).

Table 2. Outlet 001 Final Effluent Exceedances (October 1, 2018 through January 31, 2022)

Permit #	Monitoring Period End Date	Parameter Name	DMR Value	Permit Limit	Units	Limit Type
WV0005649	6/30/2021	pH	5.8	6	S.U.	Instantaneous Min.
WV0005649	10/31/2020	Oxygen, dissolved [DO]	4.8	6	NTU	Instantaneous Min.
WV0005649	9/30/2020	Oxygen, dissolved [DO]	4.3	6	lbs/day	Instantaneous Min.
WV0005649	8/31/2019	Solids, total suspended	31	30	mg/L	Monthly Ave.

Table 3. Outlet 002 Final Effluent Exceedances (October 1, 2018 through January 31, 2022)

Permit #	Monitoring Period End Date	Parameter Name	DMR Value	Permit Limit	Units	Limit Type
WV0005649	12/31/2020	Oxygen, dissolved [DO]	4.5	6	mg/L	Instantaneous Min.
WV0005649	12/31/2020	Solids, total suspended	31	25	lbs/day	Monthly Ave.
WV0005649	9/30/2020	Oxygen, dissolved [DO]	4	6	mg/L	Instantaneous Min.
WV0005649	9/30/2020	BOD, 5-day, 20 deg. C	46	25	lbs/day	Monthly Ave.
WV0005649	9/30/2020	Solids, total suspended	295	25	lbs/day	Monthly Ave.
WV0005649	9/30/2020	Solids, total suspended	295	50	lbs/day	Daily Max.
WV0005649	9/30/2020	Nitrogen, total [as N]	12,598	210	lbs/yr	Annual Total
WV0005649	9/30/2020	Phosphorus, total [as P]	852	35	lbs/yr	Annual Total
WV0005649	6/30/2020	BOD, 5-day, 20 deg. C	25.5	25	lbs/day	Monthly Ave.
WV0005649	6/30/2020	Solids, total suspended	305	25	lbs/day	Monthly Ave.
WV0005649	6/30/2020	Solids, total suspended	305	50	lbs/day	Daily Max.
WV0005649	3/31/2020	BOD, 5-day, 20 deg. C	51	25	lbs/day	Monthly Ave.
WV0005649	3/31/2020	BOD, 5-day, 20 deg. C	51	50	lbs/day	Daily Max.

Table 4. Outlet 003 Final Effluent Exceedances (October 1, 2018 through January 31, 2022)

Permit #	Monitoring Period End Date	Parameter Name	DMR Value	Permit Limit	Units	Limit Type
WV0005649	12/31/2021	Solids, total suspended	78.8	25	lbs/day	Monthly Ave.
WV0005649	12/31/2021	Solids, total suspended	78.8	50	lbs/day	Daily Max.
WV0005649	12/31/2021	Nitrogen, ammonia total [as N]	3.69	1.7	lbs/day	Monthly Ave.
WV0005649	12/31/2021	Nitrogen, ammonia total [as N]	3.69	3.3	lbs/day	Daily Max.
WV0005649	09/30/2021	Nitrogen, ammonia total [as N]	2.16	1.7	lbs/day	Monthly Ave.
WV0005649	09/30/2021	Nitrogen, total [as N]	1,816.46	210	lbs/yr	Annual Total
WV0005649	09/30/2021	Phosphorus, total [as P]	51.1	35	lbs/yr	Annual Total
WV0005649	06/30/2021	BOD, 5-day, 20 deg. C	65.5724	25	lbs/day	Monthly Ave.
WV0005649	06/30/2021	BOD, 5-day, 20 deg. C	65.5724	50	lbs/day	Daily Max.
WV0005649	06/30/2021	Solids, total suspended	25.2202	25	lbs/day	Monthly Ave.
WV0005649	12/31/2020	Oxygen, dissolved [DO]	4.6	6	mg/L	Instantaneous Min.
WV0005649	09/30/2020	Oxygen, dissolved [DO]	4.2	6	mg/L	Instantaneous Min.
WV0005649	09/30/2020	BOD, 5-day, 20 deg. C	50	25	lbs/day	Monthly Ave.
WV0005649	09/30/2020	Solids, total suspended	102	25	lbs/day	Monthly Ave.
WV0005649	09/30/2020	Solids, total suspended	102	50	lbs/day	Daily Max.
WV0005649	09/30/2020	Nitrogen, total [as N]	6,024	210	lbs/yr	Annual Total
WV0005649	09/30/2020	Phosphorus, total [as P]	159	35	lbs/yr	Annual Total
WV0005649	06/30/2020	BOD, 5-day, 20 deg. C	39	25	lbs/day	Monthly Ave.
WV0005649	03/31/2020	BOD, 5-day, 20 deg. C	55	25	lbs/day	Monthly Ave.
WV0005649	03/31/2020	BOD, 5-day, 20 deg. C	55	50	lbs/day	Daily Max.
WV0005649	03/31/2020	Solids, total suspended	85	25	lbs/day	Monthly Ave.
WV0005649	03/31/2020	Solids, total suspended	85	50	lbs/day	Daily Max.

According to EPA's ECHO Detailed Facility Report, violations were identified for the Facility in the first quarter of 2020 and the first quarter of 2021, and the Facility was in a

state of Significant Noncompliance (SNC) for the second and third quarters of 2020 and the second, third, and fourth quarters of 2021 (refer to Appendix B, Exhibit 3). Facility representatives were unsure of the exact causes of the exceedances. They stated that minimal feeding occurs, and no treatment or chemicals are added to the research or settling ponds that discharge to Outlets 002 and 003. However, they did state that a farm with cows is located between the effluent end of Reservoir B and Outlets 002 and 003, along Hopewell Run. They stated that the cows had access to Hopewell Run. Facility representatives also added that the flows from the USDA facility are not monitored by USGS prior to combining in K-pond.

Sections A.002 and A.003 of the Permit require the Permittee to conduct 24-hour composite monitoring for biochemical oxygen demand (BOD), total suspended solids (TSS), ammonia nitrogen, nitrogen nitrate and nitrogen nitrite, total phosphorus, total nitrogen, total recoverable copper, total recoverable lead, and total recoverable zinc at Outlets 002 and 003.

Observation 2. Facility representatives stated the Facility had never conducted 24-hour composite sampling at Outlets 002 or 003. They stated that they were unable to set up an automatic sampler at the outlets and had not implemented any other form of composite sampling; therefore, they had been conducting grab samples for all pollutant analyses at Outlets 002 and 003.

eDMR Submittals

Section C.8 of the Permit states, "The required DMRs shall be received by the agency no later than 25 days following the end of the reporting period in accordance with the following requirements. The agency is now requiring the permittee to utilize our electronic discharge monitoring report (eDMR) system which is now mandatory. The permittee is not required to submit hard copies of the DMRs to the addresses listed below when using eDMR. Special circumstances may result in the agency granting an exemption to eDMR and are considered on case by case basis. If the permittee was exempted by the agency from using the eDMR system, then the permittee is required to send hard copies to the addresses below. The permittee may contact the agency for more information about the eDMR system and potential exemptions from using it. Regardless, in accordance with Appendix A, Section III.6 of this permit, the permittee shall maintain copies of DMRs (either hard copies or electronic copies) at the plant site and the DMRs shall be made readily available upon request for DEP personnel."

Observation 3. The EPA Inspection Team observed the Permittee submitted eDMR data late during 20 of the 40 months between October 1, 2018 and January 31, 2022. While onsite, the EPA Inspection Team observed several late submittals in the data kept at the Facility and verified those with the entries in the ICIS database as well as observed additional occurrences. Refer to Table 5 and Appendix B, Exhibit 2 for occurrence dates. It was observed that not all limit sets were submitted late during months where there were late data submittals.

Table 5. Late eDMR Submittals Between October 1, 2018 and January 31, 2022

NPDES ID	Monitoring Period End Date	Limit Set	Non-Receipt Violation? Y/N	DMR Received Date	Number of Days Late
WV0005649	11/30/2021	001-A	Y	2/10/2022	47
WV0005649	11/30/2021	003-A	Y	2/10/2022	47
WV0005649	09/30/2021	001-A	Y	12/21/2021	57
WV0005649	09/30/2021	001-B	Y	12/21/2021	57
WV0005649	09/30/2021	001-D	Y	12/21/2021	57
WV0005649	09/30/2021	002-A	Y	1/7/2022	74
WV0005649	09/30/2021	002-B	Y	1/7/2022	74
WV0005649	09/30/2021	002-D	Y	1/7/2022	74

NPDES ID	Monitoring Period End Date	Limit Set	Non-Receipt Violation? Y/N	DMR Received Date	Number of Days Late
WV0005649	09/30/2021	003-A	Y	12/21/2021	57
WV0005649	09/30/2021	003-B	Y	12/21/2021	57
WV0005649	09/30/2021	003-D	Y	12/21/2021	57
WV0005649	08/31/2021	003-A	Y	10/7/2021	12
WV0005649	07/31/2021	001-A	Y	10/7/2021	43
WV0005649	07/31/2021	002-A	Y	10/7/2021	43
WV0005649	07/31/2021	003-A	Y	10/7/2021	43
WV0005649	04/30/2021	001-A	Y	7/20/2021	56
WV0005649	04/30/2021	002-A	Y	7/20/2021	56
WV0005649	04/30/2021	003-A	Y	7/20/2021	56
WV0005649	03/31/2021	001-A	Y	5/14/2021	19
WV0005649	03/31/2021	001-B	Y	5/14/2021	19
WV0005649	03/31/2021	003-A	Y	5/14/2021	19
WV0005649	03/31/2021	003-B	Y	5/14/2021	19
WV0005649	07/31/2020	001-A	Y	9/4/2020	10
WV0005649	07/31/2020	002-A	Y	9/4/2020	10
WV0005649	07/31/2020	003-A	Y	9/4/2020	10
WV0005649	10/31/2019	002-A	Y	2/7/2020	74
WV0005649	10/31/2019	003-A	Y	2/7/2020	74
WV0005649	09/30/2019	002-A	Y	2/7/2020	105
WV0005649	09/30/2019	002-B	Y	2/7/2020	105
WV0005649	09/30/2019	002-D	Y	2/7/2020	105
WV0005649	09/30/2019	003-A	Y	2/7/2020	105
WV0005649	09/30/2019	003-B	Y	2/7/2020	105
WV0005649	09/30/2019	003-D	Y	2/7/2020	105
WV0005649	08/31/2019	002-A	Y	2/7/2020	135
WV0005649	08/31/2019	003-A	Y	2/7/2020	135
WV0005649	07/31/2019	002-A	Y	2/7/2020	166
WV0005649	07/31/2019	003-A	Y	2/7/2020	166
WV0005649	06/30/2019	002-A	Y	2/7/2020	197
WV0005649	06/30/2019	002-B	Y	2/7/2020	197
WV0005649	06/30/2019	003-A	Y	2/7/2020	197
WV0005649	06/30/2019	003-B	Y	2/7/2020	197
WV0005649	05/31/2019	002-A	Y	2/7/2020	227
WV0005649	05/31/2019	003-A	Y	2/7/2020	227
WV0005649	04/30/2019	002-A	Y	2/7/2020	258
WV0005649	04/30/2019	003-A	Y	2/7/2020	258
WV0005649	03/31/2019	002-A	Y	2/7/2020	288
WV0005649	03/31/2019	002-B	Y	2/7/2020	288
WV0005649	03/31/2019	003-A	Y	2/7/2020	288
WV0005649	03/31/2019	003-B	Y	2/7/2020	288
WV0005649	02/28/2019	002-A	Y	2/7/2020	319
WV0005649	02/28/2019	003-A	Y	2/7/2020	319
WV0005649	01/31/2019	002-A	Y	2/7/2020	347
WV0005649	01/31/2019	003-A	Y	2/7/2020	347
WV0005649	12/31/2018	002-A	Y	2/7/2020	378
WV0005649	12/31/2018	002-B	Y	2/7/2020	378
WV0005649	12/31/2018	003-A	Y	2/7/2020	378
WV0005649	12/31/2018	003-B	Y	2/7/2020	378
WV0005649	11/30/2018	001-A	Y	2/7/2019	44
WV0005649	11/30/2018	002-A	Y	2/7/2020	409
WV0005649	11/30/2018	003-A	Y	2/7/2020	409
WV0005649	10/31/2018	002-A	Y	2/4/2020	436
WV0005649	10/31/2018	003-A	Y	2/4/2020	436

Groundwater Protection Plan
Section C.12 of the Permit states, "The Groundwater Protection Plan (GPP) shall be maintained at the plant site and shall be available for inspection by the Division of Water and Waste Management personnel."

Observation 4. The GPP could not be located for review onsite at the time of the inspection. Following the inspection, the Facilities Operations Specialist emailed a copy of the GPP, dated as developed in December 2002, and updated in July 2014, more than 4 years prior to the issuance of the Permit (refer to Appendix B, Exhibit 4).

Best Management Practice Plan
Section C.13 of the Permit states, "The Best Management Practice (BMP) Plan (as required by 40CFR45l) shall be implemented and maintained at the site and shall be available for inspection by the Division of Water and Waste Management personnel."

Title 40 of the Code of Federal Regulations (CFR), Part 451.3(d)(1) states, the Permittee must "Develop and maintain a [BMP] plan on site describing how the permittee will achieve the requirements of §451.11(a) through (e) or §451.21(a) through (h), as applicable."

40 CFR, Part 451.11(a) through (e) pertain to concentrated aquatic animal production facilities that produce 100,000 pounds or more per year of aquatic animals in a flow-through or recirculating system. The provisions include:

(a) Solids control. The permittee must:
(1) Employ efficient feed management and feeding strategies that limit feed input to the minimum amount reasonably necessary to achieve production goals and sustain targeted rates of aquatic animal growth in order to minimize potential discharges of uneaten feed and waste products to waters of the U.S.
(2) In order to minimize the discharge of accumulated solids from settling ponds and basins and production systems, identify and implement procedures for routine cleaning of rearing units and off-line settling basins, and procedures to minimize any discharge of accumulated solids during the inventorying, grading and harvesting aquatic animals in the production system.
(3) Remove and dispose of aquatic animal mortalities properly on a regular basis to prevent discharge to waters of the U.S., except in cases where the permitting authority authorizes such discharge in order to benefit the aquatic environment.

(b) Materials storage. The permittee must:
(1) Ensure proper storage of drugs, pesticides, and feed in a manner designed to prevent spills that may result in the discharge of drugs, pesticides or feed to waters of the U.S.
(2) Implement procedures for properly containing, cleaning, and disposing of any spilled material.

(c) Structural maintenance. The permittee must:
(1) Inspect the production system and the wastewater treatment system on a routine basis in order to identify and promptly repair any damage.
(2) Conduct regular maintenance of the production system and the wastewater treatment system in order to ensure that they are properly functioning.

(d) Recordkeeping. The permittee must:
(1) In order to calculate representative feed conversion ratios, maintain records for aquatic animal rearing units documenting the feed amounts and estimates of the numbers and weight of aquatic animals.
(2) Keep records documenting the frequency of cleaning, inspections, maintenance and repairs.

(e) Training. The permittee must:
(1) In order to ensure the proper clean-up and disposal of spilled material adequately train all relevant facility personnel in spill prevention and how to respond in the event of a spill.
(2) Train staff on the proper operation and cleaning of production and wastewater treatment systems including training in feeding procedures and proper use of equipment.

Observation 5. At the time of the inspection, the Facility's BMP Plan did not include all elements described as required by 40 CFR, Part 451. Specifically, the BMP Plan provided (dated March 2017; refer to Appendix B, Exhibit 5) primarily covers wastewater treatment plant operations and maintenance and does not cover any of the elements relative to aquatic animal management, feeding, recordkeeping, materials storage, spill cleanup, or maintaining the settling ponds.

It should be noted that the BMP Plan was reviewed after the onsite inspection, and the EPA Inspection Team did not verify whether the Facility was producing 100,000 pounds or more per year of aquatic animals at the time of the inspection as referenced in 40 CFR, Part 451.

Sampling Protocols

Section C.13 of the Permit states, "Sampling requirements for Outlet(s) 001 through 003 shall be performed during lab/pond cleaning, if possible. If lab/pond cleaning does not occur in a calendar month, then samples shall be collected that is representative of normal operations for that month. Twenty four (24) hour composite samples shall be obtained at Outlet(s) 001 through 003 as prescribed in Sections A.001-003 unless otherwise specified (pH and dissolved oxygen)."

Observation 6. Facility representatives stated that sampling requirements are not coordinated with lab and pond cleaning events as required by the Permit. As mentioned previously, the Permittee does not conduct 24-hour composite sampling at Outlets 002 and 003.

Appendix A, Section III.3 of the Permit states, "Samples shall be taken, preserved and analyzed in accordance with the latest edition of 40 CFR Part 136, unless other test procedures have been specified elsewhere in this permit."

Observation 7. Consistent record keeping issues were observed with the Facility's chain of custody records, including missing information related to sample containers/preservation, sample matrices, composite versus grab samples, sampler names, and sample preservation temperature (refer to Appendix A, Photographs 21 and 22 for examples).

Additionally, the chain of custody forms observed showed a 24-hour composite timeframe defined for Outlet 003 samples, even though Facility representatives stated grabs were taken at the location. It is unclear why this was documented in this manner.

Observation 8. Laboratory results from the Facility's contract lab (Pace) show that the TSS sample for K-pond (i.e., Outlet 001), taken on November 18, 2021, was not analyzed until January 4, 2022. This is well outside the prescribed TSS sample holding time of 7 days (refer to Appendix A, Photograph 23).

40 CFR, Part 136, Table IB (List of Approved Inorganic Test Procedures) identifies electrometric measurement and automated electrode as acceptable methods for hydrogen ion (pH) testing.

Observation 9. At the time of the inspection, the Permittee was not using an approved test method for demonstrating pH compliance. Specifically, facility representatives stated they used pH test paper for determining pH compliance at all three outlets. Following the inspection, the

Facilities Operations Specialist provided the name of the of the product being used (via email) as *Hydrion Insta-Check pH Test Paper Strips: 0.0-13.0 pH* (model # HJ613).

Nutrient Report

Section D.5 of the Permit states, "The permittee shall submit an annual report on, or before, November 1 each year which summarizes the following information.

a. The permittee shall summarize the previous year's nutrient data. This may be accomplished in letter form and shall include all calculations of the year's mass loadings reported. In general, this report shall include a table depicting the monthly loadings discharged for the previous year as well as an assessment of compliance with the nitrogen and phosphorus annual limitations in Sections A.001.
b. For the purpose of this condition, a year is defined as October 1st through September 30th."

Observation 10. The Permittee did not submit the nutrient data for October 1, 2020 through September 30, 2021 to DEQ by November 1, 2021. Following the inspection, the Permittee provided an edited version of the previous year's letter (also submitted late, on November 3, 2020), dated March 17, 2022 (i.e., the day following the inspection; refer to Appendix B, Exhibit 6). It is unclear if the letter was submitted to DEQ.

Additionally, the letter shows the Facility exceeded the annual loading limit for nitrogen and phosphorus at Outlet 003. However, the values in the letter do not match the values reported in the ICIS database. The letter reports 2,098 lbs/yr of nitrogen and 36 lbs/yr of phosphorus, whereas ICIS shows 1,816.46 lbs/yr of nitrogen and 51.1 lbs/yr of phosphorus for the time period (see Table 4). It is unclear why there is a discrepancy.

Closing Conference

After the Facility site walk, the EPA Inspection Team met with the Facility representatives for a closing conference and shared preliminary observations. The EPA Inspection Team reiterated that all preliminary observations discussed were not compliance determinations. Any and all preliminary observations shared were subject to further investigation by the EPA Inspection Team upon the additional review of records and documentation. Additional observations may be contained in this inspection report that were not identified at the time of the closing conference after the additional review of materials following the inspection.

The inspection concluded at approximately 1:30 PM (EDT).