EPA United States Environmental Protection Agency

EPA Region 5 Enforcement and Compliance Assurance Division

INSPECTION REPORT

Inspection Entry Date/Time	11/08/2022 11:46 AM (ET)	Announced: Yes
Inspection Exit Date/Time	11/08/2022 02:10 PM (ET)	Access: Granted
Weather	Sunny, dry	
Media	Water	
Statute(s)/Program(s)	Clean Water Act, NPDES, WWTP	
Type of Inspection	CEI - Compliance Evaluation Inspection	
Permittee Name	Scioto County Commissioners (West Portsmouth WWTP)	
Facility or Site Name	West Portsmouth WWTP	
Facility/Site Physical Address	27 Hygean Run Rd	
City, State, Zip Code	West Portsmouth, OH 45663	
County/Borough/Parish	Scioto	
Facility GPS Coordinates	38.7498, -83.03415	
Mailing Address (If different)	Same as location address	
City, State, Zip Code	Same as location address	
FRS ID	110006217619	
Permit Number(s) (If Applicable)	OH0076309	
SIC and/or NAICS	4952	

Regulatory Representatives Participating in Inspection:

Title	Name	Organization
NPDES Inspector	Andi Hodaj	EPA Region 5

Lead Inspector:

Danny Nguyen	DANNY NGUYEN Digitally signed by DANNY NGUYEN Date: 2023.01.05 12:20:50 -05'00'		1/5/2023
NPDES Inspector	EPA Region 5	nguyen.danny@epa.gov	(440) 250-1709

Supervisor Review:

Mr. Brooke Furio	BROOKE FURIO Digitally signed by BROOKE FURIO Date: 2023.01.05 12:40:33 -05'00'		1/5/2023
Multimedia Section Chief	EPA Region 5	furio.brooke@epa.gov	(440) 250-1705

SECTION I – INTRODUCTION

Site Entry and Inspection Objectives:

United States Environmental Protection Agency (EPA), Region 5 inspectors arrived at the West Portsmouth Wastewater Treatment Plant (WWTP) (the "Site" or "Facility"), located at 27 Hygean Run Rd, West Portsmouth, OH 45663, at 11:46 AM (ET) on 11/08/2022 for an announced inspection. EPA Region 5 Lead Inspector Mr. Danny Nguyen presented credentials to Mr. Jayson Coleman, Plant Operator, and informed him that this was an EPA inspection to determine compliance with the Clean Water Act (CWA) and the National Pollutant Discharge Elimination System (NPDES) permit program. The inspection was conducted under the authority of Section 308 of the CWA.

This report is based on information supplied by Facility representatives, direct observations made by the EPA Region 5 inspectors, records and reports maintained by the permittee and other information including: photographs taken by EPA Region 5 inspectors, physical evidence collected by the EPA Region 5 inspectors, measurements taken by EPA Region 5 inspectors, verbal or written statements made by information supplied by Facility representatives during or subsequent to the on-site Inspection, and materials, processes, data, photographs, or documents shown, demonstrated, or submitted to the EPA Region 5 inspectors by Facility representatives during or subsequent to the on-site Inspection. In addition, information gathered prior to or subsequent to the Inspection from a review of EPA, State, and/or public records may be included in this report.

Attendees

Organization	Attendee Name	Title	Present in Opening Conf.	Present in Closing Conf.
EPA Region 5	Danny Nguyen	Lead NPDES Inspector	Yes	Yes
EPA Region 5	Andi Hodaj	Senior NPDES Inspector	Yes	Yes
West Portsmouth WWTP	Jayson Coleman	Plant Operator	Yes	Yes

Facility/Site Description

EPA Region 5 lead inspector confirmed the following facility information:

The facility is owned by Scioto County. It has a design flow of 0.9 million gallons per day (MGD) and serves approximately 1,200 residents connected to a sanitary-only collection system. No industrial users discharge process waste to the WWTP. The facility consists of a pump station, headworks that include a spiral screen and a bar screen, flow splitter box, Aeration Basin #1 (old plant, currently used as digester with return flow), Aeration Basin #2 (new plant with built in clarifier and skimmer), single sludge press, and four sand filters used for sludge holding. The facility discharges into Hygean Run via Outfall 001.

Mr. Coleman stated the new plant with Aeration Basin #2 was built to efficiently process wastewater. In the future, Aeration Basin #1 could be rebuilt to increase design flow, but also be able to provide redundancy if one aeration basin is shutdown, the WWTP would continue to operate without having to shut down. Mr. Coleman stated that Aeration Basin #1 is being used as a digester with return flow until it can be upgraded.

Photo(s)

1. RIMG2895.JPG
2. RIMG2896.JPG
3. RIMG2906.JPG

Facility/Site Information:

Responsible official	Mr. Jayson Coleman
WWTP Design Capacity & Average Daily Flow	Design flow is 0.9 MGD, average flow is approximately .45 MGD
WWTP Approx. # of residents served	1,200
Outfalls: (and do the numbers, locations, and receiving waters match the permit?)	One outfall, 001. Number and location match the permit.
Operation schedule (days of operation, # shifts/day, # operators/shift, coverage overnight, weekends & emergencies), and is staffing sufficient for proper operation?	Monday-Friday, 8:00AM-4:30PM, 363 days a year. One plant operator and 2 maintenance personnel on-site
Do you use in-house or contract out for laboratory analyses? (including for metals or WET testing?)	No laboratory analysis is conducted in-house. Samples are taken to Wheelersburg, OH Lab for analysis and calibration of sample instruments.
Do you accept waste from septage haulers? If so, what problems have you experienced?	No
Is there currently any portion of the treatment train that is non-operational?	No
Are there any plans for renovation or additional equipment to allow for increased wastewater flow?	Yes. Aeration Basin #1 could be upgraded in the future to double processing capacity.

Location(s):

Location/Area/Sub-area	Description
Digester	Aeration Basin #1 from old WWTP is used as digester with return flow.
Outfall 001	Outfall 001 discharges into Hygean Run.
Primary Treatment	The primary treatment consists of the spiral screen, bar screen, the flow splitter box, Aeration Basin #2 with built-in clarifier.
Secondary Treatment	The secondary treatment consists of Aeration Basin #2 with built-in clarifier, Aeration Basin #1 digester with return flow, sludge press, and four sand filters that are currently used for sludge holding.

SECTION II – OBSERVATIONS

Location: Primary Treatment

Observation #: DN2-OB-001 **Date:** 11/08/2022

The USEPA inspection team started the walk-through of the facility at the headworks. The team observed three influent pipes. All three pipes were observed to be corroded. The spiral and bar screens were operational. Mr. Coleman stated the screens are cleaned twice a day. The influent autosampler was not operational at the time of inspection to take required composite samples and no working thermometer was observed to meet sample cooling requirements. Mr. Coleman stated the influent autosampler was non-operational and grab samples are taken after the wastewater goes through the spiral screen.

Mr. Coleman stated that all samples are taken to the Wheelersburg WWTP lab twice a week for analysis and all sampling instruments are calibrated each time by the lab. Mr. Coleman stated that was the only time the instruments would get calibrated. Based on Mr. Coleman's statements, it was observed that the calibration of the pH meter was not being conducted daily prior to taking samples and the pH was not measured within 15 minutes of taking a sample.

Photo(s)

1. RIMG2899.JPG
2. RIMG2900.JPG
3. RIMG2898.JPG

Location: Secondary Treatment

Observation #: DN2-OB-002 **Date:** 11/08/2022

From the inflow channel, the wastewater can be split to flow to Aeration Basin #1, or Aeration Basin #2. Currently, wastewater is routed to Aeration Basin #2 for activated sludge treatment and from there to the clarifier. Sludge from the clarifier is returned either to Aeration Basin #1, that acts as an aerobic digester or to Aeration Basin #2 for the activated sludge process. Mr. Coleman stated a timer is set to pump wastewater to Aeration Basin #1 every 6 hours for 15 minutes. The waste from Aeration Basin 1 can be returned back into the process as needed. Three blowers in the blower building are used for aeration in Aeration Basin #2. The basin has a built-in clarifier and skimmer for solid settling and removal. From the clarifier, wastewater is routed to Outfall 001 for discharge. The sludge is taken to the sand filters for sludge holding and drying until shipment off-site.

The USEPA inspectors observed the pump station, the blower building, the sand filters, and the sludge press.

Photo(s)

1. RIMG2897.JPG
2. RIMG2903.JPG
3. RIMG2904.JPG
4. RIMG2907.JPG
5. RIMG2908.JPG
6. RIMG2905.JPG
7. RIMG2911.JPG
8. RIMG2910.JPG
9. RIMG2909.JPG
10. RIMG2917.JPG
11. RIMG2916.JPG
12. RIMG2920.JPG
13. RIMG2921.JPG
14. RIMG2922.JPG
15. RIMG2923.JPG

Location: Digester

Observation #: DN2-OB-003 **Date:** 11/08/2022

The USEPA inspectors observed Aeration Basin #1 that was currently being used as an aerobic digester during the time of the inspection. The digester's return flow was routed back into the process. The USEPA inspectors observed two built-in clarifiers in Aeration Basin #1 that were not operational at the time of inspection.

Photo(s)

1. RIMG2902.JPG
2. RIMG2901.JPG
3. RIMG2912.JPG
4. RIMG2913.JPG
5. RIMG2914.JPG
6. RIMG2915.JPG

Location: Outfall 001

Observation #: DN2-OB-004 **Date:** 11/08/2022

The USEPA inspectors observed a non-operational effluent autosampler at the time of the inspection. The thermometer inside the autosampler displayed 60 degrees Fahrenheit. Mr. Coleman confirmed the autosampler was not operational and grab samples were taken at the effluent instead. The USEPA inspectors observed Outfall #1 and the signage with the correct outfall number and facing the receiving stream.

Photo(s)

1. RIMG2918.JPG
2. RIMG2919.JPG
3. RIMG2925.JPG
4. RIMG2926.JPG

SECTION III – RECORDS REVIEW

Records may not be in sequential order.

Record: Other - operator's certificate for wastewater treatment facilities		**AOC:** No
Ref #: DN2-RR-002	**Reviewed By:** Danny Nguyen	**Reviewed Date:** 11/08/2022
The USEPA inspectors reviewed the certificate for the operator of record. Mr. Jayson Coleman had a Class II Wastewater Treatment Professional Operator Certificate.		
Record: Process Description/Flow Diagram		**AOC:** No
Ref #: DN2-RR-001	**Reviewed By:** Danny Nguyen	**Reviewed Date:** 11/08/2022
The USEPA inspectors reviewed the process engineering diagrams and map that displayed the old and new parts of the plant.		

SECTION IV – SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

No sampling was conducted.

SECTION V - AREAS OF CONCERN

Areas of Concern may not be in sequential order.

The presentation of areas of concern does not constitute a formal compliance determination or violation.

AOC Reference #: DN2-OB-001	**Location: Primary Treatment**
All three influent pipes were observed to be corroded.	

AOC Reference #: DN2-OB-001	**Location: Primary Treatment**
The influent autosampler was not operational at the time of inspection to take required composite samples and no working thermometer was observed to meet sample cooling requirements.	

AOC Reference #: DN2-OB-001	**Location: Primary Treatment**
Based on Mr. Coleman's statements, it was observed that the calibration of the pH meter was not being conducted daily prior to taking sample and the pH was not being measured within 15 minutes of taking a sample.	

AOC Reference #: DN2-OB-001	Location: Primary Treatment
There was not an overall sampling and calibration procedures for personnel to follow to ensure the permit sampling requirements were being met.	
Additional Notes:	

SECTION VI – CLOSING CONFERENCE AND FOLLOW UP

Closing Conference:

The EPA Region 5 Lead Inspector held a closing conference with Facility personnel at 02:10 PM (ET) on 11/08/2022 for the inspection. During the closing conference, EPA Region 5 Lead Inspector discussed the observations and Areas of Concern identified during the inspection. Observations and Areas of Concern have not yet been evaluated for a formal compliance determination.

The USEPA lead inspector requested the following follow-up documents :

- Last 3 months of DMRs
- Last 3 months of sample Chain of Custodies and lab reports
- Sludge reports and invoices
- Last SSO report

Follow Up:

The EPA lead inspector requested the following follow-up documents:

- Last 3 months of DMRs
- Last 3 months of sample Chain of Custody and lab reports
- Sludge reports and invoices
- Last SSO report

Communication Log:

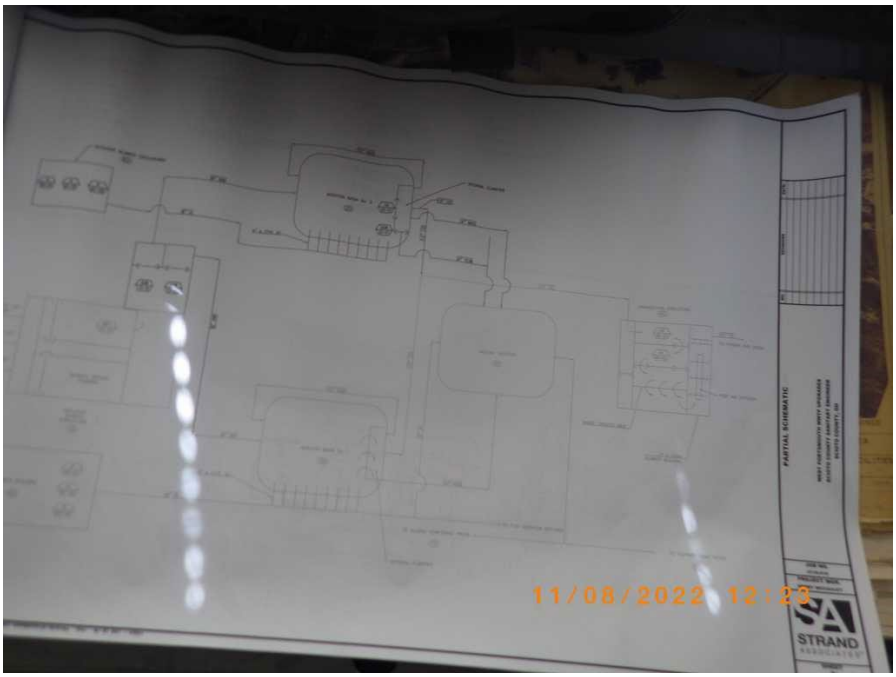
No additional information received by EPA Region 5 after exiting the Facility on 11/08/2022.

SECTION VII – LIST OF APPENDICES

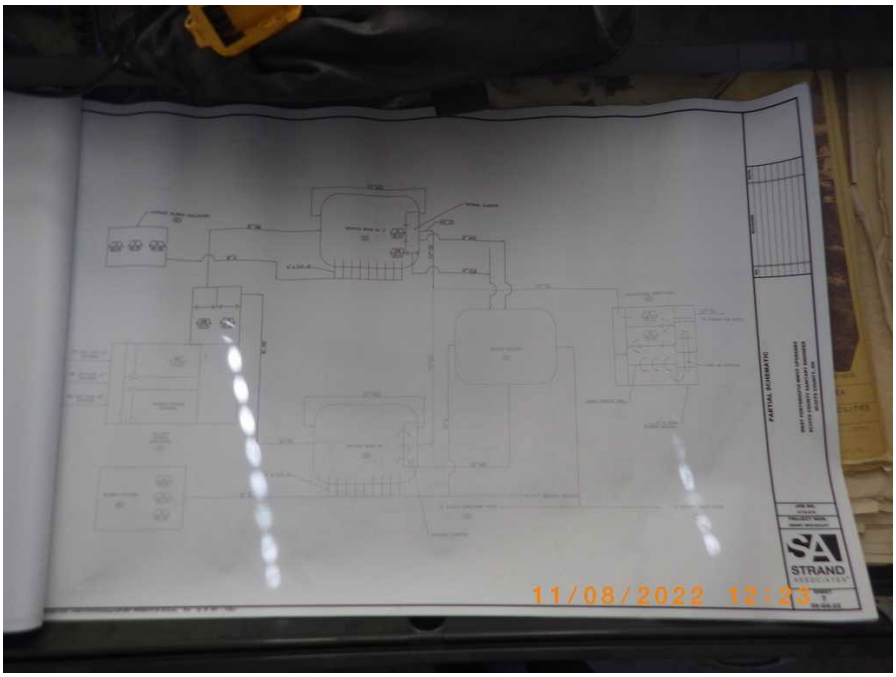
1. Photo Log

APPENDIX 1: PHOTO LOG

All Photographs taken by Andi Hodaj, Environmental Engineer, USEPA
Camera: RICOH WG-4
Time stamps in the photographs are in eastern time zone



WWTP Schematic	RIMG2895.JPG	
11/08/2022 12:23 PM	Photographer: Andi Hodaj	
[Location/Area]	No CBI	No PII
Photo of the West Portsmouth WWTP schematic that includes both the old and the new WWTP.		



WWTP Schematic	RIMG2896.JPG	
11/08/2022 12:23 PM	Photographer: Andi Hodaj	
[Location/Area]	No CBI	No PII
Schematic of the new and old treatment plant.		

New clarifier	RIMG2906.JPG	
11/08/2022 01:00 PM	Photographer: Andi Hodaj	
[Location/Area]	No CBI	No PII
View of the new clarifier. Camera looking west.		

Pump station	RIMG2902.JPG	
11/08/2022 12:55 PM	Photographer: Andi Hodaj	
Digester	No CBI	No PII
Pump station and checkout pit. Camera looking southeast.		

Old aeration tank	RIMG2901.JPG	
11/08/2022 12:52 PM	Photographer: Andi Hodaj	
Digester	No CBI	No PII
View of the old aeration tank. The pipe flowing in is the return flow from the clarifiers. Camera looking south.		

Aerobic digester	RIMG2912.JPG	
11/08/2022 01:08 PM	Photographer: Andi Hodaj	
Digester	No CBI	No PII
Aerobic digester and the valve pit that controls the flow from the clarifier. Camera looking northwest.		

Old clarifier	RIMG2913.JPG	
11/08/2022 01:12 PM	Photographer: Andi Hodaj	
Digester	No CBI	No PII
The old clarifier next to the old aeration tank. The return flow pipe can be seen in the background. Camera looking west.		

Skimmer	RIMG2914.JPG	
11/08/2022 01:12 PM	Photographer: Andi Hodaj	
Digester	No CBI	No PII
Skimmer in the old clarifier. Camera looking north.		

Old aeration tank	RIMG2915.JPG	
11/08/2022 01:14 PM	Photographer: Andi Hodaj	
Digester	No CBI	No PII
Overview of the old aeration tank with the aeration pipes in it. The old aeration tank was being used as an aerobic digester. Camera looking north.		

Final effluent	RIMG2918.JPG	
11/08/2022 01:22 PM	Photographer: Andi Hodaj	
Outfall 001	No CBI	No PII
Final effluent channel. The v-notch weir and depth sensor can be seen in it. Camera looking west.		

Autosampler	RIMG2919.JPG	
11/08/2022 01:25 PM	Photographer: Andi Hodaj	
Outfall 001	No CBI	No PII
The autosampler at the final effluent. The bottle inside the autosampler had water in it but the operator stated that no sample was being taken that day. The thermometer in the autosampler was not working.		

Outfall 001	RIMG2925.JPG	
11/08/2022 02:20 PM	Photographer: Andi Hodaj	
Outfall 001	No CBI	No PII
Outfall 001. Camera looking west.		

Outfall 001	RIMG2926.JPG	
11/08/2022 02:20 PM	Photographer: Danny Nguyen	
Outfall 001	No CBI	No PII
Outfall 001. Camera looking west.		

Spiral screen	RIMG2899.JPG	
11/08/2022 12:44 PM	Photographer: Andi Hodaj	
Primary Treatment	No CBI	No PII
Close-up view of the spiral screen at the headworks. Camera looking west.		

Influent pipes	RIMG2900.JPG	
11/08/2022 12:46 PM	Photographer: Andi Hodaj	
Primary Treatment	No CBI	No PII
Three rusted influent pipes. Camera looking east.		

Headworks	RIMG2898.JPG	
11/08/2022 12:43 PM	Photographer: Andi Hodaj	
Primary Treatment	No CBI	No PII
Overview of the headworks. Camera looking northeast.		

New aeration tank	RIMG2897.JPG	
11/08/2022 12:39 PM	Photographer: Andi Hodaj	
Secondary Treatment	No CBI	No PII
Overview of the new aeration tank. Camera looking north.		

New Blowers	RIMG2903.JPG	
11/08/2022 12:57 PM	Photographer: Andi Hodaj	
Secondary Treatment	No CBI	No PII
New blowers and the blower building in the background. Camera looking south.		

Old blowers	RIMG2904.JPG	
11/08/2022 12:57 PM	Photographer: Andi Hodaj	
Secondary Treatment	No CBI	No PII
Old blowers. Camera looking southwest.		

New Clarifier	RIMG2907.JPG	
11/08/2022 01:00 PM	Photographer: Andi Hodaj	
Secondary Treatment	No CBI	No PII
New clarifier next to the new aeration tank. Camera looking west.		

Clarifier effluent	RIMG2908.JPG	
11/08/2022 01:02 PM	Photographer: Andi Hodaj	
Secondary Treatment	No CBI	No PII
Effluent from the new clarifier.		

New aeration tank	RIMG2905.JPG	
11/08/2022 01:00 PM	Photographer: Andi Hodaj	
Secondary Treatment	No CBI	No PII
View of the new aeration tank. Camera looking west.		

Return flow	RIMG2911.JPG	
11/08/2022 01:06 PM	Photographer: Andi Hodaj	
Secondary Treatment	No CBI	No PII
Return flow from the clarifier to the aeration basin at the east end of the clarifier. Camera looking south.		

New clarifier	RIMG2910.JPG	
11/08/2022 01:04 PM	Photographer: Andi Hodaj	
Secondary Treatment	No CBI	No PII
New clarifier and the skimmer in it moving west. Camera looking west.		

New clarifier	RIMG2909.JPG	
11/08/2022 01:04 PM	Photographer: Andi Hodaj	
Secondary Treatment	No CBI	No PII
New clarifier and the skimmer in it moving west. Camera looking west.		

Dosage tanks	RIMG2917.JPG	
11/08/2022 01:19 PM	Photographer: Andi Hodaj	
Secondary Treatment	No CBI	No PII
Dosage tank splits the flow from the aeration tank to the sand filters. Camera looking north.		

Sand filters	RIMG2916.JPG	
11/08/2022 01:17 PM	Photographer: Andi Hodaj	
Secondary Treatment	No CBI	No PII
Four sand filters. The first two in the photo had sludge in them and the third one was the only one being used. Camera looking north.		

Post-aeration tank	RIMG2920.JPG	
11/08/2022 01:27 PM	Photographer: Andi Hodaj	
Secondary Treatment	No CBI	No PII
Post aeration tank and the flow meter at final tank. Camera looking east.		

Final tank	RIMG2921.JPG	
11/08/2022 01:28 PM	Photographer: Andi Hodaj	
Secondary Treatment	No CBI	No PII
Overview of the final tank. Camera looking northeast.		

Sand filters	RIMG2922.JPG	
11/08/2022 01:32 PM	Photographer: Andi Hodaj	
Secondary Treatment	No CBI	No PII
Sand filters 3 and 4. Camera looking west.		

Sand filters	RIMG2923.JPG	
11/08/2022 01:33 PM	Photographer: Andi Hodaj	
Secondary Treatment	No CBI	No PII
Sand filters 3 and 4. Camera looking west.		