



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

DATE: *June 13, 2025*

SUBJECT: CLEAN WATER ACT INSPECTION REPORT
Village of Doylestown Wastewater Treatment Plant, Wayne County, Ohio

FROM: Jonathan Moody, Environmental Engineer
WECAB, Multimedia Section

THRU: Brooke Furio, Section Supervisor
WECAB, Multimedia Section

BASIC INFORMATION

Facility Name: Village of Doylestown Wastewater Treatment Plant

Facility Type: *Publicly owned treatment works*

NPDES Permit Number: *OH0021342*

Date(s) of Inspection: April 15 to 16, 2025

EPA Inspector(s):

1. Jonathan Moody
2. Megan Bobb
3. Gabrielle Giampietro

Facility Representative(s): Mark Lightner, Operator in Charge

Contact Email Address:

Owner Contact	Operator Contact	Physical Facility Address
Village of Doylestown 24 S. Portage Street Doylestown, OH 44230	Mark Lightner 330-658-2181 mlightner@Doylestown.com	135 Calaboone Road, Doylestown, Ohio 44230

Inspection Type: Compliance Evaluation Inspection without sampling, with field monitoring.

Facility Notification:

- ☐ Unannounced Inspection
- ☒ Announced Inspection

Arrival Date and Time: 4/15/2025 9:00 AM

Departure Date and Time: 4/16/2025 12:30 PM

OPENING CONFERENCE

- ☒ Presented Credentials
- ☒ Stated authority and purpose of inspection
- ☐ Provided Small Business Resource Information Sheet
- ☒ Small Business Resource Information Sheet not provided. Reason: Current version of the factsheet may not comply with recent Executive Orders.
- ☒ Provided CBI notification to facility

The following information was obtained verbally from Mark Lightner unless otherwise noted.

Company Ownership: *Village of Doylestown, Ohio*

Company Contact Information: 330-658-2181, mlightner@Doylestown.com

Background:

The facility in question is a sewage treatment plant. According to the facility's Discharge Monitoring Reports (DMRs) for the period from January 1, 2023, through December 31, 2024, the reported average daily flow was 0.278 million gallons per day (MGD), while the maximum daily flow recorded was 0.815 MGD. However, as discussed below, the reported maximum value of 6.5 MGD in August 2024 appears to be an error in the DMR.

Process Description:

The plant features a variety of treatment components, including:

- A mechanically cleaned screen,
- Two aerated equalization basins,
- A clarigester, which serves as a combination of a primary clarifier and an anaerobic digester,
- A trickling filter,
- An aeration basin,
- Two final clarifiers,

- Two rotating biological contactors (RBCs),
- A disinfection and dechlorination system, and
- A small post-aeration feed.

The facility discharges its treated effluent into Silver Creek. The facility has limited internal bypasses on the screen and the RBCs, but does not need to utilize them during high flows.

Staff Interview(s):

Facility Operations and Staffing:

Mark Lightner is the operator in charge of the facility, with Joe Petit and Nick Spach providing additional operational support. There are no other staff members or dedicated collections system personnel. The plant is staffed every day, with normal weekday hours from 7:00 AM to 3:30 PM. Weekend staffing is limited to a few hours in the morning.

Onsite Analysis:

The facility conducts onsite analysis for compliance monitoring samples, specifically measuring total suspended solids, pH, chlorine, and dissolved oxygen.

Sanitary Sewer Overflows:

The facility reported sanitary sewer overflows in May and December 2022, prior to Mark Lightner's tenure as the operator. He does not have details regarding these overflows. According to Mark Lightner, there are no known collection system sanitary sewer overflows or constructed reliefs. Basement backups have occurred due to blockages in the sewer laterals and mains.

Collection System and Infrastructure:

The collection system includes seven pump stations. A map in the wastewater treatment building office indicates overflow tanks at two of the pump stations. Mark Lightner is unaware of the history of these overflow tanks and mentioned that modifications were made before his time.

There are six lift stations throughout the collection system, all equipped with alarms. However, only three stations—Meadows, Silver Creek, and Maple Street—can initiate alarm callouts to the operator, which are triggered by power outages rather than high levels. Records of these callouts are not maintained.

Each lift station has backup power, and the entire treatment plant can operate on backup power.

Compliance and Monitoring Issues:

Mark Lightner noted that the Cadmium Compliance Schedule Plan, as required in the NPDES permit, has not been completed.

Copper Exceedances:

In response to recent effluent exceedances, particularly concerning copper levels, Mark Lightner conducted copper sampling in 2024 within the collection system and throughout the treatment facility. A summary of this additional copper monitoring can be found in the records review section. He identified one industrial discharger, Midwest Poly Pack, and one commercial discharger, a funeral home in downtown Doylestown. Although there is agricultural activity near the southeast portion of the collection system, Mark is unaware of any dairies or livestock operations. The plan is to continue increased monitoring in the collection system, with no current plans to alter the copper treatment process.

Ammonia Exceedances:

Regarding the ammonia exceedances in October 2024, Mark Lightner explained that the trickling filter may have been cleaned during that period, and maintenance activities included draining the aeration tank to the holding pond, which could have contributed to the exceedance. There are no plans to modify the ammonia treatment process.

pH Exceedances:

Issues with the inline pH probe prompted Mark Lightner to switch to using a bench-top pH probe, the Oakton PCTS 50, which is calibrated weekly using a three-point calibration method.

Phosphorus Exceedances:

Mark Lightner is uncertain about the cause of the phosphorus exceedances in August 2024. Although there is consideration to increase ferric chloride dosing, there are no plans to change the phosphorus treatment system.

Data Discrepancies:

Mark Lightner is unsure why the August 2024 DMR reported a maximum flow of 6.5 MGD, and onsite records do not provide any clarification.

FACILITY WALK-THROUGH OCCURRED:

Yes

Data Collected and Observations:

Water flows into the facility at the automatically cleaned mechanical bar screen located at the far western end of the facility. Sampling and monitoring for the influent requirements in the NPDES permit are collected from the channel running between the mechanical screen and equalization basin. There was a pH probe (photo 7) and a flow sensor (photo 10) in the channel, and an automatic composite sampler, Hach AS950, with an all-weather enclosure and refrigerated compartment. Composite sample collection was not occurring at the time of the inspection, however the refrigerator was running and the thermometer in the compartment

showed 15 degrees Celsius (Photo 9). Mark Lightner was not certain, but thought the device was set to collect a time-based composite.

At 1:20 PM on 4/15/2025 EPA observed the lift station and overflow tank near Ross Avenue and Summit Street. At the time of the inspection the overflow tank could not be opened. The lift station was equipped with a high-level alarm and a light. The configuration of the lift station and the overflow tank could not be determined at the time of the inspection.

At 1:34 PM on 4/15/2025 EPA observed the lift station and overflow tank near Greenwood Drive and Collier Drive. The lift station was equipped with a high-level alarm and a light. The configuration of the lift station and the overflow tank could not be determined at the time of the inspection.

On 4/16/2025 the inspection resumed at the secondary clarifiers. There are two secondary clarifiers, the western clarifier is also called the upper clarifier, and the eastern clarifier is called the lower clarifier. The overflow weir into the outlet trough, or launderer is a double-sided octagon shaped trough surrounding the center well. The weir plate was smooth, without a saw-toothed pattern. At 9:06 there was flow through gaps in the launderer wall near the support structure (photo 34). There were breakthroughs at several other locations shown in photos 38, and 43 (eastern clarifier). At 9:17 AM EPA observed uneven flow of water over portions of the overflow weir into the secondary clarifier outlet trough, or launderer. This condition is visible in photos 35, 36, 39, 43, 45, and 46 where the inside side of the launderer wall is dry.

At 9:18 AM there were leaves and debris located on the surface of the clarifier, adjacent to the overflow weir on the eastern (lower) clarifier (photo 44). Both the eastern and western clarifiers had scum and floating material on the surface of the water inside the center wells, upstream of the baffles and overflow weirs (photos 36, 39, 45 and 46).

At 9:38 AM EPA observed the effluent sampling monitoring station. The station was a utility sink which held a continuous flow of water pumped from the upstream end of the chlorine contact basin. There was a dissolved oxygen probe and a pH probe in the utility sink. The dissolved oxygen probe was used for Permit compliance. The pH probe did not work, and a benchtop pH probe was used for grab measurements for Permit compliance purposes. The sink was the location of Monitoring Point 03.

There was a NIST traceable thermometer located in the refrigerator used to hold the composite sample bottle. Samples were not being collected at the time of the inspection, however the refrigerator was running and the thermometer showed 3 degrees Celsius. The calibration on the thermometer expired on April 18, 2021.

Per Mark Lightner, the composite sampler is programmed for a time-based composite.

At 10:09 AM EPA conducted field monitoring (monitoring point 06) at the outlet from the chlorine contact chamber, immediately downstream of the location where dechlorination chemicals will be added. The disinfection and dechlorination system were not operating at the time of the inspection. The system is not required to operate over the winter months November through April.

Photos and/or Videos: were taken during the inspection.
Photos taken during the inspection are included in Appendix B.

Field Measurements: were taken during this inspection.

Documents reviewed onsite:

While onsite Megan Bobb and Gabrielle Giampietro reviewed selected copies of the August and October 2023 and May and August 2024 DMRs and laboratory reports.

The DMR for October 2023 and bench sheet had discrepancies with the pH values for October 28th and 29th. The effluent pH values reported were 9.87 and 9.86 respectively, the values on the bench sheet were 6.90 and 6.87 respectively. EPA obtained copies of this DMR or bench sheet.

The DMR for October 2023 reports a value of 0.015 MGD for the flow on October 12, 2023. The bench sheet with the daily flow values shows a value of 0.215 MGD on October 12, 2023. EPA obtained copies of the DMR and the bench sheet.

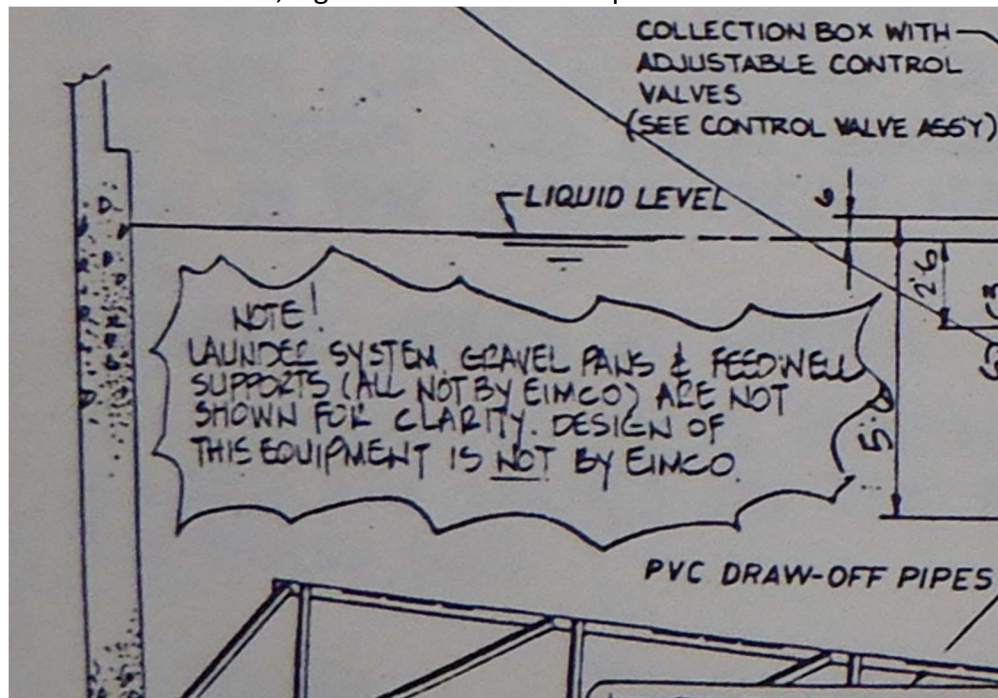
The DMR for August 2024 reports a Total Kjeldahl Nitrogen (TKN) value of 5.31 mg/L in the effluent for a sample collected on August 7, 2024. The laboratory report for the sample reported a TKN value of 5.13 mg/L. There is no permit compliance limit for TKN. EPA obtained copies of the partial August 2024 DMR and laboratory report.

The DMR for August 2024 reported a max flow of 6.5 MGD, but the bench sheet reported a max flow of 0.666 MGD. EPA did not obtain copies during the inspection, but copies of bench sheet and DMR were emailed on June 9, 2025.

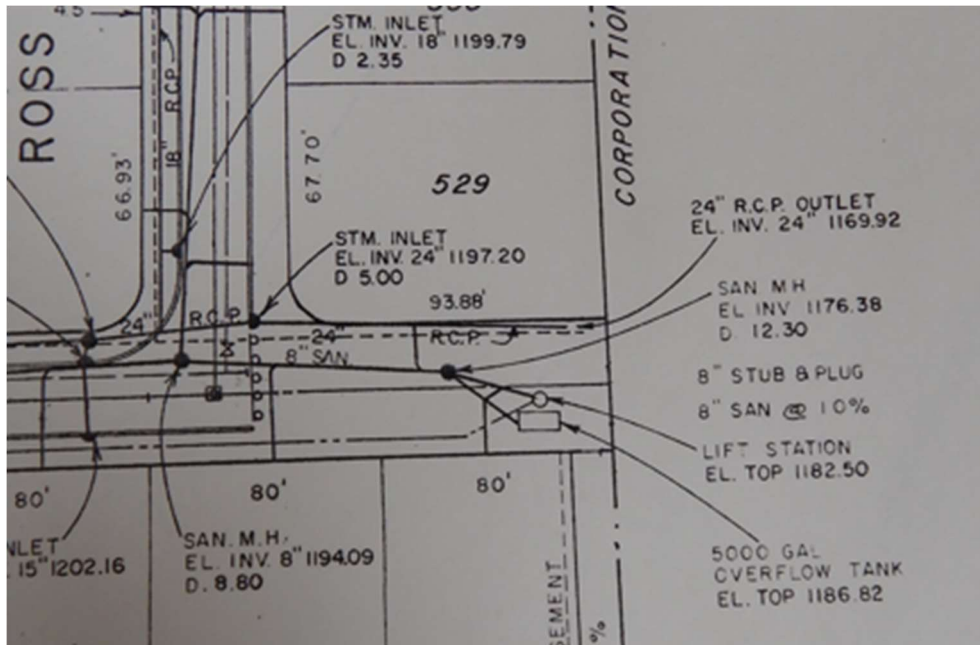
EPA also reviewed copies of a hard copy manual for operations and maintenance produced by Hammontree & Associates. The cover page of the manual was missing, but the document contained information on all of treatment units which were currently in use at the facility. These include the equalization basin, the clarigester, the trickling filter, the retrofitted aeration basin and the RBCs.

The manual included diagrams of the secondary clarifier with a note stating *“Launder system, gravel pans & Feedwell supports (all not by EIMCO) are not shown for clarity. Design of this equipment is not by EIMCO.”* A screen grab of the note is provided on the next page.

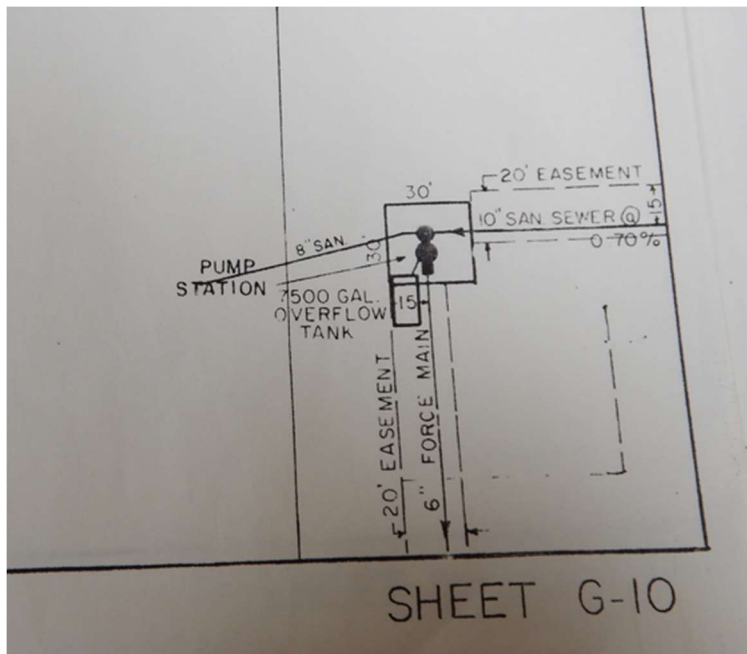
From DSCN2614.JPG, Figure 5.11-1 from the Operations Manual.



Clip of image DSCN2590.JPG Drawing of the lift station and overflow tank at Ross Avenue and Summit Street.



Clip of photo DSCN2591.JPG – Drawing of the lift station and overflow tank at Greenwood Drive and Collier Drive.



Requested documents:

- The laboratory reports and summary table for the additional copper sampling conducted between October 2024 and February 2025.

- The manufacturer and model numbers for the pH equipment at the influent and effluent monitoring stations, and the most recent calibration records for those items.
- For the flow monitoring devices at the influent and effluent, the manufacturer and model numbers and the most recent calibration records for those items.

Documents Received From Facility:

On May 8, 2025 EPA received two files from the Mark Lightner. The files included:

Cal record and copper test_.pdf – This is a PDF which includes the 2022, 2023 and 2025 calibration records and laboratory reports for the additional copper monitoring conducted in 2024.

CoppertestingWWTP.xlsx - Summary document with the results of the additional copper monitoring conducted in 2024.

EPA summary of the **Cal record and copper test_.pdf** document

Monitoring device	Calibration Report
Effluent Flow Meter - Greyline Instruments OCF 5.0, Open Channel ultrasonic, Effluent Flow Meter, Sensor Model PZ15 in a 12" palmer Bowlus Flume.	Zero flow calibration was conducted on April 21, 2025.
Effluent DO monitoring - RDO, Pro X Optical	Calibration notes indicate that a sensor cap replacement is required.
Effluent pH probe - USABB Model 28218, Differential Effluent pH Probe, 02 Wire	pH probe is out of compliance, probe cannot be field calibrated, replacement only.
Influent Flow Meter - Hach AV9000, Area Velocity, Influent Flow Meter Sigma Submerged AV Probe	Performed an air and a submerged sensor calibration
Influent pH probe - USABB Model 28218, Differential Effluent pH Probe, 02 Wire	pH probe is out of compliance, probe cannot be field calibrated, replacement only.

The table below is the contents of the document **CoppertestingWWTP.xlsx**

Copper Testing Doylestown WWTP													
Date:	Influent	Clarigester P.C #1	T.Filter Splitter box P.C#2	Aeration Tank P.C#3	Upper Clarifier P.C#4	Lower Clarifier P.C#5	Effluent	P.S#1 Meadows	P.S#2 Maple St	P.S#3 Hidden Pond	P.S#4 Collier	P.S#5 Summit	P.S#6 Silver Creek
10/2/2024	39	36	44	23	<10	<10	<10	-	-	-	-	-	-
11/6/2024	49	41	60	90	<10	<10	<10	1380	82	95	70	79	154
12/11/2024	57	51	51	61	<10	<10	<10	<10	75	60	53	70	55
1/28/2025	59	**	39	53	20	28	15	23	128	95	83	103	61
2/5/2025	-	-	-	-	-	-	<10	-	-	-	-	-	-

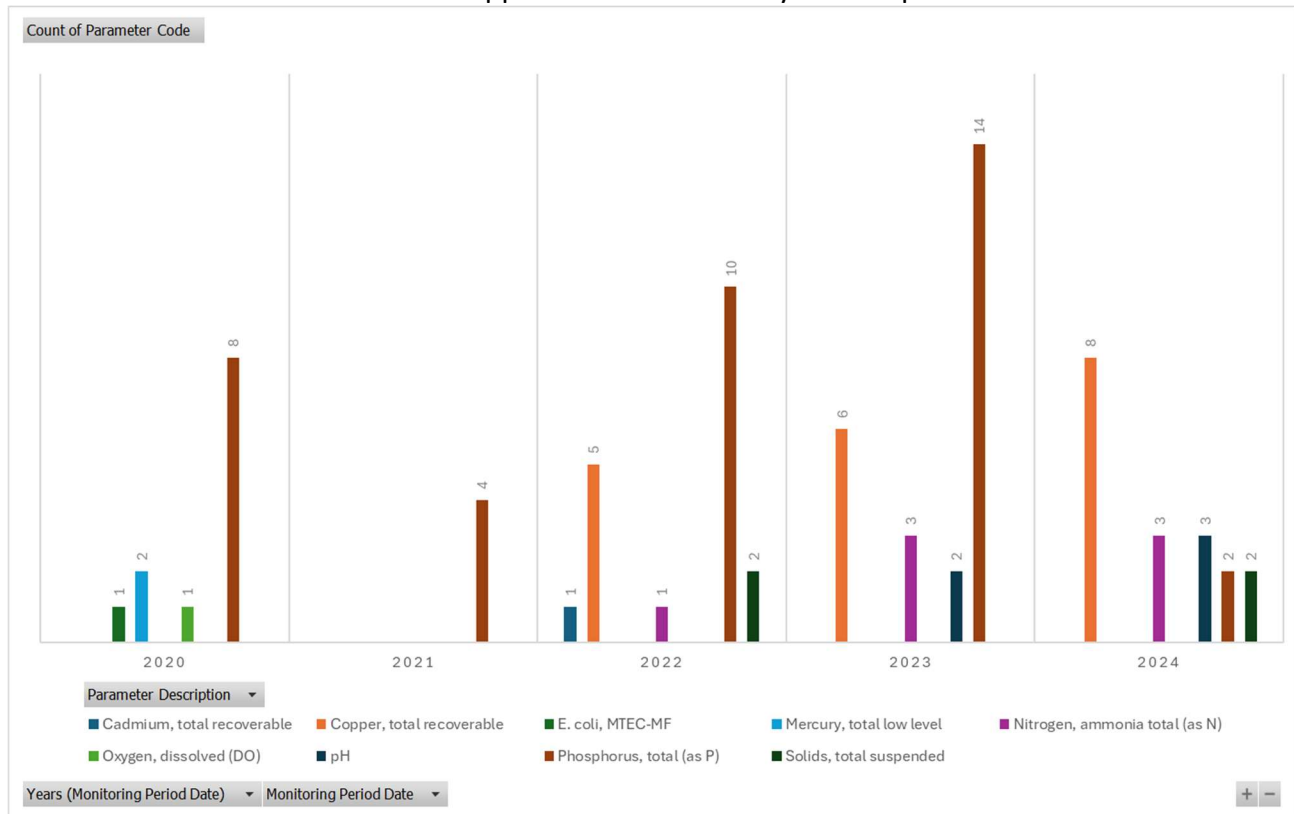
CLOSING CONFERENCE

- ☒ Provided U.S. EPA point of contact to the facility.
- ☒ Explained Inspection Report Process
- ☒ Confirm CBI status at end of closing conference. No CBI claimed.
- ☒ Discussed Preliminary Area(s) of Concern

Areas of Concern:

1. NPDES Permit No. OH0021342 Part I. A. tables 1 and 2 include the interim and final effluent limitations for Outfall 001.

Between January 1, 2020 and December 31, 2024 there were 78 instances of effluent exceedances. In the most recent 12 months the facility experienced exceedances for pH, total suspended solids, copper, phosphorous, and ammonia. A full table of exceedances is included in Appendix D. A summary chart is provided below.



2. NPDES Permit No. OH0021342 Part III – General Conditions 3. Facility, Operation, and Quality Control A. “At all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities, or systems installed or used by the permittee necessary to achieve compliance with the terms and conditions of this permit”

EPA noted the following areas of concerns regarding the facility operation:

- The thermometer in the sample storage compartment at the influent monitoring station showed 15 degrees C. There is not a record of a verification check against a NIST traceable device (Photo 9).
 - There were gaps or leaks at the supports for the weir plates at the overflow from the secondary clarifier. Additionally, the weir edges were straight and not level which resulted in an uneven flow over the weir, with some locations being dry and showing no water flow over the weir (Photos 33 through 46).
 - Floating debris, scum and leaves were present on the surface of the secondary clarifier. The clarifier was not equipped with an automatic scum removal equipment downstream of the center well baffle.
 - The most recent calibration report for the effluent pH probe, effluent DO probe, and the influent pH probe indicated that all three probes were not functioning properly. The facility has begun using alternative equipment for compliance measurements.
3. **NPDES Permit No. OH0021342 Part II. F.** *“Composite samples shall be comprised of a series of grab samples collected over a 24-hour period and proportionate in volume to the sewage flow rate at the time of sampling. Such samples shall be collected at such times and locations, and in such a fashion, as to be representative of the facility's overall performance.”*

The composite sampler at the effluent location was programed to collect samples for a time-based composite, instead of the volume (or flow) based proportioning required by the Permit. The composite sampler at the influent had a flow meter, but the programing could not be determined at the time of the inspection.

The effluent DO monitoring is conducted at the upstream end of the chlorine contact chamber. The facility uses a bisulfite based dechlorination chemical which is introduced at a location downstream of the DO monitoring.. This chemical is an oxygen scavenger and can reduce the dissolved oxygen concentration.

4. **NPDES Permit No. OH0021342 Part III. 4. Reporting** *“A. Monitoring data required by this permit shall be submitted monthly on Ohio EPA 4500 Discharge Monitoring Report (DMR) forms using the electronic DMR (e-DMR) internet application.”*

EPA noted the following discrepancies between onsite records and the DMRs

- October 12, 2023 effluent flow was reported on the DMR as 0.015 MGD, the bench sheet value was 0.215 MGD.
- The October 28th and 29th 2023 effluent pH values were reported on the DMR as 9.87 and 9.86 respectively, and the effluent pH values on the bench sheet were 6.90 and 6.87.
- August 7, 2024 Lab result for TKN was 5.31, lab value was 5.13

- August 2024 maximum flow was reported as 6.5 MGD when the bench sheets showed 0.666 MGD. The 6.5 MGD reported flow caused the phosphorous and TSS loading exceedances in August 2024. The loading violations were not associated with concentration limit exceedances.

5. **NPDES Permit No. OH0021342 Part I. C. 1. Schedule of Compliance** *“The permittee shall attain compliance with the effluent design requirements listed in the final effluent table for Outfall 3PB00014001 as expeditiously as possible, but no later than the dates developed in accordance with the following schedule...”*

At the time of the inspection the status reports for compliance with the cadmium effluent limits had not been completed. The final effluent limit became effective in November 2024. Previous monitoring from January 2020 through December 2024 shows cadmium levels below the final monthly average limit of 5.1 ug/L, for all periods except October 2022 when the system experienced an effluent exceedance.

Appendices and Attachments

- A. Aerial Image
- B. Digital Image Log
- C. Field Measurement Data
- D. Table of Effluent Exceedances

DIGITAL SIGNATURES

Report Author Name and Title: Jonathan Moody, Environmental Engineer

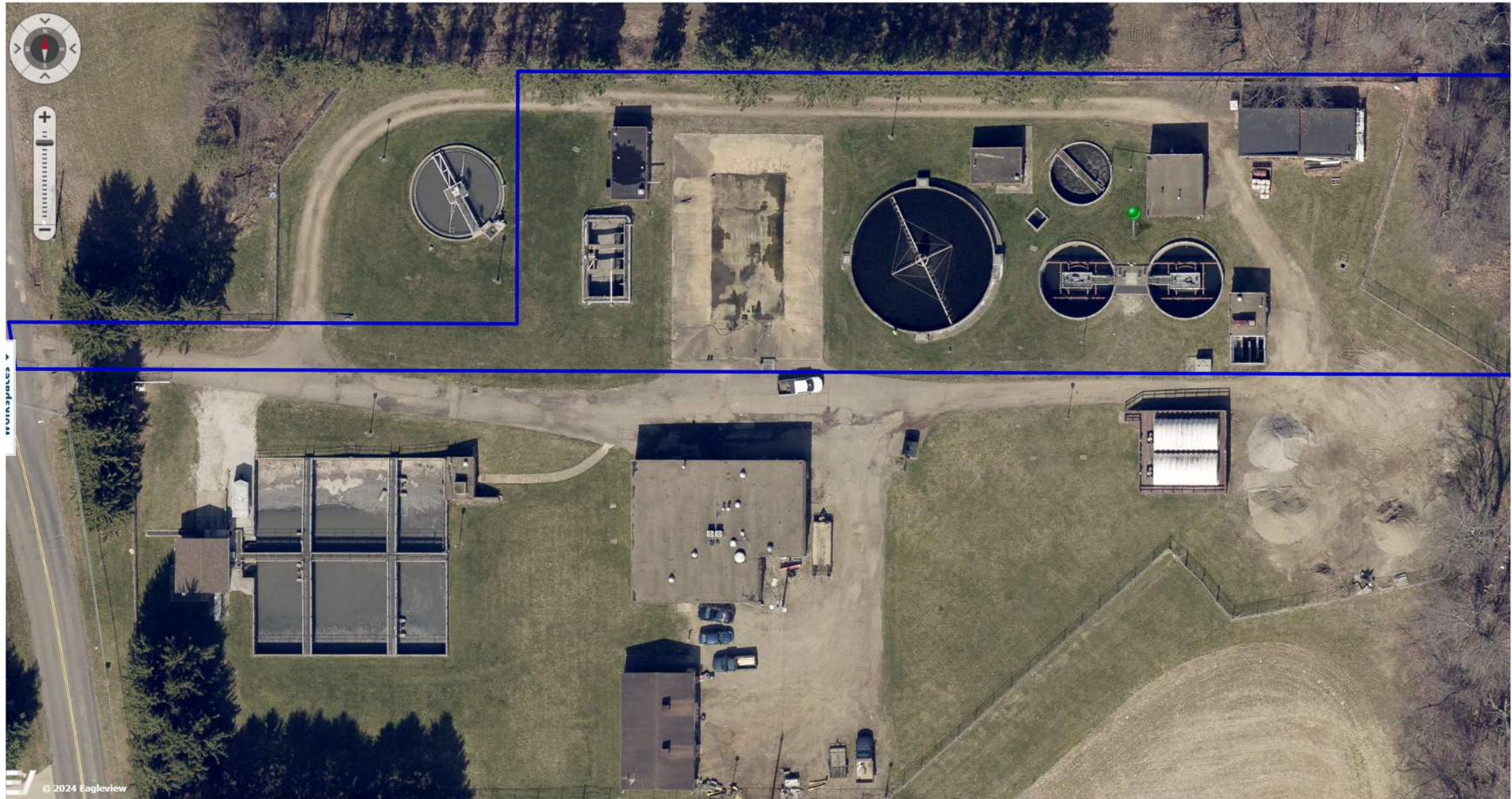
Report Author Signature: Moody, Jonathan  Digitally signed by Moody, Jonathan
Date: 2025.06.13 09:15:42 -04'00'

Section Supervisor Name and Title: Brooke Furio, Multimedia Section Supervisor

Section Supervisor Signature: BROOKE FURIO  Digitally signed by BROOKE FURIO
Date: 2025.06.13 09:33:40 -04'00'

Facility Name: Village of Doylestown Wastewater Treatment Plan
Facility Location: 135 Calaboone Road, Doylestown, 44230
Date of Inspection: April 15 and 16, 2025

APPENDIX A: AERIAL



map: Auto (Ortho) • Dates: All • < Image 1 of 36 > 03/12/2024

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025

APPENDIX B: DIGITAL IMAGE LOG

Photographer Name: Jonathan Moody

Camera Model, S/N: Nikon CoolPix W300 S/N:31034420

Village of Doylestown Wastewater Treatment Plant Digital Photo Log

Photos taken with Nikon CoolPix W200 S/N 31034420

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



1: DSCN2526.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 10:13 AM

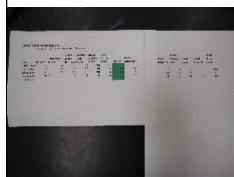
Camera Direction: Inside

Description: Sanitary system map.

Facility Name: Village of Doylestown Wastewater Treatment Plan

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2: DSCN2527.JPG

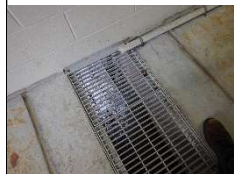
Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 10:13 AM

Camera Direction: Inside

Description: Summary of the 2024 and 2025 copper monitoring data.



3: DSCN2528.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:03 AM

Camera Direction: Inside

Description: Inside the screening building looking at the channel with the pH probe and flow monitoring device at the headworks.



4: DSCN2529.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:04 AM

Camera Direction: Down, west

Description: Unused fixed screen located at the plant headworks. This location could be used to bypass the mechanically cleaned bar screen. The channel connects into the equalization basins.



5: DSCN2530.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:08 AM

Camera Direction: Northeast

Description: Northern cell of the equalization basins. The floor is sloped toward the camera. Floating material is accumulated on the surface. Dried scum is raked out and disposed of in dumpsters.



6: DSCN2531.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:08 AM

Camera Direction: Down, West

Description: In a channel connecting the mechanically cleaned bar screen to the equalization basin. Compliance sampling for the influent is collected from water in this channel. This was the location of Monitoring Point 01.

Facility Name: Village of Doylestown Wastewater Treatment Plan

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7: DSCN2532.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:10 AM

Camera Direction: Down

Description: In a channel connecting the mechanically cleaned bar screen to the equalization basin. pH probe at the influent monitoring station.



8: DSCN2533.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:10 AM

Camera Direction: West

Description: Readout for the pH probe shown in Photo 7 at the influent monitoring location. This measurement is not used for compliance monitoring.



9: DSCN2534.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:11 AM

Camera Direction: Inside

Description: Thermometer inside the sample collection compartment of the automatic sampler. At the time of the inspection, samples were not being collected, the cooling function seemed active, and the thermometer was reading approximately 15 degrees C.



10: DSCN2535.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:17 AM

Camera Direction: Down

Description: In a channel connecting the mechanically cleaned bar screen to the equalization basin. There was an Area-Velocity flow measurement device at this location, material had accumulated on the device, and the operator was uncertain about the purpose of the device, but was able to produce a calibration report.



11: DSCN2536.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:18 AM

Camera Direction: Southwest

Description: At the channel connecting the mechanically cleaned bar screen to the equalization basin. Composite compliance samples are collected using a Hach AS950 shown in this photo.

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12: DSCN2537.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:19 AM

Camera Direction: South

Description: At the south cell of the equalization basin. There were mechanical mixers present, the operator was unsure if they still functioned.



13: DSCN2538.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:23 AM

Camera Direction: Down

Description: Skimmer arm on the clarigester.



14: DSCN2539.JPG

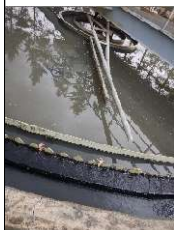
Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:24 AM

Camera Direction: North

Description: Skimmer arm on the clarigester. This side of the skimmer did not have a baffle piece at the farthest edge. The operator thought this was intentional.



15: DSCN2540.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:24 AM

Camera Direction: North

Description: Skimmer arm on the clarigester, this side of the skimmer did not have a baffle piece at the farthest edge. The operator thought this was intentional.



16: DSCN2541.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:27 AM

Camera Direction: Down

Description: Photo shows the open-air digester/sludge holding basin. The operator said this was sometimes aerated. At the time of the inspection, the aerators were not active.

Facility Name: Village of Doylestown Wastewater Treatment Plan

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Date of Inspection: April 15 and 16, 2025



17: DSCN2542.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:29 AM

Camera Direction: North

Description: A holding lagoon. Water enters this lagoon from sump pump in the office building or from a temporary pump at the clarigester. Water is pumped out of the clarigester, as needed, during high flow to prevent the clarigester from overflowing. This holding lagoon is dewatered to the equalization basin.



18: DSCN2543.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:30 AM

Camera Direction: South

Description: Trickling filter.



19: DSCN2544.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:31 AM

Camera Direction: South

Description: Trickling filter.



20: DSCN2545.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:34 AM

Camera Direction: Down

Description: Aeration basin. The basin was an old clarifier that was refitted to be used as an aeration tank.



21: DSCN2546.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:36 AM

Camera Direction: East

Description: At the aeration basin, looking toward the location where ferric chloride is added to the effluent from the aeration basin.

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22: DSCN2547.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:38 AM

Camera Direction: Down

Description: At the aeration basin, looking toward the location where ferric chloride is added to the effluent from the aeration basin.



23: DSCN2548.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:43 AM

Camera Direction: Inside

Description: Label on the drum of ferric chloride.



24: DSCN2549.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:46 AM

Camera Direction: Down

Description: Secondary clarifier. At the time of the photo excessive wind was causing waves on the surface of the clarifier and the field portion of the treatment plant inspection was postponed till 4/16/25.



25: DSCN2550.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 11:46 AM

Camera Direction: Down

Description: Secondary clarifier. At the time of the photo excessive wind was causing waves on the surface of the clarifier and the field portion of the treatment plant inspection was postponed till 4/16/25.



26: DSCN2551.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 1:20 PM

Camera Direction: South

Description: Access hatch to the lift station near Ross Avenue and Summit Street.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



27: DSCN2552.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 1:20 PM

Camera Direction: North

Description: Access hatch to the lift station near Ross Avenue and Summit Street. The concrete structure in the background is the “overflow tank”.



28: DSCN2553.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 1:20 PM

Camera Direction: North

Description: Control panel for the lift station shown in Photo 26.



29: DSCN2554.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 1:21 PM

Camera Direction: Down

Description: Log book for the electrical runtime gauges in the lift station control panel shown in Photo 28.



30: DSCN2555.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 1:23 PM

Camera Direction: South

Description: Alarm light on the lift station near the intersection of Ross Avenue and Summit Street.



31: DSCN2556.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 1:23 PM

Camera Direction: Northeast

Description: At lift station near the intersection of Ross Avenue and Summit Street. The concrete structure in the foreground is the overflow tank, there is ravine with a stormsewer outlet in the background.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



32: DSCN2557.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/15/2025 1:34 PM

Camera Direction: North

Description: Control panel at the location of the lift station near Greenwood Drive and Collier Drive.

Day Two: 4/16/2025



33: DSCN2558.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:06 AM

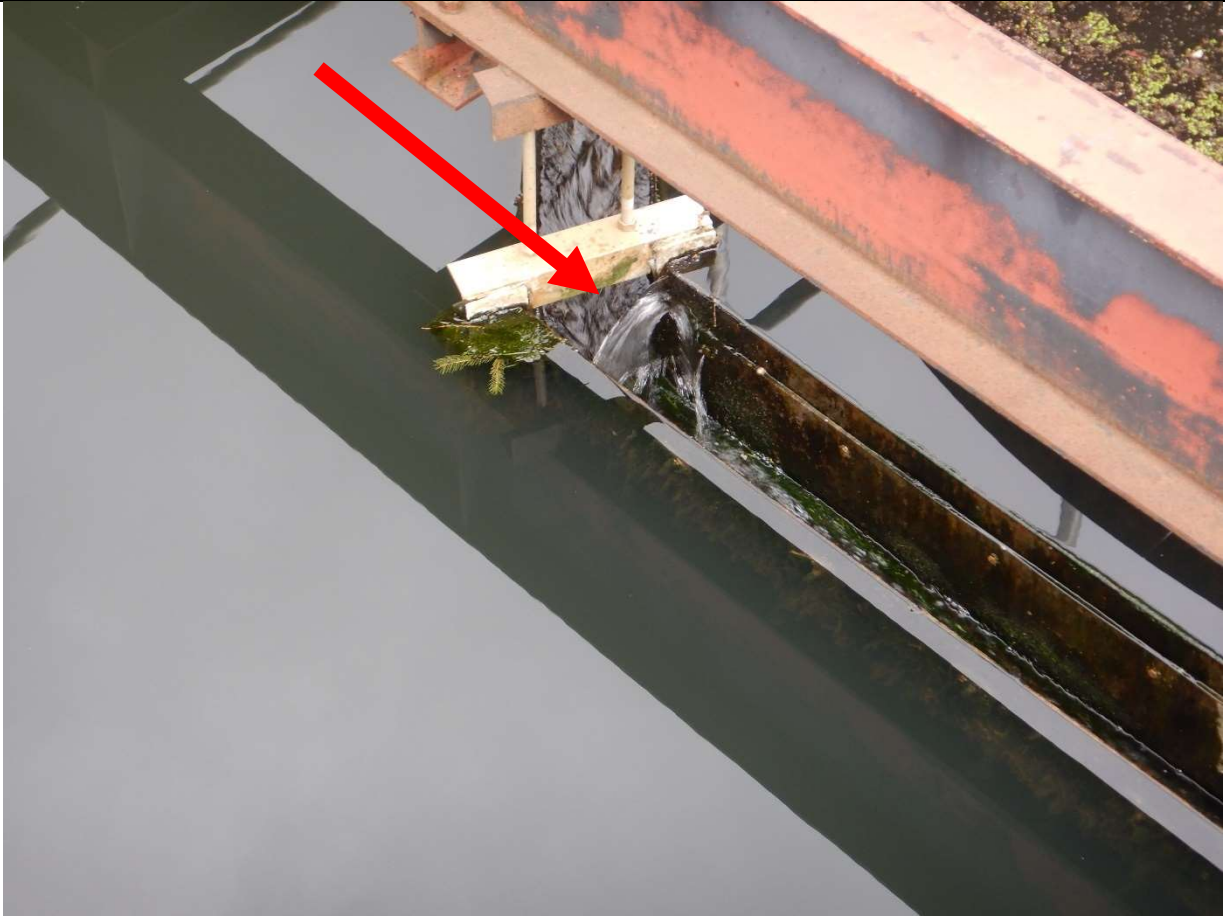
Camera Direction: Northwest

Description: Western secondary clarifier.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



34: DSCN2559.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:06 AM

Camera Direction: Northwest

Description: Western secondary clarifier, closeup of the launderer, with the straight overflow weir. At the time of the inspection, water was flowing through gaps (location marked with arrow) between the weir plates and the launderer trough.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



35: DSCN2560.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:10 AM

Camera Direction: Down

Description: Western secondary clarifier, closeup of the launderer, with the straight overflow weir. At the time of the inspection, water flow over the weir was uneven, with some locations of the weir appearing dry. The arrow indicates one location of a dry spot on the launderer (outlet) side of the weir.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



36: DSCN2561.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:10 AM

Camera Direction: Down

Description: Western secondary clarifier, closeup of the launderer, with the straight overflow weir. At the time of the inspection, water flow over the weir was uneven, with some locations of the weir appearing dry. The arrow indicates one location of a dry spot on the launderer (outlet) side of the weir.



37: DSCN2562.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:11 AM

Camera Direction: Down

Description: Western secondary clarifier, closeup of the launderer, with the straight overflow weir.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



38: DSCN2563.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:11 AM

Camera Direction: Down

Description: Western secondary clarifier, closeup of the launderer, with the straight overflow weir. At the time of the inspection, water was flowing through gaps (location marked with arrow) between the weir plates and the launderer trough.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



39: DSCN2564.JPG

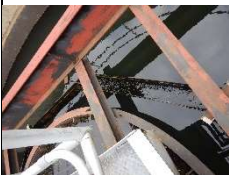
Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:11 AM

Camera Direction: Down

Description: Western secondary clarifier, closeup of the launderer, with the straight overflow weir. At the time of the inspection, water flow over the weir was uneven, with some locations of the weir appearing dry. The arrow indicates one location of a dry spot on the launderer (outlet) side of the weir.



40: DSCN2565.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:14 AM

Camera Direction: Down

Description: Western secondary clarifier, closeup of the launderer, with the straight overflow weir.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



41: DSCN2566.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:17 AM

Camera Direction: East

Description: Ferric Chloride storage totes.



42: DSCN2567.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:17 AM

Camera Direction: East

Description: Eastern secondary clarifier.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



43: DSCN2568.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:17 AM

Camera Direction: Down

Description: Eastern secondary clarifier, closeup of the launderer, with the straight overflow weir. At the time of the inspection, water flow over the weir was uneven, with some locations of the weir appearing dry. The circle indicates a location where water is flowing through a gap at the weir support. The arrow indicates a location where the backside of the weir is dry.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



44: DSCN2569.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:18 AM

Camera Direction:

Description: Eastern secondary clarifier, closeup of the launderer, with the straight overflow weir. At the time of the inspection, there was free floating debris and leaves accumulating against the outside edge of the weir. The weir was not equipped with a skimming baffle outside of the center well.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



45: DSCN2570.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:19 AM

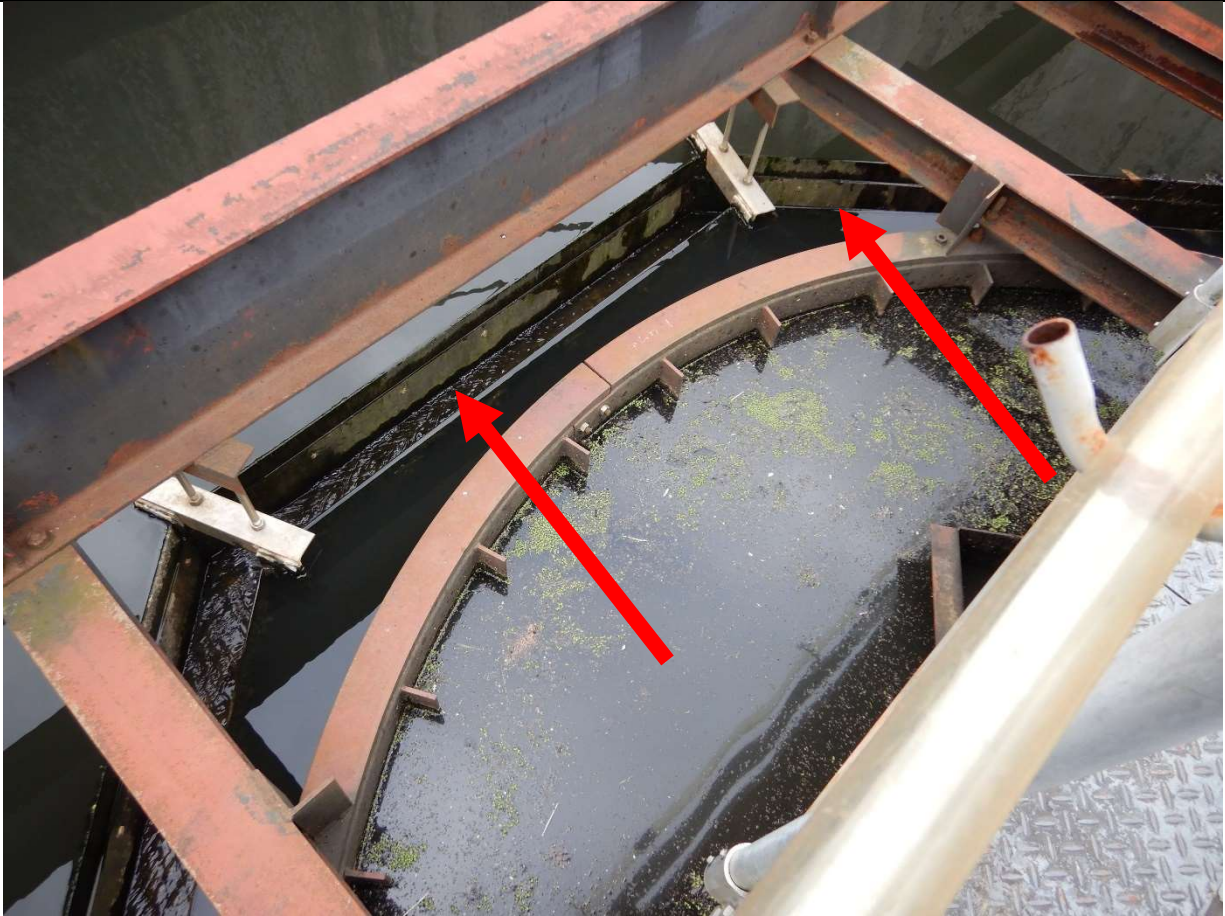
Camera Direction: Down

Description: Eastern secondary clarifier, closeup of the launderer, with the straight overflow weir. At the time of the inspection, water flow over the weir was uneven, with some locations of the weir appearing dry. The arrow indicates a location where the launderer (outlet) side of the weir is dry.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



46: DSCN2571.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:19 AM

Camera Direction: Down

Description: Eastern secondary clarifier, closeup of the launderer, with the straight overflow weir. At the time of the inspection, water flow over the weir was uneven, with some locations of the weir appearing dry. The arrows indicate a location where the launderer (outlet) side of the weir is dry.



47: DSCN2572.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:21 AM

Camera Direction: Southeast

Description: Looking at the lift station downstream of the secondary clarifiers that provides flow to the rotating biological contactors.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



48: DSCN2573.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:23 AM

Camera Direction: East

Description: Control panel for the lift station downstream of the secondary clarifiers that provides flow to the rotating biological contactors. At the time of the inspection, the toggle in the middle of the panel, labeled “Flow Control” was turned to off. The operator was unsure of the purpose of this device.



49: DSCN2574.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:25 AM

Camera Direction: Inside

Description: Looking in one of the observations ports for the rotating biological contactors.



50: DSCN2575.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:26 AM

Camera Direction: East

Description: Looking between the rotating biological contactors.



51: DSCN2576.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:33 AM

Camera Direction: Southeast

Description: Looking at an access hatch to one of the rotating biological contactors.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



52: DSCN2577.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:35 AM

Camera Direction: Down

Description: At the upstream end of the chlorine contact chamber. From the left to right, the small diameter plastic pipe was not connected and remained from a previous feed, the middle grey plastic pipe is for sample collection for the composite sampler and continuous monitoring equipment. The grey pipe on the right is the free chlorine feed.



53: DSCN2578.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:36 AM

Camera Direction: Down

Description: At the downstream end of the chlorine contact chamber. This the location where the dechlorination chemical is added prior to the final discharge.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



54: DSCN2579.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:38 AM

Camera Direction: Inside

Description: Compliance sampling and continuous monitoring equipment at the effluent. The middle grey pipe in Photo 52 pumps water into this utility basin. There is a pH probe and a DO probe in this sink, but these are not used for compliance. Compliance measurements for DO and pH are collected from this sink using other equipment. The sampling tube for the composite sample pulls from this sink. This is the location of Monitoring Point 03.



55: DSCN2580.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:42 AM

Camera Direction: Inside

Description: Readout with Flow, DO and pH. The operator does not use this readout for DO and pH.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



56: DSCN2581.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:42 AM

Camera Direction: Inside

Description: Readout for the flow totalizer. This is the total 24hr volume used for compliance reporting.



57: DSCN2582.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:44 AM

Camera Direction: Inside

Description: Temperature probe for the sample collection compartment on the composite sampler. At the time of the inspection the thermometer was reading 3 degrees.



58: DSCN2583.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:45 AM

Camera Direction:

Description: Temperature probe for the sample collection compartment on the composite sampler. The composite sampler is a Hach AS950.



59: DSCN2584.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:45 AM

Camera Direction: Inside

Description: The thermometer at the composite sampler was a NIST traceable thermometer with a calibration expiration date of April 18, 2021.



60: DSCN2585.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:55 AM

Camera Direction: East

Description: Signage at outfall.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



61: DSCN2586.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 9:57 AM

Camera Direction: Down, North

Description: Receiving stream upstream of the outfall. Location of MP 04.



62: DSCN2587.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 10:01 AM

Camera Direction: North

Description: Receiving stream downstream of the outfall. Location of MP 05.



63: DSCN2588.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 10:02 AM

Camera Direction: Down, East

Description: Receiving stream downstream of the outfall. Location of MP 05.



64: DSCN2589.JPG

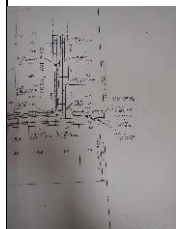
Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 10:05 AM

Camera Direction: Down

Description: Effluent flow monitoring location. There was a primary control device in this manhole.



65: DSCN2590.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 10:17 AM

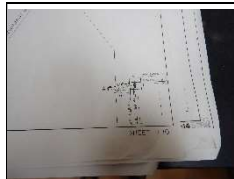
Camera Direction: Down

Description: Drawing of the lift station and overflow tank at Ross Avenue and Summit Street.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025



66: DSCN2591.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 10:19 AM

Camera Direction: Down

Description: Drawing of the lift station and overflow tank at Greenwood Drive and Collier Drive.

DSCN2592.JPG Through DSCN2640.JPG

Photos of the operations and maintenance manual produced by Hammontree & Associates.



67: DSCN2641.JPG

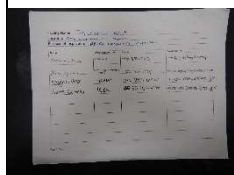
Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 11:23 AM

Camera Direction: Inside

Description: Reagent water treatment system at laboratory.



68: DSCN2642.JPG

Location: Doylestown Wastewater Treatment Plant

Photographer: Jonathan Moody

Date/Time: 4/16/2025 12:09 PM

Camera Direction: down

Description: Sign-in sheet.

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025

APPENDIX C: FIELD MEASUREMENT DATA

Dates and times used in this appendix are in the timezone local to the inspection site.

Jonathan Moody conducted field monitoring using an In-Situ AquaTROLL 600 (AT600) S/N 1079129. The AT600 was equipped with a temperature/conductivity sensor, pH/ORP sensor, Rugged Dissolved Oxygen (RDO) sensor and a turbidity sensor. Table 1 summarizes the methods used by the AT600 sensors.

Table 2 below shows the summary of the monitoring. The AT600 was calibrated on April 10, 2025 at 1:20 PM using a 3-point pH calibration with pH 4, 7, and 10 buffers. These calibrations were performed in the Region 5 office in Westlake, Ohio. The RDO sensor was calibrated using the 100% saturation method on April 15 and 16, 2025 onsite at the facility and prior to monitoring each day. The RDO sensor calibration was performed on-site just before starting the field monitoring. The turbidity and temperature sensors both have a factory calibration. Calibration information is documented in the field notebook for this compliance inspection and in the Calibration Report generated by the VuSitu App and appended to the end of this appendix.

A sensor verification was conducted on the pH sensor on April 16, 2025 at 2:50 PM. The summary of the verification is included in Table 4. The pH sensor drift was within 0.1 pH SU. Table 3 summarizes the sensor verification results.

Table 1 – AT600 Sensors and Methods			
Parameter	Sensor	Units	Method
pH	pH/ORP	SU	SM 4500-H+/EPA 150.2
ORP	pH/ORP	mV	SM 2580
Specific Conductance	Conductivity/ Temperature	uS/cm	SM 2510/EPA 120.1 +/- 1,400 mV
Temperature	Conductivity/ Temperature	Celsius	EPA 170.1
Dissolved Oxygen	RDO	mg/L	EPA-approved In-Situ Methods: 1002-8-2009, 1003-8-2009, 1004-8-2009 Compliant with ASTM D888-18 Method C and ISO 17289 methods
Turbidity	Turbidity	NTU-eq	ISO 7027

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025

Table 2: Summary of Field Monitoring

<i>Date/Time</i>	<i>Ref. #</i>	<i>Location</i>	<i>Sp. Cond. (uS/cm)</i>	<i>pH (SU)</i>	<i>RDO (mg/l)</i>	<i>Turbidity (NTU)</i>
4/15/2025 11:09 AM	MP-01	Headworks, downstream of the bar screen at the location where influent compliance samples are collected	1704.5	7.28	6.85	112.9
4/15/2025 11:39 AM	MP-02	Downstream end of the aeration basin	1323.7	7.19	6.99	1586.7
4/16/2025 9:42 AM	MP-03	Effluent compliance monitoring location for 001. Utility sink.	-	6.82d	11.19	4.5
4/16/2025 9:59	MP-04	In Silver Creek upstream of the discharge pipe outlet.	-	7.69	13.21	0
4/16/2025 10:02	MP-05	In Silver Creek, downstream of the discharge pipe outlet.	-	7.69	12.43	0.1
4/16/2025 10:09	MP-06	At the end of the chlorine contact chamber.	-	7.57	10.88	1.79

Table 3: pH Sensor Verification Check				
Date/Time	Post-Inspection pH	Verification Buffer	Pre-Inspection pH¹	Difference²
4/16/2025 2:50 PM	3.96	pH 4.00 buffer verification check	4.00	-0.04
4/16/2025 2:50 PM	6.98	pH 7.00 buffer verification check	7.02	-0.04
4/16/2025 2:50 PM	10.00	pH 10.00 buffer verification check	10.05	-0.05

1. Pre-inspection pH is the post calibration pH from the pre-inspection calibration report.
2. Difference between pre-inspection and post-inspection values

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025

Calibration Report

Instrument Aqua TROLL 600 Vented
Serial Number 1079129
Created 4/15/2025

Sensor Conductivity

Serial Number 1078227
Last Calibrated 3/27/2025

Calibration Details

TDS Conversion Factor (ppm)	0.65
Cell Constant	1.01
Offset	0.00 µS/cm
Reference Temperature	25.00 °C

Calibration Point 1

Pre Measurement

Actual Conductivity	7,336.9 µS/cm
Specific Conductivity	7,987.8 µS/cm

Post Measurement

Actual Conductivity	7,348.1 µS/cm
Specific Conductivity	8,000.0 µS/cm

Sensor Turbidity

Serial Number 1010219
Last Calibrated Factory Defaults

Sensor RDO

Serial Number 1068110
Last Calibrated 4/15/2025

Calibration Details

Slope	1.0551165
Offset	-0.00 mg/L

Calibration point 100%

Concentration	9.31 mg/L
Pre Measurement	102.49 %Sat
Post Measurement	100.00 %Sat
Temperature	14.02 °C
Barometric Pressure	967.45 mbar

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025

Sensor	pH/ORP
Serial Number	1039130
Last Calibrated	4/10/2025

Calibration Details

Calibration Point 1

pH of Buffer	4.00 pH
pH mV	144.9 mV
Temperature	21.26 °C

Pre Measurement

pH	4.00 pH
pH mV	144.9 mV

Post Measurement

pH	4.00 pH
pH mV	143.1 mV

Calibration Point 2

pH of Buffer	7.02 pH
pH mV	-29.3 mV
Temperature	21.21 °C

Pre Measurement

pH	7.00 pH
pH mV	-29.3 mV

Post Measurement

pH	7.02 pH
pH mV	-29.0 mV

Calibration Point 3

pH of Buffer	10.05 pH
pH mV	-194.1 mV
Temperature	21.14 °C

Pre Measurement

pH	10.06 pH
pH mV	-194.1 mV

Post Measurement

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025

pH 10.05 pH
pH mV -191.6 mV

Slope and Offset 1

Slope -57.71 mV/pH
Offset -28.2 mV

Slope and Offset 2

Slope -54.39 mV/pH
Offset -28.3 mV

ORP

ORP Solution	Quick Cal
Offset	58.3 mV
Temperature	20.73 °C
Pre Measurement	237.7 mV
Post Measurement	230.0 mV

Sensor **Barometric Pressure**

Serial Number	1079129
Last Calibrated	Factory Defaults

Sensor **Pressure**

Serial Number	1075766
Last Calibrated	Factory Defaults

Sensor **RDO**

Serial Number	1068110
Last Calibrated	4/16/2025

Calibration Details

Slope 1.0782751
Offset -0.00 mg/L

Calibration point 100%

Concentration	8.63 mg/L
Pre Measurement	98.16 %Sat
Post Measurement	100.00 %Sat
Temperature	17.57 °C
Barometric Pressure	987.35 mbar

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025

APPENDIX D: TABLE OF EFFLUENT EXCEEDANCES

FOR THE PERIOD JANUARY 1, 2020 TO DECEMBER 31, 2024

Monitoring Period Date	Outfall	Parameter Description	Statistical Base Type	DMR Value	DMR Value Unit	% Exceedance	Days with Exceedances
3/31/2020	001-A	Mercury, total low level	MO AVG	2.55E-05	kg/d	11	31
4/30/2020	001-A	Mercury, total low level	MO AVG	2.66E-05	kg/d	16	30
5/31/2020	001-A	E. coli, MTEC-MF	WK GEOMN	2700	MPN/100mL	646	7
6/30/2020	001-A	Oxygen, dissolved (DO)	DAILY MN	4.68	mg/L	6	1
8/31/2020	001-A	Phosphorus, total (as P)	MO AVG	1.17	mg/L	17	31
9/30/2020	001-A	Phosphorus, total (as P)	MO AVG	2.33	kg/d	23	
9/30/2020	001-A	Phosphorus, total (as P)	MO AVG	1.77	mg/L	77	30
9/30/2020	001-A	Phosphorus, total (as P)	WKLY MAX	2.25	mg/L	50	
10/31/2020	001-A	Phosphorus, total (as P)	WKLY MAX	2.5	mg/L	67	
10/31/2020	001-A	Phosphorus, total (as P)	MO AVG	1.96	mg/L	96	31
11/30/2020	001-A	Phosphorus, total (as P)	MO AVG	1.09	mg/L	9	30
12/31/2020	001-A	Phosphorus, total (as P)	WKLY MAX	1.55	mg/L	3	7
3/31/2021	001-A	Phosphorus, total (as P)	WKLY MAX	2	mg/L	33	
3/31/2021	001-A	Phosphorus, total (as P)	MO AVG	1.5	mg/L	50	31
9/30/2021	001-A	Phosphorus, total (as P)	MO AVG	1.26	mg/L	26	30
11/30/2021	001-A	Phosphorus, total (as P)	MO AVG	1.16	mg/L	16	30
1/31/2022	001-A	Phosphorus, total (as P)	MO AVG	1.08	mg/L	8	31
2/28/2022	001-A	Solids, total suspended	WKLY MAX	60.4	kg/d	6	7
4/30/2022	001-A	Solids, total suspended	MO AVG	20.9	mg/L	5	30
4/30/2022	001-A	Phosphorus, total (as P)	MO AVG	1.5	mg/L	50	30
4/30/2022	001-A	Phosphorus, total (as P)	WKLY MAX	3.4	kg/d	20	
4/30/2022	001-A	Phosphorus, total (as P)	MO AVG	2.6	kg/d	37	
4/30/2022	001-A	Phosphorus, total (as P)	WKLY MAX	1.8	mg/L	20	
5/31/2022	001-A	Phosphorus, total (as P)	MO AVG	1.09	mg/L	9	31
6/30/2022	001-A	Phosphorus, total (as P)	MO AVG	1.11	mg/L	11	30
8/31/2022	001-A	Nitrogen, ammonia total (as N)	WKLY MAX	2.55	mg/L	11	7
8/31/2022	001-A	Phosphorus, total (as P)	MO AVG	1.01	mg/L	1	31
9/30/2022	001-A	Copper, total recoverable	WKLY MAX	0.0372	mg/L	24	
9/30/2022	001-A	Copper, total recoverable	MO AVG	0.0372	mg/L	96	30
10/31/2022	001-A	Cadmium, total recoverable	MO AVG	0.0087	mg/L	40	31
10/31/2022	001-A	Copper, total recoverable	WKLY MAX	0.0507	mg/L	69	
10/31/2022	001-A	Copper, total recoverable	MO AVG	0.0507	mg/L	167	31
11/30/2022	001-A	Phosphorus, total (as P)	MO AVG	1.554	mg/L	55	30
11/30/2022	001-A	Phosphorus, total (as P)	WKLY MAX	1.838	mg/L	23	

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025

Monitoring Period Date	Outfall	Parameter Description	Statistical Base Type	DMR Value	DMR Value Unit	% Exceedance	Days with Exceedances
11/30/2022	001-A	Copper, total recoverable	MO AVG	0.028	mg/L	47	30
2/28/2023	001-A	pH	DAILY MN	6.44	SU		1
2/28/2023	001-A	Nitrogen, ammonia total (as N)	WKLY MAX	12.1	mg/L	34	7
2/28/2023	001-A	Phosphorus, total (as P)	WKLY MAX	3.93	mg/L	162	
2/28/2023	001-A	Phosphorus, total (as P)	WKLY MAX	3.33	kg/d	17	
2/28/2023	001-A	Phosphorus, total (as P)	MO AVG	2.02	kg/d	6	
2/28/2023	001-A	Phosphorus, total (as P)	MO AVG	2.43	mg/L	143	28
2/28/2023	001-A	Copper, total recoverable	WKLY MAX	0.046	mg/L	53	
2/28/2023	001-A	Copper, total recoverable	MO AVG	0.046	mg/L	142	28
2/28/2023	001-A	Copper, total recoverable	MO AVG	0.039	kg/d	8	
4/30/2023	001-A	Phosphorus, total (as P)	MO AVG	1.77	mg/L	77	30
4/30/2023	001-A	Phosphorus, total (as P)	MO AVG	2.14	kg/d	13	
4/30/2023	001-A	Phosphorus, total (as P)	WKLY MAX	2.27	mg/L	51	
6/30/2023	001-A	Nitrogen, ammonia total (as N)	WKLY MAX	3.11	mg/L	35	
6/30/2023	001-A	Nitrogen, ammonia total (as N)	MO AVG	1.52	mg/L	1	30
6/30/2023	001-A	Phosphorus, total (as P)	MO AVG	1.5	mg/L	50	30
6/30/2023	001-A	Phosphorus, total (as P)	WKLY MAX	2.03	mg/L	35	
7/31/2023	001-A	Phosphorus, total (as P)	MO AVG	1.4	mg/L	40	31
7/31/2023	001-A	Phosphorus, total (as P)	WKLY MAX	1.89	mg/L	26	
8/31/2023	001-A	Phosphorus, total (as P)	WKLY MAX	1.7	mg/L	13	
8/31/2023	001-A	Phosphorus, total (as P)	MO AVG	1.3	mg/L	30	31
9/30/2023	001-A	Phosphorus, total (as P)	MO AVG	1.23	mg/L	23	30
9/30/2023	001-A	Copper, total recoverable	MO AVG	0.043	mg/L	126	30
9/30/2023	001-A	Copper, total recoverable	WKLY MAX	0.043	mg/L	43	
9/30/2023	001-A	Copper, total recoverable	MO AVG	0.039	kg/d	8	
10/31/2023	001-A	pH	DAILY MX	9.87	SU		1
1/31/2024	001-A	pH	DAILY MN	6.3	SU		1
1/31/2024	001-A	Copper, total recoverable	MO AVG	0.0312	mg/L	64	31
1/31/2024	001-A	Copper, total recoverable	WKLY MAX	0.0312	mg/L	4	
3/31/2024	001-A	Copper, total recoverable	MO AVG	0.046	mg/L	142	
3/31/2024	001-A	Copper, total recoverable	MO AVG	0.051	kg/d	42	31
3/31/2024	001-A	Copper, total recoverable	WKLY MAX	0.046	mg/L	53	
4/30/2024	001-A	pH	DAILY MX	9.76	SU		1
7/31/2024	001-A	Copper, total recoverable	MO AVG	0.0275	mg/L	45	31
8/31/2024	001-A	Solids, total suspended	MO AVG	48.4	kg/d	28	31
8/31/2024	001-A	Solids, total suspended	WKLY MAX	169	kg/d	198	
8/31/2024	001-A	Phosphorus, total (as P)	WKLY MAX	11.5	kg/d	305	

Facility Name: Village of Doylestown Wastewater Treatment Plan

Facility Location: 135 Calaboone Road, Doylestown, 44230

Date of Inspection: April 15 and 16, 2025

Monitoring Period Date	Outfall	Parameter Description	Statistical Base Type	DMR Value	DMR Value Unit	% Exceedance	Days with Exceedances
8/31/2024	001-A	Phosphorus, total (as P)	MO AVG	6.22	kg/d	227	31
8/31/2024	001-A	Copper, total recoverable	WKLY MAX	0.03186	mg/L	6	
8/31/2024	001-A	Copper, total recoverable	MO AVG	0.03186	mg/L	68	31
10/31/2024	001-A	Nitrogen, ammonia total (as N)	WKLY MAX	11.8	kg/d	171	
10/31/2024	001-A	Nitrogen, ammonia total (as N)	MO AVG	3.32	mg/L	121	31
10/31/2024	001-A	Nitrogen, ammonia total (as N)	WKLY MAX	17.7	mg/L	670	
12/31/2024	001-A	pH	DAILY MX	9.5	SU		1