

Appendix A Photograph Log



Photograph 1. Library lift station wet well. Note the rust and corrosion on the interior of the wet well and the float gauges. Also note evidence of high-water levels in the wet well, outlined in red.



Photograph 2. Library lift station. The pump control panel is outlined in red. Note the rust and corrosion on the wet well access.



Photograph 3. Library lift station with erosion, outlined in red, by the wet well.



Photograph 4. Library lift station valve pit. Note evidence of flooding.



Photograph 5. Interior of the Morningside manhole.



Photograph 6. Morningside lift station perimeter fencing.



Photograph 7. Morningside lift station wet well.



Photograph 8. Morningside lift station pump control panel.



Photograph 9. Morningside lift station valve pit at the.



Photograph 10. Trailer Park lift station.



Photograph 11. Trailer Park lift station wet well.



Photograph 12. Trailer Park lift station valve pit.



Photograph 13. Railroad lift station.



Photograph 14. Railroad lift station wet well. Note the grease accumulation in the wet well.



Photograph 15. Railroad lift station pump control panel.



Photograph 16. Railroad lift station valve pit.



Photograph 17. Exterior of the Railroad manhole. Note the gaps/cracks in the grout and concrete exterior of the manhole.



Photograph 18. Interior of the Railroad manhole.

Appendix B

Exhibit Log

Exhibit 1
Lift Station Operational Logs (August 2024 to October 2024)

MORNINGSIDE
 System Name: CITY of WALLS

LIFT STATION MONTHLY OPERATION LOG
 CLEAR WATER SOLUTIONS

Month/Year: Oct 24

Day	General			Pumps						Wet Well			
	Time		Oper. First and Last Initial	#1			#2			Level OK or Notified	Solids OK or Notified	Grease OK or Notified	Floats OK or Notified
	In	Out		Meter	Run	Valve	Meter	Run	Valve				
	Time in 2400 format	Time in 2400 format		Reading from Hour Meter	Pump Runs	Air Release	Reading from Hour Meter	Pump Runs	Air Release				
Prior													
1													
2	1500	1510	NB	OK									
3													
4	1500	1510	NB	OK									
5													
6													
7													
8	1500	1510	NB	OK									
9													
10	1500	1510	NB	OK									
11													
12													
13													
14	1500	1510	NB	OK									
15													
16	1500	1510	NB	OK									
17	1500	1510	NB	OK									
18													
19													
20													
21	1500	1510	NB	OK									
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													

Notes:

2024/10/24 13:31

Trailer Park
 WEST LEA Road
 ENCORE

[illegible]

LIFT STATION MONTHLY OPERATION LOG CLEAR WATER SOLUTIONS													
TRAILER PARK System Name: CITY of WALLS										Month/Year: Sept 24			
Day	General			Pumps						Wet Well			
	Time		Oper. First and Last Initial	#1			#2			Level OK or Notified	Solids OK or Notified	Grease OK or Notified	Floats OK or Notified
	In	Out		Meter	Run	Valve	Meter	Run	Valve				
	Time in 2400 format	Time in 2400 format		Reading from Hour Meter	Pump Runs	Air Release	Reading from Hour Meter	Pump Runs	Air Release				
Prior													
1													
2													
3	1530	1540	NB	OK									
4													
5	1530	1540	NB	OK									
6													
7													
8													
9	1530	1540	NB	OK									
10													
11													
12	1530	1540	NB	OK									
13													
14													
15													
16	1530	1540	NB	OK									
17													
18	1530	1540	NB	OK									
19													
20	1530	1540	NB	OK									
21													
22													
23													
24	1530	1540	NB	OK									
25													
26	1530	1540	NB	OK									
27													
28													
29													
30	1530	1540	NB	OK									
31													

Notes: 12th cleaned floats

LIFT STATION MONTHLY OPERATION LOG
CLEAR WATER SOLUTIONS

APARTMENTS
 System Name: **CITY of WALLS** Month/Year: **Aug 24**

Day	General			Pumps						Wet Well			
	Time		Oper.	Meter Readin g from Hour Meter	#1		#2		Level	Solids	Grease	Floats	
	In Time in 2400 format	Out Time in 2400 format			Pump Runs	Valve Air Releas e	Pump Runs	Valve Air Releas e					
Prior													
1													
2	1520	1530	NS	OK									
3													
4													
5													
6	1520	1530	NS	OK									
7													
8	1520	1530	NS	OK									
9													
10													
11													
12	1520	1530	NS	OK									
13													
14	1520	1530	NS	OK									
15													
16	1520	1530	NS	OK									
17													
18													
19													
20	1520	1530	NS	OK									
21													
22	1520	1530	NS	OK									
23													
24													
25													
26	1520	1530	NS	OK									
27													
28	1520	1530	NS	OK									
29													
30	1520	1530	NS	OK									
31													

Notes: 22nd cleaned floats

Exhibit 2
Town of Walls Sewer Flows (October 2023 to September 2024)

DESOTO COUNTY REGIONAL UTILITY AUTHORITY
FY 2024 FLOW SUMMARY
 September 1, 2024 - September 30, 2024

		City of Olive Branch	City of Southaven	City of Hernando	City of Horn Lake	Town of Walls	TOTAL
2023	October	143.784	23.455	56.807	10.860	6.718	241.624
	November	145.747	22.823	58.350	10.677	6.817	244.415
	December	158.789	23.648	60.022	12.006	7.328	261.793
2024	January	209.789	27.865	82.635	18.129	8.637	347.055
	February	162.532	23.667	71.547	16.196	7.003	280.946
	March	178.134	24.338	71.362	15.348	7.633	296.815
	April	164.014	24.239	68.322	12.076	7.802	276.453
	May	166.824	24.931	70.686	14.396	7.680	284.517
	June	154.542	23.562	59.788	10.641	8.433	256.967
	July	156.567	24.539	63.196	13.040	9.022	266.365
	August	150.977	24.912	58.781	12.704	7.456	254.830
	September	148.602	28.430	75.614	9.958	7.502	270.105
Flow to Date		1,940.300	296.409	797.111	156.031	92.032	3,281.883
Pro Rata Flow to Date		59.12%	9.03%	24.29%	4.75%	2.80%	100.00%

FY 2024 PROJECTED FLOW:						
Total FY '24 Projected Flow	1,957.850	343.300	653.920	189.570	68.440	3,213.080
To Date/Projected	99.10%	86.34%	121.90%	82.31%	134.47%	102.14%

- Notes: 1. All Figures in Million Gallons
 2. Projections are based on prior year flows
 3. September will need adjustment after receiving flow data for Byhalia Overflow meter
 4. Walls flow #s are still being analyzed and may need adjusting



**U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ENFORCEMENT AND COMPLIANCE ASSURANCE DIVISION
CLEAN WATER ACT COMPLIANCE INSPECTION REPORT**

for

Name of System: Walls Wastewater Collection System

System Address: 9087 Nail Rd, Walls, MS 38680

Mailing Address: 9087 Nail Rd, Walls, MS 38680

Report Prepared
on:

12/16/2024
Date

By:

James Phillips

Eastern Research Group, Inc
Signature

Report Final as of:

Date

By:

EPA
Signature

General Information

Type of Inspection:	Wastewater Collection System CEI
Owner:	Town of Walls
Operator:	Clear Water Solutions (CWS)
Receiving Treatment Plant:	DeSoto County Regional Utility Authority (DCRUA) Johnson Creek WWTF
Receiving Treatment Plant Address:	2665 Highway 61 North, Walls, MS 38680

On-Site System Inspection Overview

On October 24, 2024, representatives from the U.S. Environmental Protection Agency Region IV's (EPA's) contract inspector, Eastern Research Group (ERG), James Phillips and Mike Beck, conducted a compliance evaluation inspection of the Walls wastewater collection system, under EPA Region IV's Management, Operations, and Maintenance (MOM) Program for sanitary sewer collection systems. The Town of Walls is identified as the owner of the wastewater collection system.

Approximate Entry Time: 1300 (CDT)

Approximate Exit Time: 1600 (CDT)

Inspection Date: October 24, 2024

TABLE OF CONTENTS

I. INTRODUCTION 3

II. INSPECTION PROCESS..... 3

 Inspection Opening Conference..... 3

 System Site Walk 5

 Records Review 8

 Summary of Observations..... 8

 Closing Conference 8

APPENDIX LIST

Appendix A: Photograph Log

Appendix B: Exhibit Log

- Exhibit 1 – Lift Station Operational Logs (August 2024 to October 2024)
- Exhibit 2 – Town of Walls Sewer Flows (October 2023 to September 2024)

I. INTRODUCTION

On October 24, 2024, representatives from the U.S. Environmental Protection Agency Region IV's (EPA's) contract inspector, Eastern Research Group (ERG), James Phillips and Mike Beck (hereinafter, the inspectors), conducted a compliance evaluation inspection of the Walls wastewater collection system (the "system"). The Town of Walls owns the collection system and has a contractor, Clear Water Solutions (CWS), which operates the collection system.

The primary purpose of the inspection was to review the wastewater collection system, to evaluate the accuracy and reliability of the Town of Wall's self-monitoring and reporting program, and to obtain information that will assist EPA in assessing the Town of Wall's compliance with the requirements of the Clean Water Act. The Walls wastewater collection system services a population of approximately 1,400 people and discharges wastewater to the Johnson Creek WWTF which is owned and operated by the Desoto County Regional Utility Authority (DCRUA). The weather at the time of the inspection was hot, humid, and sunny.

II. INSPECTION PROCESS

Inspection Opening Conference

The inspectors arrived at Walls town hall at 1300 on October 24, 2024, for the inspection. James Phillips and Mike Beck of ERG displayed their Clean Water Act inspector credentials to Donde Baldwin of CWS at the outset of the inspection and explained the purpose of the inspection was to observe compliance with the Clean Water Act. Table 1 describes the individuals that participated in the inspection, hereinafter the "system representatives".

Table 1. Inspection Attendee List

Name	Affiliation	Position	Email
EPA inspectors			
James Phillips	ERG	Inspector	James.phillips@erg.com
Mike Beck	ERG	Inspector	Mike.beck@erg.com
Facility Representatives			
Donde Baldwin	CWS	Manager	Donde.baldwin@clearwatersol.com
Nathan Bruce	CWS	Operator	Nathan.bruce@clearwatersol.com
Kathy Gordon	Town of Walls	Town Clerk	kgordon@townofwalls.com
Keidron Henderson	Town of Walls	Mayor	mayorkhenderson@townofwalls.com

During the opening conference, the system representatives provided an overview of the staffing, operational procedures, and sanitary sewer overflow (SSO) reporting procedures of the Walls collection system. Table 2 provides an overview of the system, including the number of lift stations, manholes, miles of lines, industrial users, connections, and SSOs per year. CWS has six full-time staff that oversee multiple collection systems in northern Mississippi, including the

Walls collection system. Staff at CWS follow a typical schedule working from 0800 to 1700 Monday to Friday and are on-call during off hours. Nathan Bruce is the primary operator for the Walls collection system and carries a Class 4 wastewater operator license from Mississippi.

The system does not have a centralized Supervisory Control and Data Acquisition (SCADA) system, nor any digital alerts/alarms. Each lift station is equipped with visual alarms and the lift stations are checked two to three times a week by the CWS operators. CWS will usually receive calls from the public if any alarms go off at the lift stations or if there is any evidence of an SSO. CWS operators record the lift station checks in operational logs.

According to the system representatives, the system does not have any industrial dischargers. The wastewater received by the Walls collection system is 100% domestic wastewater.

The system representatives stated they do not typically have any issues with fats, oils, and greases (FOG) or flushable wipes. CWS has a sewer jet that is shared among the several collection systems they operate to clear out any buildups of FOG or wipes, if needed. The system representatives stated they have some infiltration and inflow (I/I) during rain events, but it rarely causes any issues. CWS reports any SSOs to the Mississippi Department of Environmental Quality (MDEQ) as soon as possible. The system representatives stated they have not had any SSOs in the last 5 years.

CWS has both a preventative maintenance and work order program. The operators record any preventative maintenance or work orders on the lift station operational logs. CWS also has written SOPs for the daily checks and weekly cleanings of the lift stations, and other operation activities. The system representatives stated they have not conducted any inspections of the Walls collection system in the past few years. The system representatives stated they follow confined space entry procedures during maintenance or other work throughout the collection system.

CWS maintains an up-to-date inventory of spare parts for the lift stations and pumps they have for the collection systems they operate, including Walls, in an asset management plan. CWS also has one portable backup generator that is shared between the systems they operate.

At the time of inspection, the inspectors requested that the system representatives provide more detailed SOPs for the lift station, along with the system's total number of manholes and the total miles of sewer lines as follow up after the inspection. No additional information was received from Walls or MWS prior to the development of the report.

Table 2. System Characteristics.

Total No. of Lift Stations	7
Total No. of Manholes	Unknown
Total Miles of Lines	Unknown
Total No. of Significant Industrial Users	0
Approximate Population Served	1,400
Sewer Line Composition	Mostly PVC, some concrete
Approximate No. of SSOs per Year	None in the past 5 years

System Site Walk

As part of the inspection process, the inspectors visually observed 4 lift stations and 2 manholes throughout the Walls collection system. A map of the lift stations and manholes that the inspectors visited is shown in Figure 1. Table 3 and Table 4 display the names, photograph numbers, locations, information, notes, and any observations that the inspectors had for the lift stations and manholes, respectively.



Figure 1. Map of the lift stations and manholes the inspectors visited during the inspection.

Table 3. Lift Stations Visited by the Inspectors during the Inspection

Name	Library Lift Station	Morningside Lift Station	Trailer Park Lift Station	Railroad Lift Station
No. on Map	1	2	3	4
Photograph Numbers ¹	Photographs 1-4	Photographs 6-9	Photographs 10-12	Photographs 13-16
Latitude	34.9655521	34.9738705	34.9579865	34.9560727
Longitude	-90.1381664	-90.135916	-90.1497531	-90.1532173
Line Size	4 in.	4 in.	4 in.	4 in.
Type of Pump	Submersible	Submersible	Submersible	Submersible
Perimeter	Fenced	Fenced	Fenced	Fenced
Security	Pump access and wet well were locked	Pump access and wet well were locked	Pump access and wet well were locked	Pump access and wet well were locked
Alarms	Yes, visual only	Yes, visual only	Yes, visual only	Yes, visual only
# of Pumps	2 pumps, alternate	2 pumps, alternate	2 pumps, alternate	2 pumps, alternate
Observations	Erosion near the wet well; rust and corrosion inside the wet well and on the float gauges; evidence of high-water levels in the wet well	None	None	Grease accumulation in the wet well

¹ Refer to Appendix A, Photograph Log.

Table 4. Manholes Visited by the Inspectors During the Inspection

Name	Morningside	Railroad
No. on Map	2	4
Photograph Numbers ¹	Photograph 5	Photographs 17-18
Latitude	34.9738705	34.9560727
Longitude	-90.135916	-90.1532173
Manhole Type	Concrete	Concrete
Observations	None	Gaps/cracks in the grout and concrete exterior of the manhole

¹ Refer to Appendix A, Photograph Log.

Records Review

On October 24, 2024, the inspectors conducted a records review to evaluate the Town of Walls' compliance with the Clean Water Act. The inspectors reviewed the following documents onsite:

- Lift station operational logs and SOPs from August 2024 to October 2024 (refer to Appendix B, Exhibit 1)
- Total monthly sewer flows from October 2023 to September 2024 (refer to Appendix B, Exhibit 2)
- Sewer rates for 2024
- Operator certifications

Summary of Observations

The following section summarizes the inspectors' observations relative to the requirements of the Clean Water Act and operational best practices.

- Observation 1.** The inspectors requested documentation containing more detailed SOPs for the lift stations, along with the system's total number of manholes and the total miles of sewer lines for review after the inspection. The system was unable to provide these records.
- Observation 2.** The inspectors observed grease accumulation in the Railroad Lift Station wet well (refer to Appendix A, Photograph 14).
- Observation 3.** The inspectors observed gaps/cracks in the grout and concrete exterior of the Railroad manhole (refer to Appendix A, Photograph 17).
- Observation 4.** The inspectors observed erosion near the Library Lift Station wet well (refer to Appendix A, Photograph 3). The inspectors also observed rust and corrosion inside the wet well and on the float gauges, in addition to evidence of high-water levels in the wet well (refer to Appendix A, Photograph 1).

Closing Conference

On October 24, 2024, the inspectors met with the system representatives for a closing conference and shared preliminary observations. The inspectors reiterated that all preliminary observations discussed were not compliance determinations. Any and all preliminary observations shared were subject to further investigation by the inspectors 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 on October 24, 2024, at approximately 1600.