UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1600 John F. Kennedy Blvd.
Philadelphia, Pennsylvania 19103

Report Title:	Clean Water Act Compliance Inspections Report		
Inspection Date(s):	06/28/2023		
Regulatory Program(s):	National Pollutant Discharge Elimination System (NPDES)		
Type of Activity:	Wastewater Compliance Evaluation Inspection		
Facility Name:	Girardville Area Municipal Authority WWTP		
Permittee(s):	Girardville Area Municipal Authority		
Facility Address:	99 Julia St Girardville, PA 17935		
Latitude:	40.7919	**Longitude:**	-76.2977
Permit Number:	PA0063312		
NAICS:	221320	**SIC:**	4952
Receiving Waters:	Mahanoy Creek		
Unique Project #:	3E23WN095A		

Facility Representative*: **Point of Contact:**

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*Additional attendees listed on Page 2

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U.S. EPA Region III (3ED33)

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List of Attachments

I. Introduction

On June 28, 2023, inspectors from the U.S. Environmental Protection Agency (EPA) Region III (hereinafter, "EPA Inspection Team") conducted a compliance evaluation inspection (CEI) of the Girardville Area Municipal Authority (GAMA) Wastewater Treatment Plant (WWTP) (hereinafter, the "WWTP" or "Facility"). Representatives from the Pennsylvania Department of Environmental Protection (PADEP) and GAMA also attended the inspection. The purpose of the inspection was to observe compliance with the Clean Water Act ("CWA") and to verify compliance with the Facility's NPDES Permit No. PA0063312 (hereinafter, the "Permit", see Attachment B) and applicable State and Federal regulations.

A. Inspection Opening Conference

The EPA Inspection Team arrived at the Facility at approximately 1:00 PM (EDT) for the inspection. The EPA Inspection Team met with GAMA Chairman Edwards Burns and the WWTP Operator Les Harvey. Shane McAleer and Angela Weisel displayed their credentials to Mr. Burns and Mr. Harvey prior to the inspection and explained the purpose of the inspection was to review compliance with the Permit. The EPA Inspection Team explained that any information that the Facility deemed to be confidential business information ("CBI") should be identified to the EPA Inspectors during the inspection and it would be handled as CBI according to EPA's CBI Procedures. Table I outlines the individuals that participated in the inspection.

Table I. Inspection Attendee List

Name	Affiliation	Contact Information
U.S. EPA Region III		
Shane McAleer	EPA Region III - Inspector	Phone: (215) 814-5616 Email: mcaleer.shane@epa.gov
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Jared Sabitsky	PADEP Inspector	Phone: (570) 621-3458 Email: jsabitsky@pa.gov
Facility Representatives		
Edward Burns	GAMA Chairman	Phone: (570) 205-1941 Email: burnsedward757@yahoo.com
Les Harvey	WWTP Operator	Phone: (610) 389-3515 Email: lharveymbe@gmail.com

B. Weather and Precipitation Conditions

During the inspection, weather was cloudy and approximately 70 degrees. National Oceanic and Atmospheric Administration (NOAA) National Weather Service precipitation data for the inspection and 4 days prior are provided in Table II below:

Table II. Precipitation Data

Station Name	Date	Precipitation Amount (inches)[1]
CORRY 0.5 NNW, PA US US1PAER0018	06/24/2023	0.21
CORRY 0.5 NNW, PA US US1PAER0018	06/25/2023	0.00
CORRY 0.5 NNW, PA US US1PAER0018	06/26/2023	0.24
CORRY 0.5 NNW, PA US US1PAER0018	06/27/2023	0.45

[1]Source: NOAA National Climatic Data Center (http://www.ncdc.noaa.gov/).

C. Summary of the Facility

The Permit for the facility was issued on September 1, 2016 and expired on August 31, 2021. The Permit has been administratively continued, pending issuance of the renewal permit. GAMA owns and operates the WWTP, which has a permitted hydraulic design capacity of 0.24 million gallons per day (MGD) from Outfall 001 to Mahanoy Creek. The effluent limitations contained in the Permit were determined using an effluent discharge rate of 0.340 MGD. The service area for the WWTP is comprised of Girardville Borough and two sections of neighboring Butler Township, Schuylkill County, and contains approximately 750 equivalent dwelling units (EDUs). Mr. Burns indicated the service area was comprised of mainly residential users, with several commercial establishments including restaurants and bars, and no industrial users. GAMA has no direct employees, and contracts wastewater operations out to M&B Environmental. Mr. Harvey of M&B Environmental is the main Operator of the WWTP, and there are two other individuals from M&B Environmental who assist on the weekends or when Mr. Harvey is unavailable. Mr. Harvey indicated he was not a certified operator at the time of the inspection because his operator certification had lapsed, but at least one of the other operators is certified.

The fact sheet for the Permit describes the treatment units at the Facility as follows: one comminutor/bar screen; one 50,000-gallon equalization tank; three aeration/clarification tanks; one two-chamber chlorine contact tank, and the addition of dechlorination tablets. Sludge is aerobically digested and then sent to four reed beds located at the facility.

II. Facility Activity

As part of the inspection process, the EPA Inspection Team visually observed the GAMA WWTP in the presence of the WWTP Operator, Les Harvey. During the inspection, the Facility treatment units were undergoing upgrades, including installation of new equipment, and rehabilitation and repairs to existing equipment. To fund the upgrades, GAMA had recently applied for and received PENNVEST funding, which is a grant or low interest loan issued by Pennsylvania to pay for costs associated with design, engineering, and construction of public- or private-owned wastewater systems.

The facility walkthrough commenced in the WWTP office. The EPA Inspection Team requested operations and maintenance manuals and records, at which time the Operator provided a two-page Standard Operating Procedure (SOP) for the WWTP (see Photograph Nos. P6280002 and P6280003 in Attachment A), the WWTP Service Record from to 8/18/20 to 3/23/23 (see Photograph Nos. P6280004 & P6280005), and the WWTP Operations & Maintenance Manual dated February 7, 2001 (see Photograph No. P6280006). See Observation # 1 in the "Observations" section of this report.

The Operator discussed the method for collecting samples for Permit compliance. 24 hour composite samples are done via an automatic sampler, typically on Tuesdays each week and picked up by the laboratory representative on Wednesdays each week. The samples are stored in a small refrigerator in the office prior to being picked up by the lab. The EPA Inspection Team observed the inside the refrigerator, which contained a thermometer to record the temperature of the refrigerator (see Photograph No. P6280010). The Operator provided temperature logs (see Photograph Nos. P6280007 and P6280008). There was also a composite sample dated 6/23/23 on the door of the refrigerator. The Operator indicated this sample may have been unintentionally missed for pick-up (see Photograph No. P6280009).

The EPA Inspection Team observed the influent chamber (see Photograph No. P6280019), ISCO influent automatic sampler (see Photograph No. P6280020), and influent control panel (see Photograph No. P6280021). The Operator indicated they perform composite influent sampling for 5-day biological oxygen demand (BOD) and total suspended solids (TSS). The influent automatic sampler and influent control panel were new additions as part of the upgrades and contained a user's manual and influent water level / pump log (see Photograph No. P6280022).

The EPA Inspection Team observed the aerated 50,000-gallon influent equalization tank (see Photograph Nos. P6280025 through P6280028), which contained a comminutor (see Photograph No. P6280024) and bar screen (see Photograph Nos. P6280023 and P6280024). Flows from the equalization tank are conveyed through a splitter box to the three aeration/clarification tanks. The equalization tank contains a weir that can be manually raised or lowered to control the water level in the equalization tank (see Photograph Nos. P6280027 and P6280028). The Operator indicated that WWTP has experienced inflow and infiltration issues and the weir can be used to control flow for better performance of the plant during wet weather events. The equalization tank also featured a control panel, which was a new addition as part of the upgrades (see Photograph Nos. P6280031 and P6280032). Unlike the influent control panel, the equalization tank control panel did not contain a log or user's manual.

The EPA Inspection Team observed three aeration/clarification tanks, two of which were in operation at the time of the inspection (see Photograph Nos. P6280029, P6280030, and P6280033 through P6280040). The third aeration/clarification tank was empty and undergoing repairs and rehabilitation at the time of the inspection as part of the upgrade (see Photograph Nos. P6280041 and P6280042). During the inspection, the EPA Inspection Team observed the scum trough of the second aeration/clarification tank to be overtopped with material which was overflowing into the tank (see Photograph Nos. P6280039 and P6280040). See Observation # 2 in the "Observations" section of this report.

The EPA Inspection Team observed the chlorine contact tank, which included the effluent sampling line, effluent flow monitoring, and a dechlorination feed (see Photograph Nos. P6280014, P6280017 and P6280045). The effluent sampling line fed the ISCO effluent automatic sampler, which contained a thermometer to measure temperature (see Photograph Nos. P6280047). An effluent flow meter was located at the end of the chlorine contact tank (see Photograph Nos. P6280015).

Adjacent to the chlorine contact tank was the chemical storage building, which contained a sodium hypochlorite tote (used for disinfection) in secondary containment, and liquid sodium bisulfite containers (used for disinfection) not in secondary containment. The Operator indicated that the only other chemical used for treatment at the WWTP is soda ash, which is added to the aeration/clarification tanks as needed for pH control. The chemical building contained a floor drain, which was adjacent to the sodium bisulfite containers. The Operator was unsure where the floor drain discharged. During the inspection, Mr. Sabitsky, the PADEP inspector, instructed the Operator to cap and seal the floor drain of the chemical storage building (see Photograph Nos. P6280043 and P6280044). See Observation # 3 in the "Observations" section of this report.

The EPA Inspection Team observed two sludge holding tanks, one of which was in operation at the time of the inspection (see Photograph Nos. P6280046 and P6280051). The second sludge holding tank was empty and undergoing repairs and rehabilitation at the time of the inspection as part of the upgrades (see Photograph No. P6280046). Four reed beds were observed for deposition and drying of sludge (see Photograph Nos. P6280048, P6280049 and P6280050). During the inspection, only two of the four beds were online. The Operator indicated the conveyance line to the two offline reed beds was damaged and leaking. The Operator also indicated there is an underdrain from the reed beds to the influent well, but he wasn't sure if the condition of this line was evaluated when the WWTP upgrade was being designed. See Observation # 4 in the "Observations" section of this report.

The EPA Inspection Team observed groundwater wells adjacent to the chlorine contact tank and chemical storage room. Several of the WWTP tanks are required to be emptied for repair and rehabilitation during the upgrade. To prevent hydrostatic uplifting of empty tanks as a result of high groundwater levels, the wells contain pumps which maintain groundwater levels in the vicinity of the WWTP. Groundwater pumped from the wells is discharged to a wooded area adjacent to the WWTP. The Operator was not aware if the Facility had a permit for the discharge of this groundwater. See Photograph Nos. P6280011, P6280012, P6280013, and P6280016.

The EPA Inspection Team observed the WWTP control room that contained blowers for the equalization tank and aeration/clarification tanks (see Photograph No. P6280052), influent pumps (see Photograph No. P6280052), back-up generator (see Photograph No. P6280053), SCADA remote alarm system (see Photograph No. P6280054), and the WWTP electrical panels (see Photograph No. P6280055). The SCADA system was a new addition as part of the upgrades.

The EPA Inspection Team observed the WWTP laboratory, where the Operator provided the WWTP maintenance log (see Photograph No. P6280058) and daily sampling results sheets (see Photograph No. P6280056). The WWTP is required by the Permit to perform continuous flow monitoring and daily grab samples for effluent pH, residual chlorine and dissolved oxygen (D.O.), which are recorded on these sampling sheets. The pH meter was observed (see Photograph No. P6280057). The June 2023 sampling results sheet indicates effluent D.O. was 2.43 on June 25, 2023, which is below the

minimum effluent limit of 4.0 contained in the Permit (see Photograph No. P6280056 for the sampling sheet from June 2023). The Operator indicated that meeting the D.O. limit of 4.0 has been a challenge at times during the summer months. The current upgrade is not designed to provide additional D.O. or mitigate D.O. compliance issues at the WWTP. See Observation # 5 in the "Observations" section of this report.

III. Records Review

The EPA Inspection Team conducted a records review to evaluate the Facility's compliance with the Permit. See Attachment B for a copy of the Permit, which includes effluent limitations for the WWTP discharge via Outfall 001 to Mahanoy Creek. According to EPA's Integrated Compliance Information System (ICIS), in the last five years, the WWTP discharge exceeded effluent limits contained in the Permit for TSS, Fecal Coliform, pH, carbonaceous BOD, total residual chlorine (TRC), and D.O. Table 1 below lists effluent exceedances from May 2018 to May 2023. See Observation #6 in the in the "Observations" section of this report.

Table 1: GAMA WWTP Effluent Exceedances from May 2018 – May 2023

Monitoring Period End Date	Outfall	Parameter	Reporting Frequency	Reported Value/Units	Limit Value/Units	% Exceedance
05/31/2018	001	Solids, total suspended	WKLY AVG	212.5 lb/d	<=127.6 lb/d	67%
07/31/2018	001	Coliform, fecal general	INST MAX	1,800 cfu/100ml	<=1,000 cfu/100ml	80%
01/31/2019	001	pH	MINIMUM	5.8 su	>=6 su	
02/28/2019	001	BOD, carbonaceous [5 day, 20 C]	WKLY AVG	42.5 mg/l	<=40 mg/l	6%
03/31/2019	001	Chlorine, total residual	MO AVG	1.2 mg/l	<=1 mg/l	20%
07/31/2019	001	Solids, total suspended	WKLY AVG	74 mg/l	<=45 mg/l	64%
06/30/2020	001	Coliform, fecal general	INST MAX	3,400 cfu/100ml	<=1,000 cfu/100ml	240%
07/31/2020	001	Oxygen, dissolved [DO]	MINIMUM	.8 mg/l	>=4 mg/l	80%
07/31/2020	001	Coliform, fecal general	INST MAX	4,000 cfu/100ml	<=1,000 cfu/100ml	300%
08/31/2020	001	pH	MINIMUM	5.9 su	>=6 su	
10/31/2020	001	Solids, total suspended	WKLY AVG	57.5 mg/l	<=45 mg/l	28%
11/30/2020	001	Chlorine, total residual	INST MAX	2.2 mg/l	<=1.6 mg/l	38%
12/31/2020	001	Chlorine, total residual	INST MAX	2.2 mg/l	<=1.6 mg/l	38%
01/31/2021	001	Chlorine, total residual	INST MAX	2.2 mg/l	<=1.6 mg/l	38%
01/31/2021	001	Coliform, fecal general	INST MAX	12,200 cfu/100ml	<=10,000 cfu/100ml	22%
05/31/2021	001	Oxygen, dissolved [DO]	MINIMUM	2.24 mg/l	>=4 mg/l	44%
05/31/2021	001	Solids, total suspended	MO AVG	41 mg/l	<=30 mg/l	37%

Monitoring Period End Date	Outfall	Parameter	Reporting Frequency	Reported Value/Units	Limit Value/Units	% Exceedance
05/31/2021	001	Coliform, fecal general	INST MAX	56,000 cfu/100ml	<=1,000 cfu/100ml	5,500%
06/30/2021	001	Oxygen, dissolved [DO]	MINIMUM	3.8 mg/l	>=4 mg/l	5%
07/31/2021	001	Solids, total suspended	WKLY AVG	53 mg/l	<=45 mg/l	18%
08/31/2021	001	Chlorine, total residual	INST MAX	2.2 mg/l	<=1.6 mg/l	38%
09/30/2021	001	Oxygen, dissolved [DO]	MINIMUM	2.5 mg/l	>=4 mg/l	38%
09/30/2021	001	Solids, total suspended	MO AVG	<1,467.4 lb/d	<=85 lb/d	1,626%
09/30/2021	001	Solids, total suspended	WKLY AVG	3,801.2 lb/d	<=127.6 lb/d	2,879%
09/30/2021	001	Solids, total suspended	MO AVG	<179.6 mg/l	<=30 mg/l	499%
09/30/2021	001	Solids, total suspended	WKLY AVG	396.7 mg/l	<=45 mg/l	782%
09/30/2021	001	Coliform, fecal general	GEO MEAN	1,363 cfu/100ml	<=200 cfu/100ml	582%
09/30/2021	001	Coliform, fecal general	INST MAX	96,400 cfu/100ml	<=1,000 cfu/100ml	9,540%
09/30/2021	001	BOD, carbonaceous [5 day, 20 C]	MO AVG	<7,706.6 lb/d	<=70.8 lb/d	10,785%
09/30/2021	001	BOD, carbonaceous [5 day, 20 C]	WKLY AVG	658 lb/d	<=113.4 lb/d	480%
09/30/2021	001	BOD, carbonaceous [5 day, 20 C]	MO AVG	<35 mg/l	<=25 mg/l	40%
09/30/2021	001	BOD, carbonaceous [5 day, 20 C]	WKLY AVG	72.5 mg/l	<=40 mg/l	81%
10/31/2021	001	Solids, total suspended	WKLY AVG	89 mg/l	<=45 mg/l	98%
11/30/2021	001	Solids, total suspended	MO AVG	123 lb/d	<=85 lb/d	45%
11/30/2021	001	Solids, total suspended	WKLY AVG	300.1 lb/d	<=127.6 lb/d	135%
11/30/2021	001	Solids, total suspended	MO AVG	77.2 mg/l	<=30 mg/l	157%
11/30/2021	001	Solids, total suspended	WKLY AVG	182 mg/l	<=45 mg/l	304%
01/31/2022	001	Solids, total suspended	WKLY AVG	137.4 lb/d	<=127.6 lb/d	8%
01/31/2022	001	Solids, total suspended	MO AVG	51.3 mg/l	<=30 mg/l	71%
01/31/2022	001	Solids, total suspended	WKLY AVG	158 mg/l	<=45 mg/l	251%
01/31/2022	001	Chlorine, total residual	INST MAX	2.2 mg/l	<=1.6 mg/l	38%
01/31/2022	001	BOD, carbonaceous [5 day, 20 C]	WKLY AVG	54 mg/l	<=40 mg/l	35%
02/28/2022	001	Solids, total suspended	MO AVG	31.6 mg/l	<=30 mg/l	5%
02/28/2022	001	Solids, total suspended	WKLY AVG	59.5 mg/l	<=45 mg/l	32%
05/31/2022	001	Oxygen, dissolved [DO]	MINIMUM	3.93 mg/l	>=4 mg/l	2%
09/30/2022	001	Solids, total suspended	WKLY AVG	478.8 lb/d	<=127.6 lb/d	275%

Monitoring Period End Date	Outfall	Parameter	Reporting Frequency	Reported Value/Units	Limit Value/Units	% Exceedance
09/30/2022	001	Solids, total suspended	MO AVG	62.3 mg/l	<=30 mg/l	108%
09/30/2022	001	Solids, total suspended	WKLY AVG	345 mg/l	<=45 mg/l	667%
09/30/2022	001	BOD, carbonaceous [5 day, 20 C]	WKLY AVG	195.7 lb/d	<=113.4 lb/d	73%
09/30/2022	001	BOD, carbonaceous [5 day, 20 C]	MO AVG	<37.4 mg/l	<=25 mg/l	50%
09/30/2022	001	BOD, carbonaceous [5 day, 20 C]	WKLY AVG	141 mg/l	<=40 mg/l	253%
10/31/2022	001	Solids, total suspended	WKLY AVG	56 mg/l	<=45 mg/l	24%
12/31/2022	001	Coliform, fecal general	INST MAX	>20,000 cfu/100ml	<=10,000 cfu/100ml	99,999%
04/30/2023	001	Oxygen, dissolved [DO]	MINIMUM	2.5 mg/l	>=4 mg/l	38%
05/31/2023	001	Coliform, fecal general	INST MAX	20,000 cfu/100ml	<=1,000 cfu/100ml	1,900%

IV. Observations

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

Requirement: Proper Operation and Maintenance

Part B Section I.E.2 of the Permit states "*The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, adequate laboratory controls including appropriate quality assurance procedures. This provision also includes the operation of backup or auxiliary facilities or similar systems that are installed by the permittee, only when necessary to achieve compliance with the terms and conditions of this permit. (40 CFR 122.41(e)).*"

Observation #1

The Operations and Maintenance Manual provided by the Operator was dated February 7, 2001. During the inspection, the EPA Inspection Team observed new equipment installed as part of the WWTP upgrade, such as the control panels (e.g. see the influent pumping control panel in Photograph No. P6280021 and the equalization tank control panel in Photograph Nos. P6280031 and P6280032). The Operations and Maintenance Manual may be outdated and not reflect current Facility operations.

Observation #2

During the inspection, the EPA Inspection Team observed the scum trough of the second aeration/clarification tank to be overtopped and overflowing into the tank (see Photograph Nos. P6280039 and P6280040).

Observation #3

During the inspection, the EPA Inspection Team observed a floor drain in the chemical storage building adjacent to sodium bisulfite containers that were not in secondary containment. The Operator was unsure where the floor drain discharged (see Photograph Nos. P6280043 and P6280044). During the inspection, the PADEP inspector instructed the Operator to cap and seal the floor drain of the chemical storage building.

Observation #4

During the inspection, two of the four WWTP sludge reed beds were offline due to a damaged and leaking conveyance line. The Operator indicated there is an underdrain from the reed beds to the influent well, but he wasn't sure if the condition of this line was evaluated when the WWTP upgrade was being designed.

Requirement: Effluent Limitations and Monitoring Requirements

Part A of the Permit defines effluent limitations and monitoring requirements for Outfall 001 discharges from the WWTP. See Attachment B for a copy of the Permit.

Observation #5

The June 2023 sampling results sheet observed during the inspection indicates effluent D.O. was 2.43 on June 25, 2023, which is below the minimum effluent limit of 4.0 contained in the Permit (see Photograph No. P6280056). The Operator indicated that meeting the D.O. limit of 4.0 has been a challenge at times during the summer months. The current upgrade is not designed to provide additional D.O. or mitigate D.O. compliance issues at the WWTP.

Observation #6

According to EPA's Integrated Compliance Information System (ICIS), in the last five years, the WWTP discharge exceeded effluent limits contained in the Permit for TSS (23 exceedances), Fecal Coliform (9 exceedances), pH (2 exceedances), carbonaceous BOD (9 exceedances), total residual chlorine (TRC) (6 exceedances), and D.O. (6 exceedances). Table 1 in the "Records Review" section lists effluent exceedances from May 2018 to May 2023.

V. Closing Conference

At the conclusion of the inspection, the EPA Inspection Team conducted a closing conference with the Facility representatives and shared preliminary observations. The EPA Inspection Team reiterated to the Facility representatives that all preliminary observations discussed were not compliance determinations. All preliminary observations shared were subject to further investigation by EPA upon the 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 EPA reviewed additional materials following the inspection. The inspection concluded approximately at 3:45 PM (EDT).