



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

for

Name of Facility: Town of Romney, West Virginia WWTP

Facility Location: 39.3507, -78.756

Mailing Address: 340 E. Main Street, Romney, WV 26757

Report Prepared on: 7/27/2021

Date

By: , PG
Environmental Scientist (PG Environmental)
Signature

Report Final as of: _____

Date

By: _____, EPA
Signature

General Information

Type of Inspection:	Wastewater Treatment Facility CEI
Owner:	Town of Romney, West Virginia
Operator:	Town of Romney, West Virginia
Permittee:	Town of Romney, West Virginia
NPDES Permit No:	WV0020699
NPDES Permit Effective Date:	April 1, 2021
NPDES Permit Expiration Date:	February 7, 2026
Receiving Water:	Big Run of the South Branch of the Potomac River
Latitude and Longitude:	39.3507236, -78.7552112

On-Site Facility Inspection Overview

On June 16, 2021, representatives from U.S. Environmental Protection Agency (EPA) Region III and EPA's contract inspector from PG Environmental, (hereinafter referred to as EPA Inspection Team) conducted a compliance evaluation inspection at the Town of Romney, West Virginia (hereinafter, Town) Wastewater Treatment Plant (hereinafter, WWTP or Facility) in Romney, WV. The Town is identified as the Permittee and owns and operates the WWTP.

Approximate Entry Time: 8:00 AM (EDT) **Approximate Exit Time:** 1:30 PM (EDT)

Unique Project Identifier (UPI): 3E21WN038A

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APPENDIX LIST

Appendix A: Photograph Log

Appendix B: Exhibit Log

- Exhibit 1 – EPA ECHO Detailed Facility Report
- Exhibit 2 – EPA ICIS Data for Outlet 001 (April 1, 2018 through April 30, 2021)
- Exhibit 3 – EPA ICIS Data for Outlet IU01 (April 1, 2018 through April 30, 2021)

Appendix C: NPDES Permit No. WV0020699

I. INTRODUCTION

On June 16, 2021, representatives from U.S. Environmental Protection Agency (EPA) Region III and EPA's contract inspector from PG Environmental, (hereinafter referred to as the EPA Inspection Team) inspected the City of Romney, West Virginia (hereinafter, Town) Wastewater Treatment Plant (hereinafter, WWTP or Facility) in Romney, WV. The Town is identified as the Permittee and owns and operates the WWTP. The EPA Inspection Team was joined on the inspection by the Facility representatives listed in Table 1 below. The primary purpose of the inspection was to review WWTP operations, to review the accuracy and reliability of the Permittee's self-monitoring and reporting program, and to obtain information that will assist EPA in assessing the Permittee's compliance with the requirements of the Permit. The weather at the time of the inspection was sunny and warm, with no precipitation.

The WWTP is a sequencing batch reactor (SBR) plant (two SBR units) with tertiary filtration, chlorine gas disinfection, and sulfur dioxide dechlorination. Wasted sludge from the SBR process is aerobically digested, dewatered via belt filter press, and hauled offsite for land application. The treatment process is described in more detail in the "Facility Site Walk" section of this report.

The WWTP has a permitted hydraulic capacity of 0.75 million gallons per day (MGD). The WWTP treats wastewater from the Town and a portion of the Central Hampshire Public Service District. Facility representatives stated that the Facility averages dry-weather flows of approximately 0.320 MGD (approximately 0.3 MGD from the Town and approximately 0.02 MGD from the Central Hampshire Public Service District). The Permittee's activities are regulated under National Pollutant Discharge Elimination System (NPDES) Permit No. WV0020699 (hereinafter, Permit), which became effective on April 1, 2021 and is set to expire on February 7, 2026 (refer to Appendix C).

The Permit authorizes the Facility to accept and also regulates the discharges from two non-significant industrial users: Hampshire County Landfill (leachate) and a WV Region VIII Solid Waste Authority Romney Transfer Station (stormwater run-off and truck transfer leachate). The Chief Operator stated that the Facility had not received discharges from the transfer station in approximately two years prior to the EPA inspection.

Compliance Status Identification Before and After EPA Inspection

Prior to the EPA inspection, the three-year compliance status in EPA's Enforcement and Compliance History Online (ECHO) had identified the Facility to be in significant noncompliance (SNC) over multiple quarters for DMR non-receipt violations. Based on a review conducted by EPA, it appeared that this compliance status had been assigned to the Facility due to errors in how the discharge monitoring report (DMR) due dates had been identified in the EPA's Integrated Compliance Information System (ICIS) database.

After the EPA inspection, these errors were resolved in the ICIS database which changed the Facility's three-year compliance status history displayed on ECHO and eliminated quarters of SNC. Refer to Appendix B, Exhibit 1 for the Facility's ECHO Detailed Facility Report. The Permittee has not reported an effluent limit exceedance from Outlet 001 since February 2019 (refer to Observation 1). The ECHO database now identifies the Facility's compliance status for January 2021 through March 2021 as "Violation Identified" for flow rate limit exceedances reported by the Facility's industrial user Hampshire County Landfill (identified as IU01 in the Permit; refer to Observation 3).

II. INSPECTION PROCESS

Inspection Opening Conference

The EPA Inspection Team arrived at the Facility at 8:00 AM (EDT) for the inspection. Stephen Clark of PG Environmental displayed his Clean Water Act inspector credential to the Facility representatives at the outset of the inspection and explained the purpose of the inspection was to observe compliance with the Permit. A copy of the Permit is provided in Appendix C. Table 1 describes the individuals that participated in the inspection.

Table 1. Inspection Attendee List

Name	Affiliation	Telephone	Email
EPA Inspection Team			
Stephen Clark, Inspector	PG Environmental	(720) 789-8046	stephen.clark@pgenv.com
Amanda Pruzinsky, Inspector	EPA Region III	(215) 814-5456	Pruzinsky.Amanda@epa.gov
WVDEP			
Chad Swick, Inspector	WVDEP	(304) 822-7266	Chad.c.swick@wv.gov
Facility Representative			
Don Compton, Chief Operator	Town of Romney	(304) 822-3638	dcompton@townofromney.org
George Park, Class III Operator	Town of Romney	(304) 822-3638	--
Steven Lake, Class II Operator	Town of Romney	(304) 822-3638	--
Johnny Jenkins, Laborer	Town of Romney	(304) 822-3638	--

Facility Site Walk

As part of the process, the EPA Inspection Team visually observed the treatment train and site conditions in the presence of the Facility representatives. The wastewater process train consists of:

- Influent pump station
- Equalization basin for high flows (referred to as the “stormwater basin”)
- Mechanical bar screen (with bypass channel for manual bar rack)
- Mechanical vortex grit removal unit and classifier
- Two SBR basins (each with one aerated sludge digester)
- Six equalization basins (two are aerated)
- Two cloth media disc filters
- Three chlorine contact basins (operated in series)
- Dechlorination unit
- Filter belt press

Many of the Facility’s operations are tracked, trended, and implemented through the onsite supervisory control and data acquisition (SCADA) system (refer to Appendix A, Photographs 1 and 2).

All influent wastewater flows to the Facility’s onsite influent pump station. The pump station has two pumps that convey wastewater to the headworks building (refer to Appendix A, Photographs 3 and 4). The

two pumps are alternated in lead and lag positions. The wet well is equipped with high and low level alarms. Influent flow is measured via a magnetic flow meter between the pump station and headworks building (refer to [Appendix A, Photograph 5](#)).

Just prior to the wet well, there are two chambers which used to comprise the wet well of the Facility's previous influent pump station (there is some remaining infrastructure but no pumps). Wastewater flows to the first chamber, then to the second chamber, and then to the influent pump station wet well. Inside the second chamber, there is an overflow pipe that flows to a chamber with a submersible pump to convey wastewater to the stormwater basin, if needed (refer to [Appendix A, Photographs 6 through 8](#)).

There is a manhole at the Facility, upstream of the current and old influent pump station, that has an overflow pipe that directs high flows to the stormwater basin. Operators use a metal sheet affixed to a chain to divert flows to the overflow pipe (refer to [Appendix A, Photographs 9 and 10](#)).

The Facility headworks consists of an automatic bar screen and a grit removal unit and classifier. The influent channel to the mechanical bar screen has a secondary channel that contains a manual bar rack in the event the mechanical bar screen is taken offline. Screenings are captured in trash receptacles and disposed of at a landfill (refer to [Appendix A, Photographs 11 and 12](#)).

After the headworks, flow is sent to one of two SBRs (refer to [Appendix A, Photographs 13 through 16](#)) where wastewater is treated in 6-hour cycles as follows:

- Mix fill (60 minutes)
- React fill (120 minutes)
- React (60 minutes)
- Settle (60 minutes)
- Decant (60 minutes)

Decanted wastewater from the SBRs flow to a vault referred to as the "dispersion box" prior to flowing to the equalization basins. Chlorine gas is injected in the dispersion box. The dispersion box also has an overflow pipe that conveys high flows to the stormwater basin.

Wastewater flows from the diversion box to the equalization basins (refer to [Appendix A, Photographs 17 through 20](#)). There are four equalization basins upstream of the two aerated equalization basins. Wastewater is pumped from the two aerated basins to the cloth media disc filters (refer to [Appendix A, Photographs 21 and 22](#)). One of the aerated equalization basins has two pumps and the other has one pump. Note there is an overflow in the corner of one of the four non-aerated equalization basins that flows to the last chlorine contact basin (refer to [Appendix A, Photograph 17](#)); the wastewater level inside the equalization basin was well below the overflow. An overflow at this location would bypass the aerated equalization basins and filters.

Filtered wastewater then flows to the three chlorine contact chambers (refer to [Appendix A, Photographs 23 through 26](#)). For algae control, each chamber is covered with repurposed housing taken from the Facility's decommissioned rotating biological reactor. A visual sample taken from the last chlorine contact chamber by a Facility representative appeared clean and clear (refer to [Appendix A, Photograph 27](#)).

After the chlorine contact chambers, sulfur dioxide is injected inside a manhole for dechlorination. Wastewater then is discharged to the Big Run of the South Branch of the Potomac River via Outlet 001 (refer to [Appendix A, Photographs 28 through 31](#)).

Sludge is collected from the bottom of the SBRs, pumped to its associated digester, dewatered via belt press, and hauled offsite for land application (refer to [Appendix A, Photographs 32 through 35](#)).

Records Review

The EPA Inspection Team conducted a records review to evaluate the Permittee's compliance with the Permit. Most of the records and reports required by the Permit were available for review prior to and after the inspection. The following were reviewed:

- EPA ICIS data during the period from April 1, 2018 through April 30, 2021 (the timeframe covered by ECHO's three-year compliance status plus April 2021)
- Various SCADA system screens that show the operational status of equipment and process control parameters
- Daily operator logbook
- pH meter calibration sheets
- Hard-copy forms used to document runtimes for various equipment (e.g., blowers)
- Influent and effluent grab sample logs
- Various maintenance logs for Facility equipment (e.g., SBRs, filters)
- Process control logs
- Sludge hauling and land application logs
- Chemical usage logs
- Laboratory data for effluent samples
- Facility equipment O&M manuals
- Facility engineering drawings

Summary of Observations

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

Permit Status and Effluent Exceedances

Section A.001 of the Permit defines discharge limitations and monitoring requirements for Outlet 001 discharges.

Observation 1. According to EPA's ICIS database, the Facility experienced seven effluent limit exceedances from Outlet 001 between April 1, 2018 and April 30, 2021 (i.e., the timeframe covered by ECHO's three-year compliance history, plus April 2021; refer to Appendix B, Exhibit 2 and Table 2 below). None of these exceedances occurred under the current version of the Permit (effective April 1, 2021).

Table 2. Summary of Effluent Exceedances at Outlet 001 (April 1, 2018 through April 30, 2021)

NPDES ID	Monitoring Period End Date	Parameter Name	DMR Value	Permit Limit	Units	Type
WV0020699	1/31/2019	Ammonia Nitrogen	2.185	2	mg/L	Avg. Monthly
WV0020699	2/28/2019	BOD, 5-day, 20 deg. C	107.6	68.8	lbs./day	Avg. Monthly
WV0020699	2/28/2019	BOD, 5-day, 20 deg. C	299.7	137.6	lbs./day	Max. Daily
WV0020699	2/28/2019	BOD, 5-day, 20 deg. C	31.5	11	mg/L	Avg. Monthly

NPDES ID	Monitoring Period End Date	Parameter Name	DMR Value	Permit Limit	Units	Type
WV0020699	2/28/2019	BOD, 5-day, 20 deg. C	59	22	mg/L	Max. Daily
WV0020699	2/28/2019	Ammonia Nitrogen	2.34	2	mg/L	Avg. Monthly
WV0020699	2/28/2019	BOD, 5-day, 20 deg. C	50	85	%	Percent Removal

Appendix A, Section III.1 of the Permit states, “Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.”

Observation 2. An apparent stormwater flow path led to the effluent composite sample location. It appeared stormwater could enter the effluent chamber (equipped with grated cover) during rain events, potentially impacting the representativeness of effluent samples collected during wet weather (refer to [Appendix A, Photographs 28 and 29](#)). The weather was dry at the time of the inspection. The Chief Operator stated that stormwater does flow towards the effluent sample collection area.

Section A.IU01 of the Permit defines discharge limitations and monitoring requirements for Significant Industrial User IU01 (Hampshire County Landfill) and states, “During the period beginning 4/1/2021 and lasting through midnight 2/7/2026 the permittee is authorized to accept the discharge from Outlet Number(s) IU01 (Pretreatment – Non Significant Industrial User)” and that “Such discharges shall be limited and monitored by the permittee as specified [in the table] below.”

Section F.4 of the Permit states, “Should any of the permittee's industrial users fail to comply with the specific terms and conditions pertaining to that specific industrial user in this permit, the permittee shall immediately contact said industrial user and identify the violation causing the noncompliance with the permit. The permittee shall take all reasonable, escalating enforcement steps, up to and including disallowing the continued acceptance of the nondomestic wastewater from the industrial user, to keep the industrial user compliant with the terms and conditions of the permit.”

Observation 3. According to EPA’s ICIS database, the Facility experienced eight effluent limit exceedances from Outlet IU01 between April 1, 2018 and April 30, 2021 (i.e., the timeframe covered by ECHO’s three-year compliance history plus April 2021; refer to [Appendix B, Exhibit 3](#) and Table 3 below). None of these exceedances occurred under the current version of the Permit (effective April 1, 2021). The Chief Operator stated that Facility representatives visit the industrial user once per month to collect self-monitoring information and that the Permittee performs quarterly composite monitoring of the user’s discharges to the publicly owned treatment works (POTW). The IU01 exceedances were reviewed after the onsite inspection and not discussed directly with the Facility representatives. It is unclear if the Permittee has communicated these issues with the industrial user, or whether any process changes have been recommended or completed.

Table 3. Summary of Effluent Exceedances at Outlet IU01 (April 1, 2018 through April 30, 2021)

NPDES ID	Monitoring Period End Date	Parameter	DMR Vale	Permit Limit	Units	Limit Type
WV00206099	06/30/2018	Flow rate	10,001	1,000	Gallons per day (gpd)	Max. Daily
WV00206099	09/30/2018	Flow rate	13,980	1,000	gpd	Max. Daily
WV00206099	12/31/2018	Flow rate	5,683.7	1,000	gpd	Max. Daily
WV00206099	03/31/2019	Flow rate	3,686	1,000	gpd	Max. Daily
WV00206099	12/31/2019	Flow rate	1,074	1,000	gpd	Max. Daily
WV00206099	03/31/2020	Flow rate	1,918	1,000	gpd	Max. Daily
WV00206099	12/31/2020	Flow rate	1,526	1,000	gpd	Max. Daily
WV00206099	03/31/2021	Flow rate	3464	1,000	gpd	Max. Daily

Proper Operation and Maintenance

Appendix A, Part II.1 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 conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures. Unless otherwise required by Federal or State law, this provision requires the operation of back-up auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of the permit.”

Observation 4. The EPA Inspection Team observed that multiple calibration standards for the pH meter were expired. According to Facility representatives, smaller bottles for routine use are filled via larger bulk bottles. The smaller bottles indicated the solutions were expired and there were not any notations indicating the bottles had been filled with standards of a different lot and expiration date (refer to [Appendix A, Photograph 36](#)). The expiration dates on the smaller bottles for the pH 4, 7, and 10 standards were August 2019, August 2017, and August 2016, respectively. The bulk bottles being used for the pH 4, 7, and 10 solutions had expiration dates of December 2022, January 2021, and December 2020, respectively (refer to [Appendix A, Photographs 37 and 38](#)). There were unexpired bulk bottles for the pH 7 and 10 solutions onsite that were not yet in use (both had expiration dates of April 2022).

Observation 5. The EPA Inspection Team made multiple observations related to operations and maintenance at the Facility:

- The Facility’s coagulant and MicroC© 2000 chemical feed systems lacked redundant pumps (refer to [Appendix A, Photographs 39 and 40](#)) and the Permittee did not maintain spare chemical feed pumps or parts at the Facility (only spare tubing was kept onsite). The Facility has two caustic feed pumps that were not being utilized and could be interchanged with the coagulant and MicroC©2000 feed system pumps (refer to [Appendix A, Photograph 41](#)). The Chief Operator stated that the caustic feed system was not needed based on influent pH and stated the typical pH range is 6.8 to 7.2 standard units (s.u.).

The O&M Manual for the SBR recommends neutralization for pH ranges outside of 6.5 to 8.5 s.u.

- The Chief Operator stated that the cloth media for the disc filters had not been replaced since the Facility was placed into operation approximately six years prior to the EPA inspection. He stated that the filter manufacturer recommended replacing the cloth media once every five years. Note that the WWTP effluent appeared clean and clear at the time of the EPA inspection and the Permittee reported a total suspended solids (TSS) percent removal of 97.6% for April 2021. Based on DMR data reported by the Permittee, this removal percentage appears typical (over the past three years, TSS removal percentages have ranged from approximately 92% to 99%).
- The Chief Operator stated the influent magnetic flow meter is not routinely calibrated/verified. It was unclear if this had been done since the Facility had been placed into operation which was approximately six years prior to the EPA inspection. Note that the service sticker on the effluent ultrasonic flow meter display panel stated it was last calibrated on March 1, 2021.
- During wet-weather operations, the treatment cycles for the SBR units are changed based on the institutional knowledge of the operators; the Facility lacked a written standard operating procedure (SOP) for this practice. The changes are based on the manufacturer's recommendations and then adjusted based on site-specific conditions at the Facility. The O&M Manual for the SBRs was maintained onsite.

Closing Conference

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

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