Second Monthly Progress Report

June 2024

Currituck Water & Sewer, LLC

CPCN Proceeding for Carolina Village MHP

W-1333 Sub 5

Introduction

Currituck Water & Sewer, LLC's ("Currituck") monthly report is prepared for and submitted to the North Carolina Utilities Commission ("NCUC" or "Commission"), with a copy to the Public Staff of the North Carolina Utilities Commission ("Public Staff") consistent with the Commission's *Order Acknowledging Partial Settlement Agreement, Staying Show Cause Proceeding, Canceling Show Cause Hearing, And Continuing CPCN Proceeding* ("Order") issued May 2, 2024.

The Commission's Order adopts Currituck's and the Public Staff's *Joint Motion for Approval of Partial Settlement Agreement, Cancellation of Hearing on Motion to Show Cause, and Agreed Revised Scheduling Order* (Partial Settlement Agreement) dated May 1, 2024.

The Partial Settlement Agreement requires Currituck, in part, to communicate with the Public Staff and provide monthly updates on the progress of certain capital projects and other relevant activities (e.g., environmental matters, customer service) connected to the Carolina Village MHP. On April 24 (site visit) and May 8, 2024, representatives of Currituck and the Public Staff met or otherwise meaningfully communicated regarding Currituck's progress at the Carolina Village MHP. On May 6, 2024, Currituck filed with the Commission a capital project Gantt chart as its initial submission. Currituck will review, revise, and update this and future monthly reports consistent with the Commission's Order, the Partial Settlement Agreement, and its initial submission.

Capital Projects Summary

Immediate Renewal & Replacement (R & R)
(preliminary engineering estimate - $100,000)

The purpose of this project is to address immediate items related to the condition of the facilities with the goal to improve reliability and increase the effectiveness of the existing wastewater treatment plant (WWTP) and drinking water treatment plant (WTP) to maximize the effectiveness of the existing facilities while more substantive improvements are completed. For the WWTP, the immediate R&R items address items at the WWTP, while the

permanent facility is upgraded to a to a facility incorporating new tankage, blowers, and pumps while also utilizing existing tankage for equalization and sludge holding. The upgraded facility will provide the required treatment units necessary to achieve permit limit requirements. For the WTP, the immediate R&R items address items at the well house, while the design, permitting, and construction of the upgraded facilities is completed. The project consists of chemical feed upgrades, air compressor replacement, booster pump repairs, well house painting, new signage, and electrical modifications.

The project began on February 19, 2024. Beginning on or about March 27, 2024, Currituck undertook numerous immediate repairs as outlined in its response to the Public Staff's Motion to Show Cause. Work is expected to be ongoing as the effectiveness of the WWTP and WTP is continually analyzed. Currently, the planning, procurement, and mobilization phases will continue as needed. The initial construction phase began on March 10, 2024, and is largely complete with a few items such as additional removal of unnecessary equipment and materials and the installation of additional safety/security items to be completed on May 31, 2024. The existing WWTP plant will be repurposed when the new treatment facilities are commissioned. Some of the tankage and equipment will then be repurposed for use with the new plant. The scope of the immediate WTP improvements includes items that will largely be used as part of the planned additional upgrades. Previously provided as Exhibits A-1 through A-13 were pictures, Notices to Proceed, and Purchase Order Requisitions connected to the project. Note that while Exhibit A-13 shows the storage building was for operation & maintenance ("O&M"), it is in fact a capital improvement.

June Update

Currently, this project is materially complete.

Carolina Village Collection System R & R
(preliminary engineering estimate - $275,000)

The purpose of this project is to raise one manhole that sank, rehabilitate the four (4) Carolina Village MHP wastewater lift stations, improve the reliability of the facilities, decrease the potential for environmental harm (i.e., sanitary sewer overflows (SSOs)), and enhance public safety. Specifically, Currituck completed a CCTV of the collection system and the inspection of the four (4) lift stations. As part of these inspections, Currituck identified a single manhole that had settled, making it unserviceable. Currituck also found that the four (4) lift stations required renewal. Renewal of the lift stations will include installation of a new lift station control mounting station, upgrade of the electrical service, new controls, new pumps, new pump mounts, and new telemetry to bring the lift stations up

to Currituck's lift station standards. Additionally, the existing wet wells have been determined to be suitable for continued use. The sunken manhole will be raised approximately 24 inches. This will include realignment of 850 feet of six-inch PVC sewer main and eight four-inch services.

The project began on March 26, 2024, and is expected to be completed on May 31, 2024. Currently, the planning, procurement, and mobilization phases have been completed. The construction phase began on April 30, 2024, and is expected to conclude on or about May 31, 2024. Commissioning of the manhole and each lift station will occur as construction is complete. Previously provided as Exhibits B-1 through B-12 were pictures, quotes, Notices to Proceed, and Purchase Order Requisitions connected to the project.

June Update

David May of the North Carolina Department of Environmental Quality conducted a site visit on May 31, 2024. Mr. May was pleased with the lift station work and plans to return for a final inspection once telemetry units are installed. As previously indicated, the telemetry units have been ordered but have not yet arrived to be installed. Despite not having the units, the pump stations are online and running on the new pumps.

Additionally, to correct what was believed to be a sunken manhole, it was determined that the manhole in fact was not sunken, but rather, the road around the manhole had sunk due to a water leak. The leak has been fixed and the issue has been resolved.

Attached as Exhibits A-1 through A-6 are pictures connected to the project.

WTP Modifications
(preliminary engineering estimate - $100,000)

The purpose of this project is to construct structural enhancements, install a valve bank at the Carolina Village MHP wellhouse that meets Currituck standards, and properly connect the existing 5,000-gallon hydro-pneumatic tank to the system. More specifically, the project includes demolition, removal, and scrapping of the 100,000-gallon ground water storage tank (as well as other equipment) that is no longer required. Renovations will include the well house and valve bank and re-piping to remove the ground storage tank and booster station. Booster pumps will be decommissioned, and the valve bank to the hydro-pneumatic tank will be modified to meet Currituck's tank standards.

The project began in March 2024 and is expected to be completed by October 31, 2024. Currently, the planning phase has been completed. Final commissioning for the project is expected to occur on or about October 31, 2024. Previously provided as Exhibits

C-1 through C-3 were pictures, Notices to Proceed, and Purchase Order Requisitions connected to the project.

June Update

Currently, Currituck is working on permitting. It is anticipated that the permit application will be finished and submitted by the middle of June.

Water Distribution System Modifications
(preliminary engineering estimate - $50,000)

The purpose of this project is to remove fire hydrants as the achievement of fire flow is not possible with the Carolina Village MHP drinking water system and presents a liability. This project includes initially bagging of the fire hydrants so fire crews are fully aware that fire flow is not feasible on the existing Carolina Village water system, and, eventually, removing the fire hydrants, requiring fire crews to obtain water from an alternative source more suitable for providing water for fire fighting activities. Since fire hydrants will be removed, installation of blow-off assemblies at system dead end will allow Currituck to flush the water system with the intent to maintain high water quality throughout the system.

The project began in February 2024 when Currituck bagged the existing hydrants and coordinated this action with the local fire department. Currently, the planning, procurement, and mobilization phases have been completed. The construction phase will begin when Currituck crews have completed work on other projects. Construction completion is scheduled for October 31, 2024.

June Update

There is no material update on this project.

Water Metering Project
(preliminary engineering estimate - $200,000)

The purpose of this project is to allow Currituck to determine monthly water use by individual users and promote the responsible use of water by each customer. In addition, this will ensure customer billing accuracy and allow more efficient operation of the water system. Currituck will install approximately 124 meter boxes, meter setters, and meters.

The project began with the purchase of water meters and is expected to be completed by October 31, 2024. The construction phase will begin when Currituck crews have completed work on other ongoing projects. Final commissioning for the project is expected

to occur on or about October 31, 2024. Attached as Exhibit D-1 through D-4 were quotes and invoices connected to the project.

June Update

There is no material update on this project.

WWTP Upgrade
(preliminary engineering estimate - $700,000)

The purpose of this project is to replace the existing extended aeration wastewater treatment plant in operation at Carolina Village MHP by moving and installing an existing membrane WWTP to Carolina Village MHP that has the capability of achieving treatment results compatible with Engineered Option Permit (EOP) standards. The 60,000 gpd membrane plant includes three (3) tanks (pre-anoxic tank, aeration tank, and membrane tank), mixers, blowers, permeate pumps, and recycle pumps. The extended aeration plant's twelve (12) 5,000 gallon concrete aeration tanks are to be repurposed for use as two (2) 5,000-gallon equalization tanks, and ten (10) 5,000-gallon sludge holding tanks with two (2) approximately 260 cubic feet per minute (cfm) blowers for aeration. The existing tablet chlorinator, flow meter, and back up generator will be used for disinfection and backup power.

The project began on April 30, 2024, with the evaluation of the mobile plant and beginning of roadbed preparation for plant delivery and is expected to be completed on December 31, 2024. Currently, the planning phase is still underway, but the major elements of the WWTP have already been procured. A hydrogeologist has identified a new location for the EOP fields as the previously identified location was not feasible based upon well point tests. MacConnell & Associates approved the location. ELJ cleared vegetation for further investigation by the hydrogeologist.

The mobilization and construction phases have yet to begin. Final commissioning for the project is expected to occur on or about December 31, 2024. Attached as Exhibits E-1 through E-7 were pictures connected to the project.

June Update

Currently, Currituck is working on completion of a preliminary design for the treatment plan. Currituck is working with MacDonnell & Associates and ELJ for the design. Additionally, site selection for the EOP fields is complete. The hydrogeologist has performed preliminary and field evaluations and provided to Currituck preliminary loading rates.

Environmental Summary

Currituck achieved compliance with all relevant and appropriate drinking water quality legal obligations at Carolina Village MHP during April 2024. With respect to wastewater obligations at Carolina Village MHP, Currituck is waiting on all sample results to confirm status of compliance and will provide same as part of its next status report. As is known by the Public Staff and the North Carolina Department of Environmental Quality ("DEQ"), however, the Carolina Village MHP wastewater treatment plant effluent remains non-compliant with nitrogen standards until the completion of Currituck's WWTP capital project (see above).

Previously attached as Exhibit F-1 was the Monthly Operating Report ("MOR") for April 2024 as submitted to DEQ.

June Update

As stated above, David May conducted a site visit on May 31, 2024. Mr. May indicated that the basin the system was discharging into is in compliance. He also requested Currituck prepare a pump and haul application (without submitting it) in the event the level of the infiltration pond would violate the freeboard requirement during a major storm like a hurricane. Mr. May indicated the application could be quickly turned around if implementation was necessary.

Attached as Exhibits B-1 through B-3 are the April DMR (which indicated the system is in compliance, including for nitrogen) and sampling results from May.

Customer Service Summary

During April 2024, Currituck received three (3) customer service contacts regarding Carolina Village MHP. The first matter was reported on April 15 and involved Lift Station B. Envirolink responded the same day and determined that the electrical panel had "tripped" requiring the successful reset of the breakers. The second matter involved a report on April 19 of a main break. Envirolink responded that same day and determined there was no main break and notified the customer. Finally, on April 25 Envirolink resolved an earlier report of a malfunctioning pump by replacing it with a new pump and motor. Each customer service contact was fully and timely resolved by Envirolink staff.

June Update

There were no customer contacts in May.

Operational & Administrative Improvements

Currituck is developing certain operational and administrative improvements. Currituck will timely report on each operational and administrative improvement in future monthly reports.

June Update

Currituck is currently working to with Envirolink to transition away from Envirolink's subcontractor to a new Envirolink lead operator.

EXHIBIT A INDEX – COLLECTION SYSTEM R&R

Exhibit A-1

Exhibit A-2

Exhibit A-3

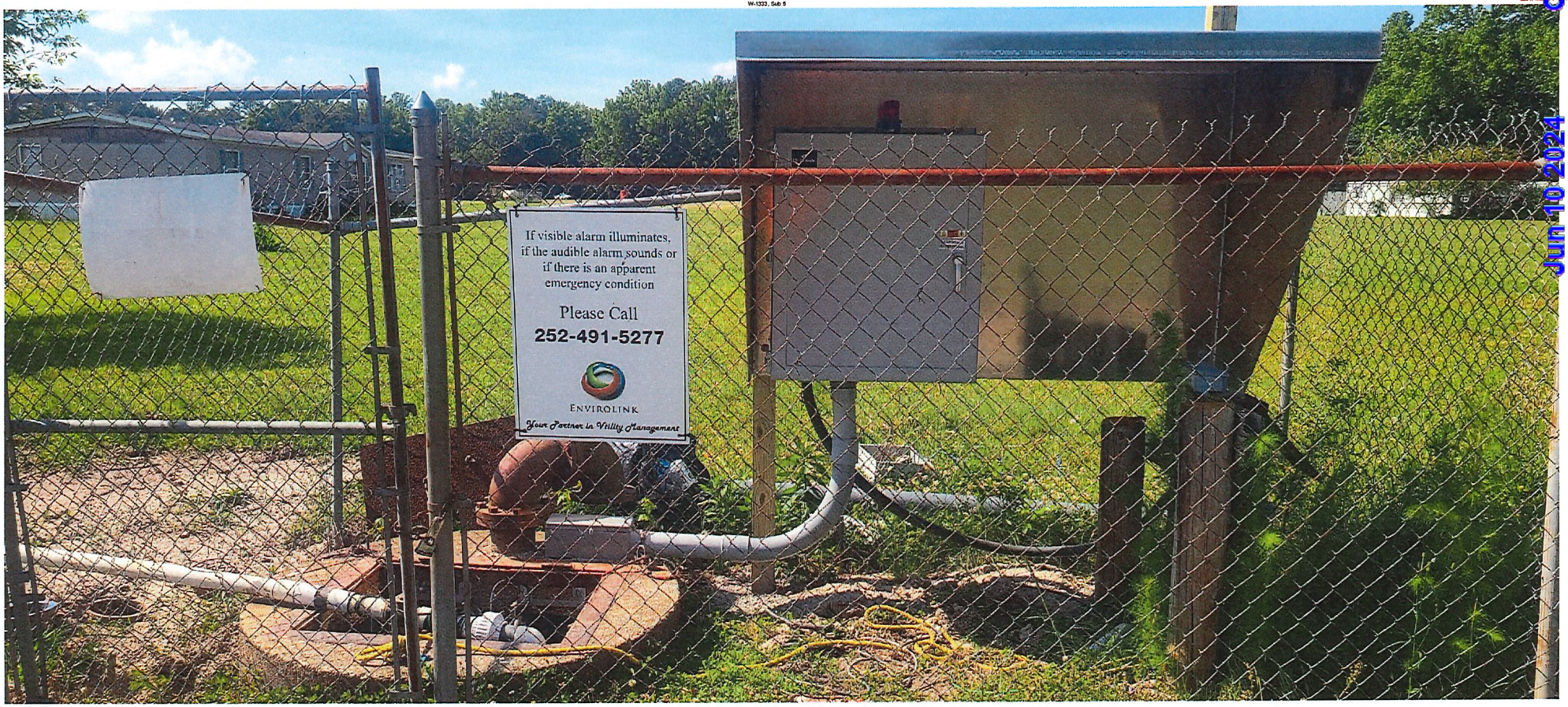

Exhibit A-5

Exhibit A-6

EXHIBIT B INDEX – ENVIRONMENTAL

Exhibit B-1: April 2024 DMR;

Exhibit B-2: May sampling results;

Exhibit B-3: May sampling results.

FORM: NDMR 05-16

NON-DISCHARGE MONITORING REPORT (NDMR)

WQ0004696

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EXHIBIT B-1

Permit No.: WQ0004696	Facility Name: Carolina Village WWTP	County: Currituck	Month: April	Year: 2024
PPI: 001	Flow Measuring Point: ☐ Influent ☑ Effluent ☐ No flow generated	Parameter Monitoring Point: ☐ Influent ☑ Effluent ☐ Groundwater Lowering ☐ Surface Water		

Parameter Code →			50050	00310	00940	50060	31616	00610	00625	00620	00600	00400	00665	70300	00530	00076		
Day	ORC Arrival Time	ORC Time On Site	Flow	BOD5	Chloride	Total Residual Chlorine	Fecal Coliform	Ammonia	Total Kjeldahl Nitrogen	Nitrate	Total Nitrogen	pH	Total Phosphorus	Total Dissolved Solids	Total Suspended Solids	Turbidity		
	24-hr	hrs	GPD	mg/L	mg/L	mg/L	#/100 mL	mg/L	mg/L	mg/L	mg/L	su	mg/L	mg/L	mg/L	NTU		
1			28,547															
2	12:00	1.5	38,430			0.5						7.2						
3	14:00	1	11,009			1.3						7.2						
4	16:30	2	10,357			0.9						7.4						
5	14:52	1	6,001			0.08						7.2						
6	14:48	1	5,174			1.3						7.3						
7	06:09	1	6,128			1.4						7.2						
8	15:00	0.5	3,987			1.3						7.4						
9	08:55	1	3,362			1.2						7.4						
10	13:10	0.5	5,161			2.1						7.6						
11			4,091															
12	15:00	1	4,098			1.8						7						
13	10:00	1	5,018			1.9						7.1						
14	09:29	1	4,019			2						7.2						
15	16:30	1	6,325			1.8						7.4						
16	14:40	1	7,900			2.2						7						
17	14:29	1	3,991			2.3						7.4						
18			2,895															
19	14:00	1	3,040			2.4						7.5						
20	08:30	1	3,858			2						7.4						
21	11:42	1	4,561			3.1						7						
22	07:32	1	3,848			3.4						7.2						
23	17:30	1	247			2.1						7.4						
24			9,108															
25			10,007	10			<1	2.77	4.4	0.04	4.5		0.3		3.9			
26	13:10	1	9,822			1.6						7.4						
27	11:45	1	8,209			1.9						7.2						
28	12:15	1	3,101			2						7						
29			5,987															
30	10:45	1	2,198			2.3	<1	0.55	1.1	2.23	3.3	6.9	0.07		<2.5			
31																		
Average:			7,349	10.00		1.79	1.00	1.66	2.75	1.14	3.90		0.19		1.95			
Daily Maximum:			38,430	10.00		3.40	1.00	2.77	4.40	2.23	4.50	7.60	0.30		3.90			
Daily Minimum:			247	10.00		0.08	1.00	0.55	1.10	0.04	3.30	6.90	0.07		2.50			
Sampling Type:			Recorder	Composite	Composite	Grab	Grab	Composite	Composite	Composite	Composite	Grab	Composite	Composite	Composite	Recorder		
Monthly Limit:			60,000	10			14	4		10	7		3		15			
Daily Limit:												6-9				10		
Sample Frequency:			Continuous	2 X Month	3 X Year	5 X Week	2 X Month	2 X Month	2 X Month	2 X Month	2 X Month	5 X Week	2 X Month	3 X Year	2 X Month	Continuous		

FORM: NDMR 05-16

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NON-DISCHARGE MONITORING REPORT (NDMR)

EXHIBIT B-1

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Permit No.: WQ0004696	Facility Name: Carolina Village WWTP	County: Currituck	Month: April	Year: 2024

PPI: 002	Flow Measuring Point: ☐ Influent ☐ Effluent ☑ No flow generated	Parameter Monitoring Point: ☐ Influent ☑ Effluent ☐ Groundwater Lowering ☐ Surface Water

Parameter Code →			50050	00940	31616	70300	00610	00620	00600	00400	00665								
Day	ORC Arrival Time	ORC Time On Site	Flow	Chloride	Fecal Coliform	Total Dissolved Solids	Ammonia	Nitrate	Total Nitrogen	pH	Total Phosphorus								
	24-hr	hrs	GPD	mg/L	#/100 mL	mg/L	mg/L	mg/L	mg/L	su	mg/L								
1			28,547																
2	12:00	1.5	38,430							7.2									
3	14:00	1	11,009							7.2									
4	16:30	2	10,357							7.4									
5	14:52	1	6,001							7.2									
6	14:48	1	5,174							7.3									
7	6:09	1	6,128							7.2									
8	15:00	0.5	3,987							7.4									
9	8:55	1	3,362							7.4									
10	13:10	0.5	5,161							7.6									
11			4,091																
12	15:00	1	4,098							7									
13	10:00	1	5,018							7.1									
14	9:29	1	4,019							7.2									
15	16:30	1	6,325							7.4									
16	14:40	1	7,900							7									
17	14:29	1	3,991							7.4									
18			2,895																
19	14:00	1	3,040							7.5									
20	8:30	1	3,858							7.4									
21	11:42	1	4,561							7									
22	7:32	1	3,848							7.2									
23	17:30	1	247							7.4									
24			9,108																
25			10,007		<1		1.66	0.7	6.3		0.59								
26	13:10	1	9,822							7.4									
27	11:45	1	8,209							7.2									
28	12:15	1	3,101							7									
29			5,987																
30	10:45	1	2,198		<1		<0.1	0.02	0.6	6.9	0.13								
31																			
Average:			7,349		1.00		0.83	0.36	3.45		0.36								
Daily Maximum:			38,430		1.00		1.66	0.70	6.30	7.60	0.59								
Daily Minimum:			247		1.00		0.10	0.02	0.60	6.90	0.13								
Sampling Type:			Recorder	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab								
Monthly Limit:				250		500	1.5	10											
Daily Limit:			43,387							6.5-8.5									
Sample Frequency:			Continous	3 X Year	2 X Month	3 X Year	2 X Month	2 X Month	2 X Month	5 X Week	2 X Month								

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NON-DISCHARGE MONITORING REPORT (NDMR)

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EXHIBIT B-1

Permit No.: WQ0004696	Facility Name: Carolina Village WWTP	County: Currituck	Month: April	Year: 2024
PPI: 003	Flow Measuring Point: ☐ Influent ☐ Effluent ☑ No flow generated	Parameter Monitoring Point: ☐ Influent ☐ Effluent ☑ Groundwater Lowering ☑ Surface Water		

Parameter Code →			00310	00300	00600	00400	00665												
Day	ORC Arrival Time	ORC Time On Site	BOD5	Dissolved Oxygen	Total Nitrogen	pH	Total Phosphorus												
	24-hr	hrs	mg/L	mg/L	mg/L	su	mg/L												
1																			
2	12:00	1.5																	
3	14:00	1																	
4	16:30	2																	
5	14:52	1																	
6	14:48	1																	
7	6:09	1																	
8	15:00	0.5																	
9	8:55	1																	
10	13:10	0.5																	
11																			
12	15:00	1																	
13	10:00	1																	
14	9:29	1																	
15	16:30	1																	
16	14:40	1																	
17	14:29	1																	
18																			
19	14:00	1																	
20	8:30	1																	
21	11:42	1																	
22	7:32	1																	
23	17:30	1																	
24																			
25																			
26	13:10	1																	
27	11:45	1																	
28	12:15	1																	
29																			
30	10:45	1																	
31																			
Average:																			
Daily Maximum:																			
Daily Minimum:																			
Sampling Type:			Grab	Grab	Grab	Grab	Grab												
Monthly Limit:																			
Daily Limit:																			
Sample Frequency:			3 X Year	3 X Year	3 X Year	3 X Year	3 X Year												

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NON-DISCHARGE MONITORING REPORT (NDMR)

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EXHIBIT B-1

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Jun 10 2024

Permit No.: WQ0004696	Facility Name: Carolina Village WWTP	County: Currituck	Month: April	Year: 2024
PPI: 004	Flow Measuring Point: ☐ Influent ☐ Effluent ☑ No flow generated	Parameter Monitoring Point: ☐ Influent ☐ Effluent ☐ Groundwater Lowering ☑ Surface Water		

Parameter Code →			00310	00300	00600	00400	00665												
Day	ORC Arrival Time	ORC Time On Site	BOD5	Dissolved Oxygen	Total Nitrogen	pH	Total Phosphorus												
	24-hr	hrs	mg/L	mg/L	mg/L	su	mg/L												
1																			
2	12:00	1.5																	
3	14:00	1																	
4	16:30	2																	
5	14:52	1																	
6	14:48	1																	
7	6:09	1																	
8	15:00	0.5																	
9	8:55	1																	
10	13:10	0.5																	
11																			
12	15:00	1																	
13	10:00	1																	
14	9:29	1																	
15	16:30	1																	
16	14:40	1																	
17	14:29	1																	
18																			
19	14:00	1																	
20	8:30	1																	
21	11:42	1																	
22	7:32	1																	
23	17:30	1																	
24																			
25																			
26	13:10	1																	
27	11:45	1																	
28	12:15	1																	
29																			
30	10:45	1																	
31																			
Average:																	1.02		
Daily Maximum:																	2.00		
Daily Minimum:																	0.50		
Sampling Type:			Grab	Grab	Grab	Grab	Grab												
Monthly Limit:																			
Daily Limit:																			
Sample Frequency:			3 X Year	3 X Year	3 X Year	3 X Year	3 X Year												

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NON-DISCHARGE MONITORING REPORT (NDMR) WI-1535, Sub 5

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EXHIBIT B-1

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Jun 10 2024

Sampling Person(s)	Certified Laboratories
Name: Michelle Pharr	**Name:** Environmental Chemist
Name:	**Name:**

Does all monitoring data and sampling frequencies meet the requirements in Attachment A of your permit? ☑ Compliant ☐ Non-Compliant

If the facility is non-compliant, please explain in the space below the reason(s) the facility was not in compliance. Provide in your explanation the date(s) of the non-compliance and describe the corrective action(s) taken. Attach additional sheets if necessary.

Operator in Responsible Charge (ORC) Certification	Permittee Certification
ORC: David Pharr	**Permittee:** Carolina Village MHP
Certification No.: 26526	**Signing Official:** Daniel Sears
Grade: WW4 **Phone Number:** 252-725-3471	**Signing Official's Title:** Compliance Manager
Has the ORC changed since the previous NDMR? ☐ Yes ☑ No	**Phone Number:** 984-365-9155 **Permit Expiration:** 5/4/2030
Signature: [signature] Date: 5/16/24	Signature: [signature] Date: 05/16/2024
By this signature, I certify that this report is accurate and complete to the best of my knowledge.	I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that all qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Mail Original and Two Copies to:
Division of Water Resources
Information Processing Unit
1617 Mail Service Center
Raleigh, North Carolina 27699-1617

FORM: NDAR-2 05-16

NON-DISCHARGE APPLICATION REPORT (NDAR-2)

W-1333, Sub 5

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EXHIBIT B-1

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Jun 10 2024

Permit No.:	WQ0004696	Facility Name:	Carolina Village WWTP	County:	Currituck	Month:	April	Year:	2024

Did infiltration occur at this facility? ☑ YES ☐ NO

	Site Name:	1	Site Name:	2	Site Name:		Site Name:	
	Area (acres):	0.29	Area (acres):	0.29	Area (acres):		Area (acres):	
	Rate (GPD/ft²):	2.35	Rate (GPD/ft²):	2.35	Rate (GPD/ft²):		Rate (GPD/ft²):	
	Site Infiltrated?	☑ YES ☐ NO	Site Infiltrated?	☐ YES ☑ NO	Site Infiltrated?	☐ YES ☐ NO	Site Infiltrated?	☐ YES ☐ NO

Day	Weather			Freeboard		1				2											
	Weather Code	Temperature	Precipitation	Storage (if applicable)	5-Day Upset (if applicable)	Volume Applied	Time Infiltrated	Daily Loading	Freeboard (Basins Only)	Volume Applied	Time Infiltrated	Daily Loading	Freeboard (Basins Only)	Volume Applied	Time Infiltrated	Daily Loading	Freeboard (Basins Only)	Volume Applied	Time Infiltrated	Daily Loading	Freeboard (Basins Only)
		°F	in	ft	ft	gal	min	GPD/ft²	ft	gal	min	GPD/ft²	ft	gal	min	GPD/ft²	ft	gal	min	GPD/ft²	ft
1	C	79				28,547		2.26													
2	CL	68		3		38,430		3.04													
3	CL	75		3		11,009		0.87													
4	CL	59		3		10,357		0.82													
5	CL	61		3		6,001		0.48													
6	CL	61		3		5,174		0.41													
7	CL	62		3		6,128		0.49													
8	CL	57		3		3,987		0.32													
9	C	60		3		3,362		0.27													
10	CL	60		3		5,161		0.41													
11	C	75				4,091		0.32													
12	CL	72		3		4,098		0.32													
13	CL	78		3		5,018		0.40													
14	CL	85		3		4,019		0.32													
15	CL	67				6,325		0.50													
16	C	83		3		7,900		0.63													
17	CL	74		3		3,991		0.32													
18	R	60	0.28			2,895		0.23													
19	CL	67		3		3,040		0.24													
20	CL	60		3		3,858		0.31													
21	CL	56		3		4,561		0.36													
22	C	67		3		3,848		0.30													
23	C	61		3		247		0.02													
24	CL	57				9,108		0.72													
25	CL	66				10,007		0.79													
26	CL	83		3		9,822		0.78													
27	C	86				8,209		0.65													
28	CL	68		3		3,101		0.25													
29	CL	73				5,987		0.47													
30	CL	71		3		2,198		0.17													
31																					
Monthly Loading (GPD/ft²):								0.58				#DIV/0!				#DIV/0!				#DIV/0!	
Year to Date Loading (GPD/ft²):																					

FORM: NDAR-2 05-16

NON-DISCHARGE APPLICATION REPORT (NDAR-2)

WI 1893 Sub E

EXHIBIT B-1

Page 3

OFFICIAL COPY

Jun 10 2024

Did the application rates exceed the limits in Attachment B of your permit?	☑ Compliant	☐ Non-Compliant
If not a basin, were the sites kept free of vegetation and raked?	☑ Compliant	☐ Non-Compliant
If not a basin, were there any instances of effluent ponding in or runoff from the sites?	☑ Compliant	☐ Non-Compliant
If a basin, were there any instances of breakout from the berms?	☑ Compliant	☐ Non-Compliant
Was the onsite automatically activated standby power source tested and operational?	☑ Compliant	☐ Non-Compliant

If the facility is non-compliant, please explain in the space below the reason(s) the facility was not in compliance. Provide in your explanation the date(s) of the non-compliance and describe the corrective action(s) taken. Attach additional sheets if necessary.

Operator in Responsible Charge (ORC) Certification	Permittee Certification
ORC: David Pharr	**Permittee:** Carolina Village MHP
Certification No.: 26526	**Signing Official:** Daniel Sears
Grade: WW4 **Phone Number:** 252-725-3471	**Signing Official's Title:** Compliance Manager
Has the ORC changed since the previous NDAR-2? ☐ Yes ☑ No	**Phone Number:** 984-365-9155 **Permit Exp.:** 5/4/30
Signature: [signature] Date: 5/16/24	Signature: [signature] Date: 05/16/2024
By this signature, I certify that this report is accurate and complete to the best of my knowledge.	I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that all qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Mail Original and Two Copies to:
Division of Water Resources
Information Processing Unit
1617 Mail Service Center
Raleigh, North Carolina 27699-1617

envirochem

ANALYTICAL & CONSULTING CHEMISTS

Environmental Chemists, Inc.

6602 Windmill Way, Wilmington, NC 28405 • 910.392.0223 Lab • 910.392.4424 Fax
710 Bowsertown Road, Manteo, NC 27954 • 252.473.5702 Lab/Fax
255-A Wilmington Highway, Jacksonville, NC 28540 • 910.347.5843 Lab/Fax

info@environmentalchemists.com

Envirolink, Inc.
PO Box 670
Bailey NC 27807
Attention:

Date of Report: May 13, 2024
Manteo Report #: 24M-909
Report #: 2024-09953
Customer ID: 16040014
Project ID: Carolina Village MHP

Lab ID	Sample ID:	Collect Date/Time	Matrix	Sampled by
24-24191	Site: PPI 001 Effluent	4/30/2024 9:30 AM	Water	M. Pharr

Test	Method	Results	Date Analyzed
Nitrite Nitrogen	EPA 353.2, Rev. 2.0, 1993	< 0.02 mg/L	05/02/2024
Residue Suspended (TSS)	SM 2540 D-2015	<2.5 mg/L	05/02/2024
Ammonia Nitrogen	SM 4500 NH3 C-2011	0.55 mg/L	05/02/2024
Total Phosphorus	SM 4500 P (F-H)-2011	0.07 mg/L	05/06/2024
BOD	SM 5210 B-2016	<2 mg/L	05/01/2024
Nitrate Nitrogen (Calc)			
Nitrate Nitrogen	Subtraction Method	2.23 mg/L	05/10/2024
Total Nitrogen (Calc)			
Nitrate+Nitrite-Nitrogen	EPA 353.2, Rev. 2.0, 1993	2.23 mg/L	05/08/2024
Total Kjeldahl Nitrogen (TKN)	SM 4500 Norg B-2011	1.1 mg/L	05/02/2024
Total Nitrogen	Total Nitrogen	3.3 mg/L	05/10/2024

Lab ID	Sample ID: M-1357	Collect Date/Time	Matrix	Sampled by
24-24192	Site: PPI 001 Effluent Grab -M	4/30/2024 9:30 AM	Water	M. Pharr

Test	Method	Results	Date Analyzed
Fecal Coliform	Idexx Colilert-18	<1 MPN/100ml	04/30/2024

Lab ID	Sample ID:	Collect Date/Time	Matrix	Sampled by
24-24193	Site: PPI 002	4/30/2024 9:30 AM	Water	M. Pharr

Test	Method	Results	Date Analyzed
Nitrite Nitrogen	EPA 353.2, Rev. 2.0, 1993	< 0.02 mg/L	05/01/2024
Total Dissolved Solids (TDS)	SM 2540 C-2015	166 mg/L	05/01/2024
Ammonia Nitrogen	SM 4500 NH3 C-2011	<0.1 mg/L	05/02/2024
Total Phosphorus	SM 4500 P (F-H)-2011	0.13 mg/L	05/06/2024
Chloride	SM4500 Cl E-2011	43 mg/L	05/07/2024
Nitrate Nitrogen (Calc)			
Nitrate Nitrogen	Subtraction Method	0.02 mg/L	05/10/2024
Total Nitrogen (Calc)			
Nitrate+Nitrite-Nitrogen	EPA 353.2, Rev. 2.0, 1993	0.02 mg/L	05/08/2024
Total Kjeldahl Nitrogen (TKN)	SM 4500 Norg B-2011	0.6 mg/L	05/02/2024
Total Nitrogen	Total Nitrogen	0.6 mg/L	05/10/2024

envirochem SM

ANALYTICAL & CONSULTING CHEMISTS

Environmental Chemists, Inc.

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710 Bowsertown Road, Manteo, NC 27954 • 252.473.5702 Lab/Fax
255-A Wilmington Highway, Jacksonville, NC 28540 • 910.347.5843 Lab/Fax

info@environmentalchemists.com

Envirolink, Inc.
PO Box 670
Bailey NC 27807
Attention:

Date of Report: May 13, 2024
Manteo Report #: 24M-909
Report #: 2024-09953
Customer ID: 16040014
Project ID: Carolina Village MHP

Lab ID	Sample ID: M-1358	Collect Date/Time	Matrix	Sampled by
24-24194	Site: PPI 002 -Grab M	4/30/2024 9:30 AM	Water	M. Pharr

Test	Method	Results	Date Analyzed
Fecal Coliform	Idexx Colilert-18	<1 MPN/100ml	04/30/2024

Comment:

Reviewed by:

6602 Windmill Way
Wilmington, NC 28405
910.392.0223

Sample Receipt Checklist

Client: Carolina Village Date: 5/1/24 Report Number: 2024 9953

Receipt of sample: ECHEM Pickup ☐ Client Delivery ☐ UPS ☒ FedEx ☐ Other ☐

☐ YES	☐ NO	☒ N/A	1. Were custody seals present on the cooler?
☐ YES	☐ NO	☒ N/A	2. If custody seals were present, were they intact/unbroken?

Original temperature upon receipt 4.1 °C Corrected temperature upon receipt _____ °C

How temperature taken: ☐ Temperature Blank ☒ Against Bottles

IR Gun ID: Thomas Traceable S/N: 230222540 IR Gun Correction Factor °C: 0.0

☒ YES	☐ NO	3. If temperature of cooler exceeded 6°C, was Project Mgr./QA notified?
☒ YES	☐ NO	4. Were proper custody procedures (relinquished/received) followed?
☒ YES	☐ NO	5. Were sample ID's listed on the COC?
☒ YES	☐ NO	6. Were samples ID's listed on sample containers?
☒ YES	☐ NO	7. Were collection date and time listed on the COC?
☒ YES	☐ NO	8. Were tests to be performed listed on the COC?
☒ YES	☐ NO	9. Did samples arrive in proper containers for each test?
☒ YES	☐ NO	10. Did samples arrive in good condition for each test?
☒ YES	☐ NO	11. Was adequate sample volume available?'
☒ YES	☐ NO	12. Were samples received within proper holding time for requested tests?
☒ YES	☐ NO	13. Were acid preserved samples received at a pH of <2? *
☐ YES	☐ NO	14. Were cyanide samples received at a pH >12?
☐ YES	☐ NO	15. Were sulfide samples received at a pH >9?
☒ YES	☐ NO	16. Were NH3/TKN/Phenol received at a chlorine residual of <0.5 m/L? **
☐ YES	☐ NO	17. Were Sulfide/Cyanide received at a chlorine residual of <0.5 m/L?
☐ YES	☐ NO	18. Were orthophosphate samples filtered in the field within 15 minutes?

* TOC/Volatiles are pH checked at time of analysis and recorded on the benchsheet.

** Bacteria samples are checked for Chlorine at time of analysis and recorded on the benchsheet.

Sample Preservation: (Must be completed for any sample(s) incorrectly preserved or with headspace)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly

by adding (circle one): H_2SO_4 HNO_3 HCl NaOH

Time of preservation: _____ If more than one preservative is needed, notate in comments below

Note: Notify customer service immediately for incorrectly preserved samples. Obtain a new sample or notify the state lab if directed to analyzed by the customer. Who was notified, date and time: _____

Volatiles Sample(s) _____ were received with headspace

COMMENTS:

EXHIBIT B-2

envirochem
Analytical & Consulting Chemists

ENVIRONMENTAL CHEMISTS, INC

NCDENR: DWQ CERTIFICATION # 94 NCDHHS: DLS CERTIFICATION # 37729

6602 Windmill Way Wilmington, NC 28405
OFFICE: 910-392-0223 FAX 910-392-4424
info@environmentalchemists.com

COLLECTION AND CHAIN OF CUSTODY

Client: Envirolink-OBX	PROJECT NAME: Carolina Village MHP	REPORT NO: 24M909
ADDRESS:	CONTACT NAME: Envirolink OBX	PO NO: 24-9953
	Permit Number: WQ0004696	PHONE/FAX:
	COPY TO:	email:

Sampled By: M. Rhem

SAMPLE TYPE: I = Influent, E = Effluent, W = Well, ST = Stream, SO = Soil, SL = Sludge, Other:

W-1333 Sub 5

Sample Identification	Collection: Date	Collection: Time	Collection: Temp	Sample Type	Composite or Grab	Container (P or G)	Chlorine mg/L	pH of bottle	LAB ID NUMBER	PRESERVATION: NONE	HCL	H2SO4	HNO3	NAOH	THIO	FILTERED	OTHER	ANALYSIS REQUESTED
PPI 001 (effluent-2/month)	4/30	9:30			C	P												
					G	G	<0.5		24191	X		X	<2					BOD,TSS,NH3,P, NO3,NO2,TKN
PPI 001 (effluent-2/month)					C	P												
					G	G			M1357						X			Fecal Coliform
PPI 001 (Mar/July/November)					C	P												
					G	G			24193	X								TDS/Chloride (not same
PPI 002 (GW Lower-2/month)					C	P												
					G	G	<0.5		M1358	X		X	<2		X			Fecal,NH3,P,NO3,NO2,TKN
PPI 002 (GW-Mar/Jul/Nov)					C	P												
					G	G				X								TDS/Chloride (acl bottle
PPI 003-SW#1 (Mar/Jul/Nov)					C	P												
					G	G				X		X						BOD,Total N, P
PPI 004-SW#2 (Mar/Jul/Nov)					C	P												
					G	G				X		X						BOD,Total N, P
					C	P												
					G	G												

Transfer	Relinquished By:	Date/Time	Received By:	Date/Time
1.BOD,TSS,NO2,NO3				
2.TP TN TKN NH3		4/30/24 4:30		4/30/24 12:20

Temperature when Received °C: 4.1 Accepted: ✓ Rejected: Resample Requested:

Delivered By: M. Rhem WS Received By: R Koneen Date: 5/1/24 Time: 1230

Comments: TURNAROUND:

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ANALYTICAL & CONSULTING CHEMISTS

Environmental Chemists, Inc.

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710 Bowsertown Road, Manteo, NC 27954 • 252.473.5702 Lab/Fax
255-A Wilmington Highway, Jacksonville, NC 28540 • 910.347.5843 Lab/Fax

info@environmentalchemists.com

Envirolink, Inc.
PO Box 670
Bailey NC 27807
Attention:

Date of Report: May 14, 2024
Manteo Report #: 24M-880
Report #: 2024-09700
Customer ID: 16040014
Project ID: Carolina Village MHP

Lab ID	Sample ID:	Collect Date/Time	Matrix	Sampled by
24-23576	**Site:** PPI 001 Effluent	4/25/2024 11:30 AM	Water	M. Pharr

Test	Method	Results	Date Analyzed
Nitrite Nitrogen	EPA 353.2, Rev. 2.0, 1993	0.06 mg/L	04/26/2024
Residue Suspended (TSS)	SM 2540 D-2015	3.9 mg/L	04/29/2024
Ammonia Nitrogen	SM 4500 NH3 C-2011	2.77 mg/L	04/26/2024
Total Phosphorus	SM 4500 P (F-H)-2011	0.30 mg/L	05/02/2024
BOD	SM 5210 B-2016	10 mg/L	04/26/2024
Nitrate Nitrogen (Calc)			
Nitrate Nitrogen	Subtraction Method	0.04 mg/L	04/29/2024
Total Nitrogen (Calc)			
Nitrate+Nitrite-Nitrogen	EPA 353.2, Rev. 2.0, 1993	0.10 mg/L	04/29/2024
Total Kjeldahl Nitrogen (TKN)	SM 4500 Norg B-2011	4.4 mg/L	04/26/2024
Total Nitrogen	Total Nitrogen	4.5 mg/L	04/29/2024

Lab ID	Sample ID: M-1312	Collect Date/Time	Matrix	Sampled by
24-23577	**Site:** PPI 001 Effluent Grab -M	4/25/2024 11:30 AM	Water	M. Pharr

Test	Method	Results	Date Analyzed
Fecal Coliform	Idexx Colilert-18	<1 MPN/100ml	04/25/2024

Lab ID	Sample ID:	Collect Date/Time	Matrix	Sampled by
24-23578	**Site:** PPI 002	4/25/2024 11:30 AM	Water	M. Pharr

Test	Method	Results	Date Analyzed
Nitrite Nitrogen	EPA 353.2, Rev. 2.0, 1993	0.06 mg/L	04/26/2024
Ammonia Nitrogen	SM 4500 NH3 C-2011	1.66 mg/L	04/26/2024
Total Phosphorus	SM 4500 P (F-H)-2011	0.59 mg/L	05/02/2024
Nitrate Nitrogen (Calc)			
Nitrate Nitrogen	Subtraction Method	0.70 mg/L	04/29/2024
Total Nitrogen (Calc)			
Nitrate+Nitrite-Nitrogen	EPA 353.2, Rev. 2.0, 1993	0.76 mg/L	04/29/2024
Total Kjeldahl Nitrogen (TKN)	SM 4500 Norg B-2011	5.5 mg/L	04/26/2024
Total Nitrogen	Total Nitrogen	6.3 mg/L	04/29/2024

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ANALYTICAL & CONSULTING CHEMISTS

Environmental Chemists, Inc.

6602 Windmill Way, Wilmington, NC 28405 • 910.392.0223 Lab • 910.392.4424 Fax
710 Bowsertown Road, Manteo, NC 27954 • 252.473.5702 Lab/Fax
255-A Wilmington Highway, Jacksonville, NC 28540 • 910.347.5843 Lab/Fax

info@environmentalchemists.com

Envirolink, Inc.
PO Box 670
Bailey NC 27807
Attention:

Date of Report: May 14, 2024
Manteo Report #: 24M-880
Report #: 2024-09700
Customer ID: 16040014
Project ID: Carolina Village MHP

Lab ID	Sample ID: M-1315	Collect Date/Time	Matrix	Sampled by
24-23579	Site: PPI 002 -Grab M	4/25/2024 11:30 AM	Water	M. Pharr

Test	Method	Results	Date Analyzed
Fecal Coliform	Idexx Colilert-18	<1 MPN/100ml	04/25/2024

Comment:

Reviewed by:

Environmental Chemist, Inc., Wilmington, NC Lab #94

6602 Windmill Way
Wilmington, NC 28405
910.392.0223

Sample Receipt Checklist

Client: Carolina Village Date: 4/26/24 Report Number: 2024-9700

Receipt of sample:		ECHEM Pickup ☒	Client Delivery ☐ UPS ☐ FedEx ☐ Other ☐
☐ YES	☐ NO	☒ N/A	1. Were custody seals present on the cooler?
☐ YES	☐ NO	☒ N/A	2. If custody seals were present, were they intact/unbroken?
Original temperature upon receipt 2.2 °C			Corrected temperature upon receipt _____ °C
How temperature taken:		☐ Temperature Blank	☒ Against Bottles
IR Gun ID: Thomas Traceable S/N: 230222540			IR Gun Correction Factor °C: 0.0
☒ YES	☐ NO		3. If temperature of cooler exceeded 6°C, was Project Mgr./QA notified?
☒ YES	☐ NO		4. Were proper custody procedures (relinquished/received) followed?
☒ YES	☐ NO		5. Were sample ID's listed on the COC?
☒ YES	☐ NO		6. Were samples ID's listed on sample containers?
☒ YES	☐ NO		7. Were collection date and time listed on the COC?
☒ YES	☐ NO		8. Were tests to be performed listed on the COC?
☒ YES	☐ NO		9. Did samples arrive in proper containers for each test?
☒ YES	☐ NO		10. Did samples arrive in good condition for each test?
☒ YES	☐ NO		11. Was adequate sample volume available?'
☒ YES	☐ NO		12. Were samples received within proper holding time for requested tests?
☒ YES	☐ NO		13. Were acid preserved samples received at a pH of <2? *
☐ YES	☐ NO		14. Were cyanide samples received at a pH >12?
☐ YES	☐ NO		15. Were sulfide samples received at a pH >9?
☒ YES	☐ NO		16. Were NH3/TKN/Phenol received at a chlorine residual of <0.5 m/L? **
☐ YES	☐ NO		17. Were Sulfide/Cyanide received at a chlorine residual of <0.5 m/L?
☐ YES	☐ NO		18. Were orthophosphate samples filtered in the field within 15 minutes?

* TOC/Volatiles are pH checked at time of analysis and recorded on the benchsheet.

** Bacteria samples are checked for Chlorine at time of analysis and recorded on the benchsheet.

Sample Preservation: (Must be completed for any sample(s) incorrectly preserved or with headspace)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly

by adding (circle one): H_2SO_4 HNO_3 HCl NaOH

Time of preservation: _____ If more than one preservative is needed, notate in comments below

Note: Notify customer service immediately for incorrectly preserved samples. Obtain a new sample or notify the state lab if directed to analyzed by the customer. Who was notified, date and time: _____

Volatiles Sample(s) _____ were received with headspace

COMMENTS:

EXHIBIT B-3

envirochem
Analytical & Consulting Chemists

ENVIRONMENTAL CHEMISTS, INC

NCDENR: DWQ CERTIFICATION # 94 NCDHHS: DLS CERTIFICATION # 37729

6602 Windmill Way Wilmington, NC 28405
OFFICE: 910-392-0223 FAX 910-392-4424
info@environmentalchemists.com

COLLECTION AND CHAIN OF CUSTODY

Client: Envirolink-OBX	PROJECT NAME: Carolina Village MHP	REPORT NO: 24M880
ADDRESS:	CONTACT NAME: Envirolink OBX	PO NO: 24-9700
	Permit Number: WQ0004696	PHONE/FAX:
	COPY TO:	email:

Sampled By: M. Ott

SAMPLE TYPE: I = Influent, E = Effluent, W = Well, ST = Stream, SO = Soil, SL = Sludge, Other:

W-1333, Sub 5

Sample Identification	Collection: Date	Time	Temp	Sample Type	Composite or Grab	Container (P or G)	Chlorine mg/L	pH of bottle	LAB ID NUMBER	PRESERVATION: NONE	HCL	H2SO4	HNO3	NAOH	THIO	FILTERED	OTHER	ANALYSIS REQUESTED
PPI 001 (effluent-2/month)	4/25	11:30			C	P			23576	X		X	x2					BOD,TSS,NH3,P, NO3,NO2,TKN
					G	G												
PPI 001 (effluent-2/month)					C	P			M1312						X			Fecal Coliform
					G	G												
PPI 001 (Mar/July/November)					C	P			23578	X								TDS/Chloride
					G	G												
PPI 002 (GW Lower-2/month)					C	P			M1315	X		X	x2		X			Fecal,NH3,P,NO3,NO2,TKN
					G	G												
PPI 002 (GW-Mar/Jul/Nov)					C	P				X								TDS/Chloride
					G	G												
PPI 003-SW#1 (Mar/Jul/Nov)					C	P				X		X						BOD,Total N, P
					G	G												
PPI 004-SW#2 (Mar/Jul/Nov)					C	P				X		X						BOD,Total N, P
					G	G												
					C	P												
					G	G												

Transfer	Relinquished By:	Date/Time	Received By:	Date/Time
1 BOD, TSS, NH3, TP, TN				
2 NO2 NO3		4/25/24 4:30		

Temperature when Received °C: 2.2 DKnotts Accepted: ✓ Rejected: Resample Requested:

Delivered By: Received By: Date: 4/25/24 Time: 2:00

Comments: TURNAROUND: 930 4/26/24