AMERICAN
ENGINEERING CONSULTANTS, INC.
1300 12th Street, Suite A • P.O. Box 2299 • Cayce, SC 29171 • (803) 791-1400 • FAX: (803) 791-8110

September 13, 2020

Jackie Calvi Mack
Senior Program Manager
South Carolina Rural Infrastructure Authority
1201 Main Street, Suite 1600
Columbia, SC 29201

Re: Grant Application Package – Town of Edisto Beach
Upgrades to Pump Station A and Pump Station B

Dear Ms. Mack:

The Town of Edisto Beach appreciates the opportunity to submit an application for RIA grant funding for the Upgrades to Pump Station A and Pump Station B Project, located in Edisto Beach, Colleton County, South Carolina. Enclosed you will find one (1) original completed application package, one (1) copy of the application package, and one (1) flash drive that contains a PDF of the application package. We believe you will find that the submittal fully addresses all grant application requirements.

Your consideration of this grant application is appreciated. If you should have any questions, please do not hesitate to give us a call.

Sincerely,

American Engineering Consultants, Inc.

Betsy M. Catchings

Betsy M. Catchings
Project Manager

Enclosures

cc: Iris Hill, Town of Edisto Beach

RIA South Carolina
Rural Infrastructure Authority

1201 Main Street, Suite 1600
Columbia, SC 29201
www.ria.sc.gov

Grant Application

Grant Applicant: Town of Edisto Beach **Date Submitted:** 09/13/2021

Project Title: Upgrades to Pump Stations A and B

APPLICATION CHECKLIST

Application: See Grant Application Instructions (attached)

- Application Forms and Certification (*with original signature*) ☑
- Narrative ☑

Attachments (*assembled in the following order*):

1. Preliminary Engineering Cost Estimate ☑
2. Maps: See Attachment
   - Project Location and Service Area ☑
   - Existing Infrastructure ☑
   - Proposed Improvements ☑
3. Program Documentation:

Basic Infrastructure (*attach as appropriate*)

- DHEC Sanitary Survey – For all Water Projects ☐ Not Applicable
- DHEC Compliance Evaluation Inspection– For all Sewer Projects ☑
- Notice of Violation or Consent Order None Active ☑
- Corrective Action Plan None Active ☑
- Other "Need" Documentation ☑
- Operating Budget and Actual Revenues/Expenses ☑
- Capital Improvement Plan ☑
- Residential Customer User Rates ☑

Economic Infrastructure (*attach as appropriate*) Not Applicable

Economic Development/Jobs

- Jobs & Capital Investment Commitment ☐
- Planned or Approved Incentives ☐

Product Development

- Industrial Site/Park Public Ownership Documentation ☐
- Industrial Site/Park Master Plan with utilities and capacity ☐

System Capacity

- DHEC Sanitary Survey – For all Water Projects ☐
- DHEC Compliance Evaluation Inspection– For all Sewer Projects ☐

4. Funding and Other Commitments
   - Local Funds - Required ☑
   - Other Funds ☑
   - New Customers (70% documented commitment to connect) ☐ Not Applicable
   - Property ownership certification (Easements/ROW/Real Property) ☑
   - Agreement to apply on behalf of an eligible entity, if applicable ☐ Not Applicable

*Submit **original application documents and attachments** and **either**:*
*(a) 5 hard copies of the application and attachments; **or***
(b) 1 hard copy and a PDF version of the application and attachments.
Applications must be received by 5:00 pm on the due date. No postmarks will be accepted.

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Applicant Information		
Applicant Name:	Town of Edisto Beach	
Mailing Address:	214 Murray Street	
City, State and Zip:	Edisto Beach, SC 29438	
State Legislative Districts:	Senate: 43 - Campsen	House: 121 - Rivers
Applicant Type:	☒ Local Government ☐ Special Purpose District ☐ Public Works Commission ☐ Joint Municipal System	☐ Applicant is submitting on behalf of a not-for-profit water/sewer company or other eligible entity (*attach written agreement*) Name: _____

Project Summary		
Project Title:	Upgrades to Pump Stations A and B	
Project Summary: *(Limit to 2/3 sentences)*	Pump Stations A & B receive wastewater from approximately 87% of the Town's customers. The pump stations are currently over capacity, which leaves the Town very vulnerable during equipment malfunctions and/or severe weather events. These two pump stations are in need of upgrades to keep up with current flows and eliminate the potential for SSOs.	
Project Location: *(Be specific)*	The two pump stations are located within the town limits of Edisto Beach. Pump Station A is located at Sea Cloud Circle. Pump Station B is located at 81 Gun Bluff Road	
County Development Status/Census Tract(s):	☐ Tier I or II County ☒ Tier III or IV County	Project Census Tract(s): 9708

Funding Request		Grant Category	Type of Project
RIA Funds Requested:	$ 500,000.00	☒ Basic Infrastructure ☐ Economic Infrastructure	☐ Water ☒ Sewer ☐ Stormwater Drainage ☐ Other (Describe):
Other State Funds:	$		
Federal Funds:	$		
Local Funds:	$ 360,500.00		
Total Project Funding:	$ 860,500.00		

Contact Information	Name	Title	Phone	Email Address
Chief Elected or Administrative Official:	Iris Hill	Town Administrator	(843) 869-2505 ext. 211	ihill@townofedistobeach.com
Local Project Contact:	Patrick Zemp	Utilities Director	(843) 869-2505 ext. 202	pzemp@townofedistobeach.com
Local Financial Contact:	Iris Hill	Town Administrator	(843) 869-2505 ext. 211	ihill@townofedistobeach.com
Engineer/Consultant:	Bill Bingham, Jr., P.E., American Engineering Consultants, Inc.	President	(803) 791-1400	bbingham@aec-sc.com

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Project Budget				
Activity	**RIA Funds**	**Other Funds**	**Identify Source**	**Total**
Construction				
Pumps Station A	$ 250,000.00	$ 124,000.00	Town of Edisto Beach	$ 374,000.00
	$	$		$ 0.00
Pump Station B	$ 250,000.00	$ 124,000.00	Town of Edisto Beach	$ 374,000.00
	$	$		$ 0.00
	$	$		$ 0.00
	$	$		$ 0.00
	$	$		$ 0.00
	$	$		$ 0.00
	$	$		$ 0.00
Construction Total	$ 500,000.00	$ 248,000.00		$ 748,000.00
Percent of RIA and Other Funding	67%	33%		100%

**Percent of Other Funding: Applicants in Tier I and II Counties are required to provide at least 25% of the total construction costs.*

Activity		**Other Funds**	**Identify Source**	**Total**
Non-Construction				
Engineering		$ 112,000.00	Colleton County	$ 112,000.00
Permits		$ 500.00	Town of Edisto Beach	$ 500.00
Land Acquisition		$		$ 0.00
Legal or Administrative		$		$ 0.00
Other:		$		$ 0.00
Other:		$		$ 0.00
Non-Construction Total		$ 112,500.00		$ 112,500.00

Total Project Funding** Construction + Non-Construction	$ 500,000.00	$ 360,500.00		$ 860,500.00
Percent of RIA and Other Funding	58%	42%		100%

***Total Project Funding should match Total Project Funding on Page 2 of this application.*

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Project Benefit	Residential	Business
Total Customers/Taps *(existing and new)* to be Served by Project	879	29
Number of **New** Customers/Taps to be Served by Project	0	0
Number of **New** Customers/Taps Committed to Connect *(minimum of 70% of all new customers)*	0	0
Number of Jobs *(Economic Development/Jobs Project)*	New: N/A	Existing: N/A
New Capital Investment *(Economic Development/Jobs Project)*	$ N/A	

Project Schedule & Readiness

Ready to Go Status	Actual or Planned Completion	Permits	Obtained
Preliminary Engineering Report	Date: ____ ☒ NA	DHEC	☐ Y ☒ N ☐ NA
Final Design	Date: 10/15/2021 ☐ NA	DOT	☐ Y ☐ N ☒ NA
Acquisition	Date: ____ ☒ NA	Railroad	☐ Y ☐ N ☒ NA
Permits	Date: 11/15/2021 ☐ NA	Wetlands	☐ Y ☐ N ☒ NA
Construction Bid Opening	Date: 02/03/2022 ☐ NA	Other: ____	☐ Y ☐ N ☐ NA
Construction Start	Date: 05/17/2022 ☐ NA	*If permit in hand, select **Y**. If needed and not yet obtained, select **N**. If permit not needed, select **NA**.*	
Construction Completion	Date: 01/29/2023 ☐ NA		
Grant Closed	Date: 03/30/2023 ☐ NA		
Are multiple contracts planned?	☐ Y ☒ N		

Property Acquisition	Actual or Planned Completion	Quantity
☐ Easements/ROW	Date: ____	Number needed: ____
☐ Real Property	Date: ____	Number needed: ____
☒ NA		

Attach certification of public ownership for all easements, ROW or real property already acquired for this project.

Certification

As the Chief Executive Official for the applicant, I certify that the information submitted in this request and the attachments are complete and correct and that the applicant has authorized the submission of this grant application for SC Rural Infrastructure Authority funding to assist in carrying out the project described herein. I concur with the commitments implied and contained in this application and agree to abide by the program requirements as well as any future grant agreements. The applicant certifies that it has complied with state law with respect to the submission and contents of this application and has disclosed any conflicts of interest with regard to the project.

Iris Hill	Town Administrator
Name of Chief Executive Official (Elected or Administrative)	**Title**
Iris Hill	9/8/21
Signature	**Date**

APPLICATION NARRATIVE
UPGRADES TO PUMP STATION A AND PUMP STATION B
TOWN OF EDISTO BEACH

NEED

The Town of Edisto Beach (Town) owns and operates a wastewater system that includes thirteen (13) individual gravity sewer systems that flow to pump stations and then discharge to other gravity systems and pumping systems, or that directly discharge to the wastewater treatment plant. The wastewater treatment plant is permitted for a flow of 350,000 gallons per day (GPD) and effluent from the plant is discharged through a spray irrigation system on to portions of a nearby golf course. Over the years, new developments have been constructed within the town limits and they have been connected to the existing system. This has resulted in the two main pump stations being over capacity. Pump Station A and Pump Station B serve approximately 87% of the Town's customers. These two pump stations collect wastewater from eight (8) of the remaining pump stations. Because they are now over capacity, the risk for Sanitary Sewer Overflows (SSOs) is great. This is especially a concern during peak summer months and during severe weather events. To further complicate matters, the two pump stations discharge into a common forcemain. The pump stations were not initially designed to efficiently pump the current flow when both pump stations are running at the same time. Therefore, there is a limitation as to how much flow can be pumped, which can cause the system to back up. The Town intends to address these problems through pump station upgrades.

The existing pump stations were constructed in the 1970s and have exceeded the useful life and capacity for the current system conditions. Pump Stations A and B collect the wastewater from approximately 908 customers, 29 of which are non-residential. When both pump stations are running at the same time, the current pumping capacity of Pump Station A is approximately 141 gpm and the pumping capacity of Pump Station B is approximately only 86 gpm, based on sewer modeling. There is significant influence on the pumping capacity when both stations are running, which reduces the overall pumping capacity substantially. If equipment failures or high level alarms occur at either of these main pump stations, there is a domino effect and upstream pump stations and customers are impacted. Based on the current pumping conditions, Pump Station A is approximately 272 Residential Equivalency Units (REUs) over capacity and Pump Station B is approximately 149 REUs over capacity.

In recent years, high level alarms in the wetwells have been addressed by tweaking controls and VFDs in order to maximum the pumping rate. Bypass pumping connections have also been added to the pump stations and temporary bypass pumping systems have been purchased for use at the pump stations. These are used to keep up with the flow into the pump stations. However, these steps are not

permanent solutions to the pump stations being undersized. In a normal summer, there are typically around four high level alarm events that occur around peak usage times (holidays). In addition, heavy rainfall events contribute to high level alarms. These events require the Town to use the bypass pumps to keep the wetwell level down and/or require operations staff to closely monitor the wetwells and make adjustments as needed to try to prevent SSOs. These events can last for six hours or up to four days per event. When high level situations arise, the Town receives numerous complaints from customers about smell and the noise of the pumps. The Town has experienced approximately three SSOs in the past three years. Due to the Town's diligence in extensive monitoring of these pump stations, these SSOs have been minor. However, more significant overflows have occurred during severe weather events such as Hurricane Matthew in 2016 and Tropical Storm Irma in 2017.

The issues with Pump Stations A and B are so critical that Town Council took steps in March of 2021 to begin approving a moratorium on building permits that restricts new connections to the system and also additions to existing structures that would require additional sewer capacity. The second reading of the Ordinance was approved on April 8, 2021. Town Council, per the Ordinance, reviews the moratorium every 30 days, but the intent is that it will remain in effect until the capacity issues at Pump Stations A and B can be addressed. (See Attachment No. 3C for Additional Documentation)

SERVICE AREA

As previously discussed, the existing collection system consists of thirteen (13) individual gravity sewer systems that flow to pump stations and then discharge to other gravity systems and pumping systems, or that discharge directly to the wastewater treatment facility. There is approximately 9.09 miles of 8-inch and 10-inch gravity sewer collection lines and approximately 4.4 miles of 6-inch and 4-inch forcemain in the Town's system. The service area for sewer is the entire municipal limits of the Town of Edisto Beach, which is approximately four (4) square miles. These collection systems currently handle approximately 1,042 sewer customers located throughout the Town. However, sewer is not available to the entire municipal limits due to limitations on the wastewater treatment plant discharge flow to the golf course. Homes that are not connected to the Town's system use individual septic systems. A map of the Town's existing sewer service area is shown in Attachment No. 2.

The proposed project service area is identified in Attachment No. 2. The project service area was determined by identifying the customer accounts that discharge to each sub-system. In addition to customers in Sub-Systems A and B, the sub-systems that discharge to A and B are directly impacted by the capacity restrictions. The sub-systems discharging to Pump Station A include: Bay Point, Summerwinds, and Bay Creek. The sub-systems discharging to Pump Station B include: Scott Creek, Dock Site, Waterfront (Jungle Road), Pompano, and Cheehaw. This equates to customers in ten of the Town's 13 sub-systems being directly impacted by the proposed upgrades. The total number of customers from these impacted sub-systems is approximately 908.

Of these, all customers are residential except 29. The 908 customers directly impacted by these two major pump station systems equates to approximately 87% of the entire customer base for the Town of Edisto Beach. The Town does not track which customers are permanent residences versus transient, rental units. Generally, rental licenses have been obtained by approximately 27% of the residences throughout the Town. However, most of the customers impacted by the proposed project fall within the Town's Planned Unit Development District and they are believed to be mostly permanent residences.

PROJECT DESCRIPTION

The proposed project will replace and upgrade the pumps, motors, and controls for the Town of Edisto Beach's Pump Station A and Pump Station B in order to address the previously outlined problems. These upgrades are the most critical need of the system and will provide the Town sufficient capacity to handle the wastewater flow from existing customers and minimize the potential for SSOs, thereby maintaining SCDHEC compliance.

All work for the proposed upgrades will be contained within the existing pump station buildings. The existing pumps for both duplex pump stations are Gorman-Rupp T-Series horizontal, self-priming, centrifugal pumps. These pumps will be replaced with similar style Gorman-Rupp T-Series pumps that are designed to increase the pumping capacity of Pump Station A to approximately 320 gpm and increase the pumping capacity of Pump Station B to approximately 200 gpm, while both pumps are running at the same time. Each pump station will have two new centrifugal pumps with equal capacity. The lead pump will alternate so that there is no excess wear on a single pump. The pump selected to meet the design criteria is the Gorman-Rupp model T4A71S-B. The pumps will be controlled by variable frequency drives (VFDs) in order to accommodate fluctuations in flows. New 30 hp motors and VFD control panels will be installed for each pump station. Due to anticipated delivery schedules for the pumps, it is anticipated that the pump station upgrades will be performed during the off-peak season for the Town. If bypass pumping is needed during the installation, it is anticipated that the Town's temporary bypass pumping system will be used.

Installation of the new pumps and controls will provide the relief the Town needs for the two main pump stations to operate properly and without fear of overflows and backups. The upgrades will increase the capacity of the pump stations and minimize the need for maintenance and oversight that is currently being required on the aging and over capacity stations. It will also allow the Town to remove the moratorium on building permits so that property owners can proceed with planned improvements.

A PER is not required for this project. The project is currently under design by American Engineering Consultants, Inc. and all surveying has been completed. It is anticipated that applications for all required SCDHEC permits will be submitted in early October 2021. No land acquisition or easements are required. In addition, no

encroachment of highway Right-of-Way is required. Engineering fees for the project are being funded through Colleton County (see Attachment No. 4B). The Town will cover any expenses that exceed funding through RIA and Colleton County (see Attachment No. 4A).

FEASIBILITY

Resolution

The replacement of insufficient infrastructure is a necessity for all utilities in order to ensure continued safe and reliable sewer service. Backups of the system due to pump station failures can pose health risks to customers. Having a reliable pumping system is also especially important in coastal areas where sanitary sewer overflows can impact protected waterways and close waters for recreational and commercial use. Taking no action would continue to put the Town at risk of experiencing sanitary sewer overflows and jeopardizing public health and the environment. Completing the proposed upgrades will address these critical issues, provide additional pumping capacity, and provide a reliable pumping system that impacts ten sub-systems and 87% of the Town's customers. The proposed project resolves the immediate and critical concerns of the Town and will allow the moratorium on building permits to be lifted.

Cost

An Opinion of Probable Construction Cost is included in Attachment No. 1. Based on this, the total estimated construction cost for the pump station upgrades is $748,000. The cost for the upgrades was based off of quotes from suppliers of the equipment and estimated labor for installation. There are 908 customers that are directly benefiting from the proposed project. Based on this information, the cost per customer for construction is approximately $824, which is well below the RIA threshold of $10,000 per customer.

Alternatives & Ability

A regional approach was not feasible for the proposed project, as the Town already has a wastewater treatment plant that serves this area. The next closest wastewater treatment plant is off of Edisto Island in the Town of Walterboro, approximately 50 miles away. The Town of Edisto Beach's wastewater treatment plant has the capacity to treat the wastewater from the Town's major pump stations and, therefore, there is no need to look at a regional approach. Three viable options for addressing the critical problems with Pump Station A and Pump Station B were evaluated and discussed. The first alternative included installing a new forcemain from the pump stations to the wastewater treatment plant. This alternative was not selected because it was not cost effective and did not the address aging pumping systems. The second alternative considered was to upgrade Pump Station A, Pump Station B, and Pump Station C, which also discharges into the common forcemain with A and B. This alternative was not selected because it was not cost effective and the pumps in Pump Station C had recently been replaced. The third alternative, which was selected, was the upgrades to Pump Station A and Pump Station B. This was the most cost effective option and provided the relief to the

Town to address the capacity restraints. If the Town desires to further increase the capacity of Pump Stations A, B, and C in order to allow for future growth, a new forcemain would need to be installed between the point where the flow from all three pump stations combine and the wastewater plant. However, this is not necessary in order to address the critical problems with capacity. The upgrades to Pump Stations A and B will solve the immediate concerns and most critical areas of the system. The Town has the staff required to operate and maintain the proposed improvements. In fact, the amount of time staff has to spend monitoring the pump stations to prevent overflows and backups will significantly decrease as a result of the proposed project. The pump station upgrades will be maintained in accordance with best management practices and SCDHEC regulations.

Schedule

The schedule included in the RIA application takes into consideration the manufacturing and delivery of the pumps and controls, as provided by the equipment suppliers. The amount of time allowed is longer than initially anticipated for the proposed project due to manufacturing delays that have occurred as a result of COVID-19. The uncertainty and impacts of COVID-19 are certainly out of the Town's control and the future cannot be predicted. However, the schedule provided is based on the best information available at this time. No easements, property acquisition, or Right-of-Way encroachments are required on the proposed project. Therefore, potential delays are not anticipated.

VIABILITY

Financial

As requested, a copy of the Town's Water and Sewer Operating Budget for the current fiscal year with actual revenues and expenses is included in Attachment No. 3E. In addition, a summary of the Town's Cash Reserves for water and sewer is included in Attachment No. 3F. The Town currently has an account that is earmarked for Renewals and Replacements (R&R) of infrastructure and equipment. In addition, the Town budgets money each year to be used for capital improvements projects. The Town is currently in the process of evaluating the sewer system needs and developing a CIP. A draft of the sewer system CIP is included in Attachment No. 3G. Please note that this CIP list is still being finalized and has not been approved by Town Council. The Town recently completed an extensive drinking water system capital improvement project that included two new wells, a new reverse osmosis treatment system, transmission piping, a new treatment building and office, emergency generator, SCADA, and other items. Therefore, the Town does not anticipate any capital improvements being necessary on the drinking water system in the near future.

As a standard practice, the Town does not transfer utility funds to the general fund. The Town performs an annual audit, as required by the State of South Carolina, and submits the findings to the State each year. The Town is financially sound and prepared to handle repairs and emergencies.

Billing & Rates

The Town of Edisto Beach uses a volumetric rate method for calculating a customer's water and sewer charges. Water meters are only read twice per year and the sewer charges are based on water usage. The current water rate schedule is designed so that customers are billed for a minimum usage of 24,000 gallons over a six month period. An inclining block rate is used for volumes over 24,000 gallons. The Town's water rates are broken down by customer classification and rates vary depending on whether the customer is a residential (inside or outside of town limits), business, or other type user. The current residential rate for up to 24,000 gallons of usage is $249.18. If distributed equally each month, this would be an average usage of 4,000 gallons per month at $41.53 each month.

The current sewer rate schedule is designed for a minimum semi-annual billing of 6,000 gallons. A uniform volumetric rate is used for any volume over 6,000. The current minimum rate for this is $225.35 for six months. The current volumetric rate per 1,000 gallons is $3.57.

If a customer used 5,000 gallons of water each month for a six-month billing cycle, the total water bill would be $265.86 ($44.31 per month if equal usage is assumed). The sewer bill for equivalent usage would be $311.03 for the six months ($51.84 per month if equal usage is assumed).

The Town routinely evaluates rates, having performed an in-depth rate study in 2011 and updates to the rate study in 2016 and 2019. Based on recommendations from these rate studies, the Town has increased water rates in 2016, 2017, 2019, and 2020. Sewer rates have been increased in 2020 and 2021. A 5% rate increase is being requested for May of 2022 for both water and sewer. Charts showing the current rate schedule and historical rate increases for water and sewer are included in Attachment No. 3D.

BENEFITS / IMPACTS

There will be approximately 908 direct beneficiaries of this project. Of this number, 879 are residential accounts and the remaining 29 are commercial accounts. In addition, there are approximately 73 customers that are indirect beneficiaries. These are customers that are part of Sub-System C. This area of the system is included in the moratorium because the pump station for Sub-System C discharges into the same forcemain as Pump Stations A and B and influences the pumping capacity of those pump stations. Once Pump Stations A and B are upgraded, the influence of Pump Station C will be minimized and the moratorium can be lifted for all of these areas.

Without the proposed improvements, these customers are at risk of experiencing sewer backups and the Town is at risk of discharging raw sewage to the environment and violating SCDHEC requirements. By completing this project, the risks for generating

SSOs and public health concerns are minimized. In addition, capacity issues with two critical pump stations are addressed, which directly impacts ten sub-systems and 87% of the Town's customers. Completion of the proposed project also will allow the Town to remove the current moratorium on building permits. Overall, the project resolves regulatory and health issues and improves the quality of life for the Town's customers.

Additionally, this project addresses the following goals of the Rural Infrastructure Authority by:

- Resolving Regulatory and Health Issues: Sanitary Sewer Overflows violate SCDHEC requirements and pose public health and environmental risks. This project will minimize the risk for SSOs from Pump Stations A and B and, therefore, improve regulatory compliance.

- Improving Quality of Life: The proposed project will present an improved quality of life for customers by eliminating concerns that Pump Stations A and B will not be able to keep up with system demands, resulting in sewer backups. In addition, staff will no longer have to closely monitor (babysit) the pump stations during holidays and when system usage is at its peak. The proposed project will also eliminate the need for routine bypass pumping due to high level alarms and, therefore, reduce complaints from customers about the noise and/or smell. Having a reliable pumping system is important for eliminating public health issues and improving the quality of life.

- Having a Positive Economic Impact: The proposed upgrades to Pump Station A and Pump Station B will also have a positive economic impact because it will allow current property owners to make improvements and/or expansions that are currently prohibited by the moratorium. This could result in increased revenue for the Town and also positively impact suppliers and businesses in the building industry. In addition, the improvements can make the area more appealing to potential homebuyers and investors.

- Providing Greater Sustainability: The pump station improvements will replace aging equipment and address capacity issues. This will provide a more reliable pumping system and reduce alarm situations that have been common in peak seasons and heavy rain events. This increased reliability will provide the Town and customers a better quality of life for the foreseeable future.

Attachment 1

Preliminary Engineering Cost Estimate

(Opinion of Probable Construction Cost)

Town of Edisto Beach Upgrades to Pump Station A and Pump Station B
Opinion of Probable Construction Cost
For Budgetary Use Only

PUMP STATION A

Item	Description	Unit	Quantity	Unit Price	Amount
1	Replacement of Centrifugal Pumps and Control Panels	EA	1	$ 275,000.00	$ 275,000.00
2	Miscellaneous Piping and Appurtenances	EA	1	$ 10,000.00	$ 10,000.00
3	Electrical	LS	1	$ 55,000.00	$ 55,000.00
				Subtotal Pump Station A	$ 340,000.00
				Contingency (10%)	$ 34,000.00
				Total Construction Estimate Pump Station A	**$ 374,000.00**

PUMP STATION B

Item	Description	Unit	Quantity	Unit Price	Amount
1	Replacement of Centrifugal Pumps and Control Panels	EA	1	$ 275,000.00	$ 275,000.00
2	Miscellaneous Piping and Appurtenances	EA	1	$ 10,000.00	$ 10,000.00
3	Electrical	LS	1	$ 55,000.00	$ 55,000.00
				Subtotal Pump Station B	$ 340,000.00
				Contingency (10%)	$ 34,000.00
				Total Construction Estimate Pump Station B	**$ 374,000.00**

TOTAL OPINION OF PROBABLE CONSTRUCTION COST	**$ 748,000.00**

Prepared By
American Engineering Consultants, Inc.
September 2021

Attachment 2

Project Location and Service Area Maps

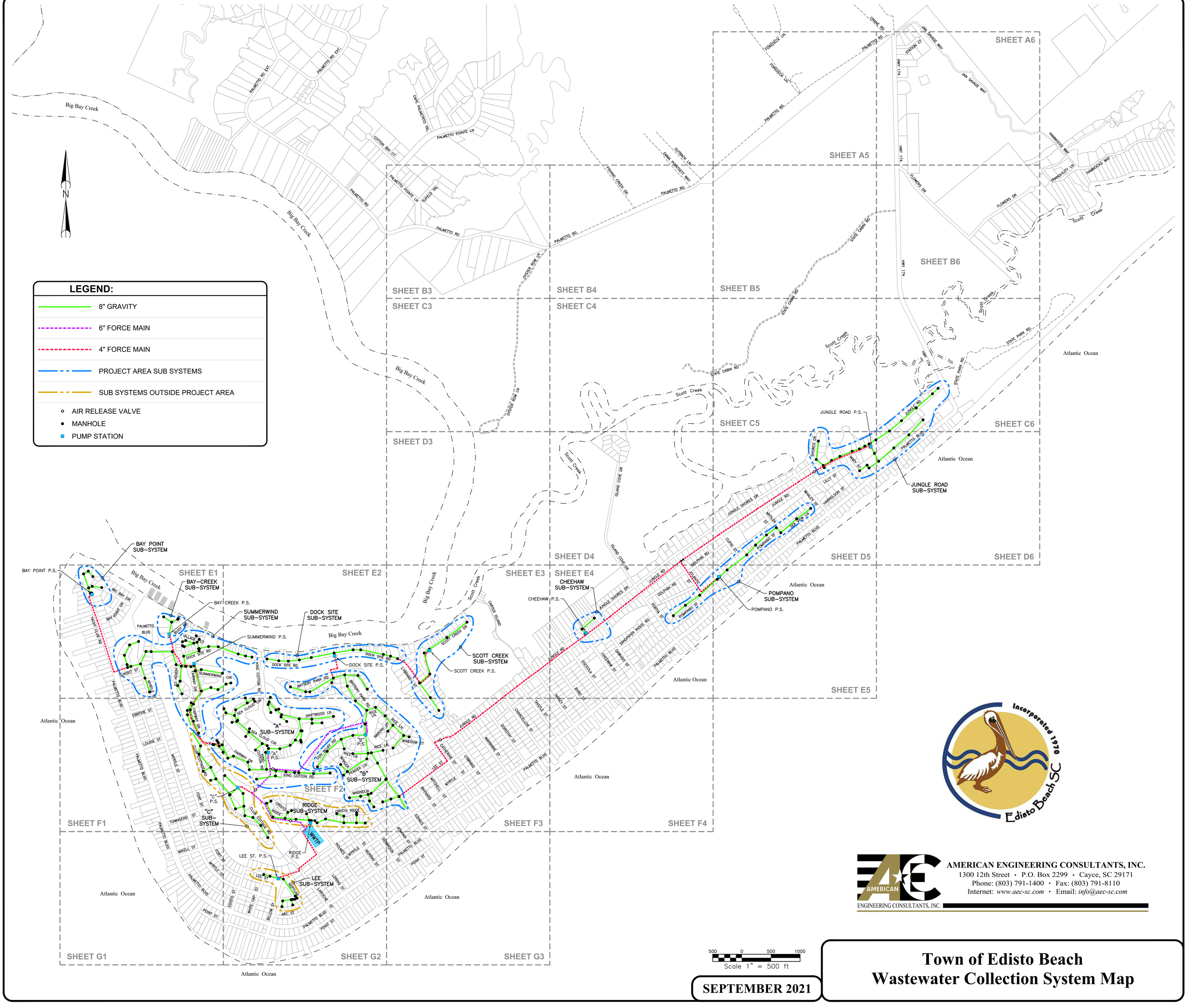
Town of Edisto Beach Wastewater Collection System Map

Includes:

Existing Sewer Service Area

Existing Sewer Infrastructure

Project Area


LEGEND:
8" GRAVITY
6" FORCE MAIN
4" FORCE MAIN
PROJECT AREA SUB SYSTEMS
SUB SYSTEMS OUTSIDE PROJECT AREA
AIR RELEASE VALVE
MANHOLE
PUMP STATION
N
SHEET A5
SHEET A6
SHEET B3
SHEET B4
SHEET B5
SHEET B6
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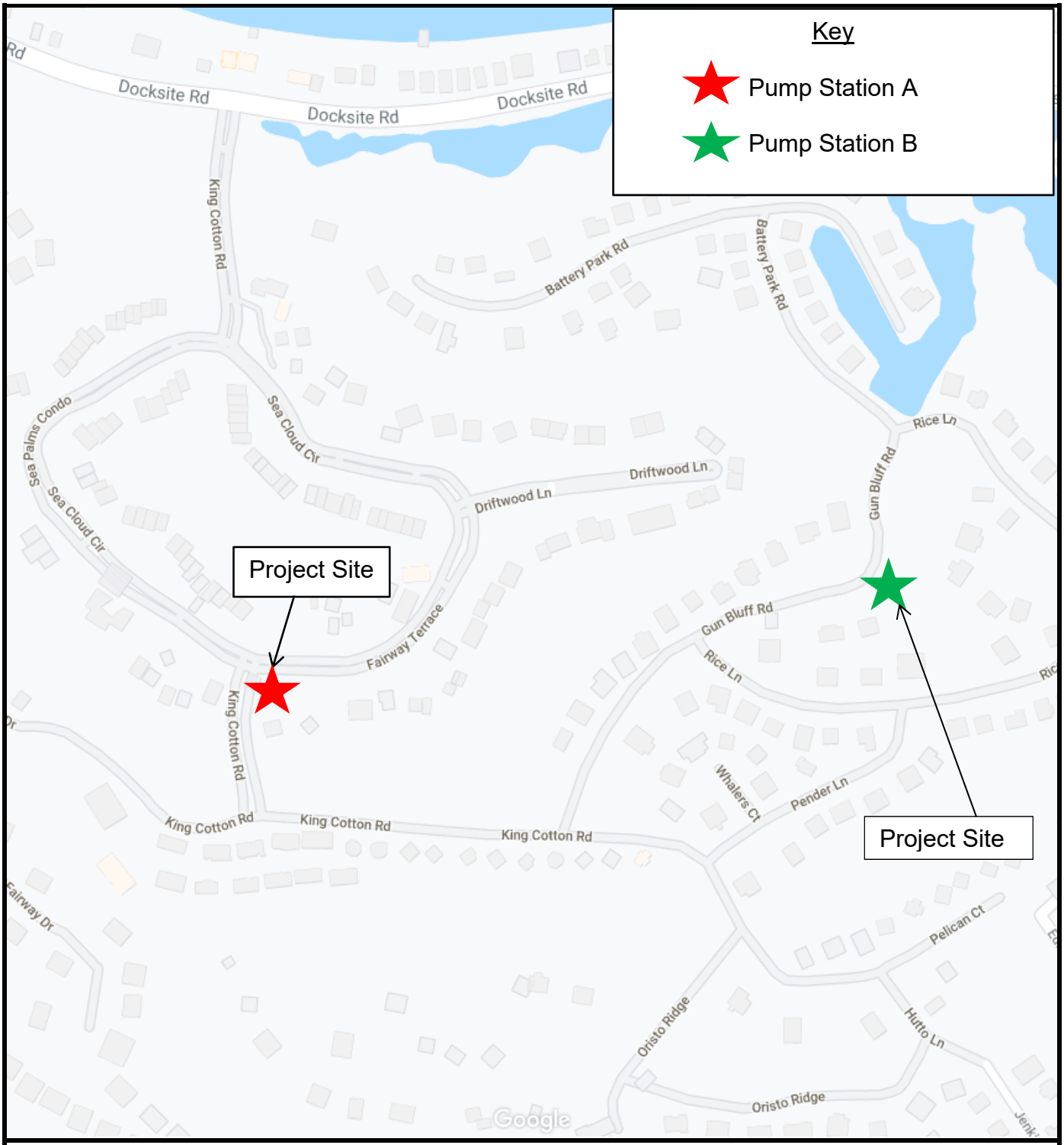
SHEET E5
SHEET F1
SHEET F2
SHEET F3
SHEET F4
SHEET G1
SHEET G2
SHEET G3
Big Bay Creek
Scott Creek
Atlantic Ocean
PALMETTO RD EXT.
COTTON BAY CT
CAPE PALMETTO TRL
PALMETTO POINTE LN
TUPELO TRL
PALMETTO RD
FISHING CREEK DR
OUTBACK LN
EMMA POMPYSETT WAY
CRANE RD
FORESEEK LN
JAN SAVAGE WAY
STATION CT
HWY 174
HAMMOCKS WAY
TRANQUILITY LN
FLOWERS DR
STATE CABIN RD
STATE PARK RD
OYSTER ROW LN
JUNGLE ROAD P.S.
JUNGLE RD
PALMETTO BLVD
SNIPES DR
MARY ST
LILLY ST
WHALEY ST
HARRELSON ST
JUNGLE SHORES DR
MATTOX ST
SEA POW LN
JUNGLE ROAD SUB–SYSTEM
ISLAND COVE DR
CUPID ST
POMPANO ST
DOLPHIN RD
ATLANTIC ST
PORTIA ST
SNAPPER RIDGE RD
CHEEHAW ST
DAMPIER ST
DOSCOLA ST
BYRD ST
NANCY ST
THISTLE ST
CHANCELLOR ST
DOROTHY ST
MARIANNE ST
LYBRAND ST
CATHERINE ST
LEE ST
MITCHELL ST
MYRTLE
BANNARD ST
EDWARDS ST
POINT ST
SOMERSET ST
MURRAY ST
HOLMES ST
LORING ST
ARCHDALE ST
ARC ST
DIVISION ST
WHITE CAP
BILLOW ST
EDISTO ST
CHEEHAW P.S.
CHEEHAW SUB–SYSTEM
POMPANO P.S.
POMPANO SUB–SYSTEM
SCOTT CREEK P.S.
SCOTT CREEK SUB–SYSTEM
DOCK SITE P.S.
DOCK SITE SUB–SYSTEM
DOCK SITE RD
CARTER ISLAND
BAY POINT P.S.
BAY POINT SUB–SYSTEM
BAY CREEK P.S.
BAY–CREEK SUB–SYSTEM
BIG BAY DR
BAY POINT DR
YACHT CLUB RD
SUMMERWIND P.S.
SUMMERWIND SUB–SYSTEM
SUMMERWIND CIR
SQUIDT RD
VILLAGE CT
FERRON CT
FAIRWAY DR
HARBIN CIR
KING COTTON RD
SEA CLOUD CIR
SEA CLOUD DR
DRIFTWOOD LN
"A" SUB–SYSTEM
"A" P.S.
BATTERY PARK RD
RICE LN
BROWN DR
WINDSOR CT
"B" P.S.
"B" SUB–SYSTEM
PLUM BLUFF RD
WHALER
FERGER LN
MAGNOLIA
"C" P.S.
"C" SUB–SYSTEM
CLUB COTTAGE RD
RIDGE SUB–SYSTEM
ORISTO RIDGE
RIDGE
RIDGE P.S.
WWTP
LEE ST. P.S.
LEE SUB–SYSTEM
PALMETTO
BLVD
EBBTIDE ST
LOUISE ST
MYRTLE ST
FORT ST
TOWNSEND ST
MIKELL ST
SUNSET ST
AMERICAN ENGINEERING CONSULTANTS, INC.
1300 12th Street • P.O. Box 2299 • Cayce, SC 29171
Phone: (803) 791-1400 • Fax: (803) 791-8110
Internet: www.aec-sc.com • Email: info@aec-sc.com
ENGINEERING CONSULTANTS, INC.
Incorporated 1970
Edisto Beach SC
500 0 500 1000
Scale 1" = 500 ft
SEPTEMBER 2021
Town of Edisto Beach
Wastewater Collection System Map

Project Location Map



LOCATION MAP

UPGRADES TO PUMP STATION A AND PUMP STATION B

Town of Edisto Beach, South Carolina

AMERICAN ENGINEERING CONSULTANTS, INC.
1300 12th Street • PO Box 2299 • Cayce, SC 29171
Tel: (803) 791-1400 • Fax: (803) 791-8110

DATE	08/27/2021
SCALE:	NTS
DRAWN:	PAS
JOB NO.	21-028
CAD FILE:	MAPS

Attachment 3

Program Documentation

Basic Infrastructure

Attachment 3A

Most Recent SCDHEC Sewer System Inspection Reports

Compliance Evaluation Inspection

(Dated March 4, 2020)

dhec
Healthy People. Healthy Communities.

March 4, 2020

PATRICK ZEMP
TOWN OF EDISTO BEACH
2414 MURRAY ST
EDISTO ISLAND, SOUTH CAROLINA 29438

Re: Laboratory I. D. # 15555
Certificate # 15555001

Dear Mr. Zemp:

The report of the on-site laboratory evaluation performed on February 11, 2020 by the South Carolina Department of Health and Environmental Control is enclosed.

The report format provides a brief overview of the equipment and practices in place at the laboratory and lists the findings noted. If a response is required, please follow the report format by using the corresponding heading and finding number(s). Include any requested documentation on a CD or flash drive. Mail your response to the Office of Environmental Laboratory Certification at 2600 Bull Street, Columbia, SC 29201.

Your cooperation was greatly appreciated. Please contact me at 803-896-0978 or by email at medlincr@dhec.sc.gov, if you have any questions concerning this report.

Sincerely,

Candace R Medlin
Office of Environmental Laboratory Certification
Bureau of Environmental Health Services

cc: Bennie L. Cockerel, Jr., Program Manager
Office of Environmental Laboratory Certification

Register on our website at www.scdhec.gov/labcert to receive e-mail updates for the Laboratory Certification Program. Subscribing is easy and you'll automatically receive new posts to our website.

Introduction

On February 11, 2020 in accordance with State Regulation 61-81, Candace R Medlin and Nydia F Burdick, Laboratory Certification Officers with the South Carolina Department of Health and Environmental Control conducted an on-site laboratory evaluation of Town of Edisto Beach. Patrick Zemp was available for the on-site evaluation.

The on-site evaluation includes a review of the record keeping practices, methodology, equipment, and quality control procedures. The evaluation was based on the applicable methodology as published in the Federal Register 40 CFR Parts 122, 136, 503, et. al.; 40 CFR Parts 141,143 and the EPA's "Manual for the Certification of Laboratories Analyzing Drinking Water"; 40 CFR Part 260; and SW-846. Other regulations, as applicable, are also used to evaluate the laboratory practices. The sample preservation, types of containers, and maximum holding times specified in these regulations are considered minimum requirements of the program.

State Regulation 61-81 requires the formal certification of all laboratories reporting data to the Department. Certification is issued on an analyte-by-analyte basis. Certification is maintained by undergoing an on-site evaluation at least once every three years. Appropriate records must be retained to demonstrate that analytical proficiency and the required standard of quality are maintained throughout the certification period. Laboratory participation in annual Proficiency Testing (PT) studies is required for all applicable parameters for which it is certified.

Laboratories that are not issued certification for specific parameters will be required to contract those analyses to an approved laboratory with the required parameter certification. Environmental monitoring data submitted to the Department is subject to review to ensure the reporting laboratory has the necessary certification. Data reported by laboratories without proper certification will be handled by the enforcement programs.

This report reflects the conditions which existed at the laboratory at the time of the evaluation. The findings and recommendations discussed on the day of the evaluation are listed below. The findings included in this report were those observed during this on-site evaluation. Others may exist and their omission from this report does not constitute endorsement by this Office. The laboratory is encouraged to correct any existing deficiencies even if they are not included in this report. Please address each request for documentation.

Personnel and Training Records

A current personnel list with responsibilities must be maintained and available upon request. A signature page should also be available for each person performing analyses with their printed name, signature, and initials used in the analysis records.

Training records must be maintained for all personnel. These records should include all job-related formal education and training taken by the analyst that pertains to any aspect to his/her responsibilities, including but not limited to analytical methodology, SOP review, laboratory safety, sampling, quality assurance, and data analysis.

Finding: Documented training records such as SOP review sign-off sheets and initial and continuing demonstrations of capability (DOCs) for each staff member performing compliance measurements were not available for review.

Requirement: Each staff member performing compliance analyses must be properly trained and able to demonstrate proficiency for applicable analyses. **Submit a review sign-off sheet for the laboratory's revised temperature, dissolved oxygen, pH and residual chlorine SOPs. Additionally, submit DOCs for each laboratory analyst performing dissolved oxygen, pH and residual chlorine measurements.**

Current Personnel

The laboratory certification officer was provided a current personnel listing for all analysts performing analyses in the field or laboratory. See attached personnel listing.

Proficiency Testing (PT) Studies

The laboratory is reminded that Water Pollution (WP) and/or Water Supply (WS) Studies must be performed each year in order to maintain certification for the time period specified on the certification certificate. It is important that the laboratory participate in these studies as early as possible to avoid potential loss of certification. The studies must be part of an official WP and/or WS study, begin and end within the calendar year, and be graded and reported by the PT Provider to this Office no later than December 31 of each calendar year. Results received after December 31 cannot be used for compliance with the PT requirement. Split studies may be used for recertifying a laboratory but may not be used to meet the annual PT requirement. Split studies are those studies that open in one year and are graded and reported the following year or open in one year and close in another year. If the laboratory has questions regarding the submission of PT data, the acceptability of specific studies, or has questions about the annual requirement, please contact this Office.

Please also note that if you fax, e-mail, or enter your results on-line, we strongly recommend that you also mail them via postal mail or contact the Provider to ensure that the e-mail, internet data entry, or fax was received in its entirety. There have been instances where the PT Provider did not receive the results and the laboratory was decertified.

Refer to our website at www.scdhec.gov/labcert for the required PTs and additional information.

Proficiency Testing Studies Reviewed

Proficiency testing sample results analyzed in the past year and applicable calibration and analysis records were available for review: WS-265, WS-277, WP-283 and WP-295 from ERA.

Finding: Proficiency testing (PT) sample results were not traceable to calibration and analysis records.

Requirement: Complete calibration and analysis records must be maintained for the PT samples to provide traceability. All sample analyses must be recorded, preferably in the daily analysis records to serve as the permanent laboratory record. **In the response, include the corrective action taken to ensure that this will not be a finding for future PT samples.**

Sample Collection, Handling, and Preservation

Chain-of-Custody

Chain-of-custody forms (completed) for all types of samples collected for regulatory compliance determinations were available for review at the time of the evaluation. The forms documented the required information.

Field Analyses

The following analyses are being performed in the field at the time of sample collection: temperature, DO, pH, and residual chlorine.

Contract Laboratories

The chain-of-custody records for the contract laboratories being used for regulatory analyses documented the required information and the Certificates of Analysis were available for review. At the time of the evaluation the following contract laboratories were being used for the documented parameters.

Lab Id	Lab Name	Parameters
32571001	ACCESS ANALYTICAL INC	BOD, TSS, CBOD, Fecal Coliform, Nitrate
98016003	ANALYTICAL ENVIRONMENTAL SERVICES INC	CBOD

Quality Assurance Plan

A Quality Assurance Plan with the date of last revision was available and provided to the laboratory certification officer at the time of the evaluation. Periodically this document must be updated to reflect any changes in the laboratory operations.

Laboratory Ethics and Fraud Detection/Deterrence

Laboratories are encouraged to have an ethics policy and implement a fraud detection and deterrence policy/program. A laboratory's ethics program would include a policy statement, training, and signed code of conduct. Laboratories are encouraged to have a Laboratory Ethics SOP which documents where employees can report suspected fraud.

Standard Operating Procedures (SOP) Manual

A Standard Operating Procedure (SOP) must be available for each certified method. Copies of the SOPs with current revision dates were provided to the evaluator at the time of the evaluation. The SOPs should periodically be updated to reflect changes in the procedure, equipment, and reagents. Each time the SOP is updated, the revision date must be updated and a copy with the changes identified submitted to our office for review.

The following findings were noted for the SOPs below:

CLEAN WATER ACT, DISSOLVED OXYGEN, SM 4500-O G-2011 - The SOP states that "DO samples must be analyzed immediately after collection" but does not define immediately as within 15 minutes.

CLEAN WATER ACT, HYDROGEN-ION CONC. (PH), SM 4500-H B-2011

1) The SOP does not state that commercially prepared pH buffer containers must be labeled with the received date, opened date, expiration date and analyst initials.

2) The SOP does not include the sample collection procedure for sample duplicates, frequency and acceptance criteria. A sample duplicate is prepared by collecting one sample and then splitting it into two separate containers for analysis. The acceptance criteria for the sample duplicate as listed on the "Quality Control Duplicate Bench Sheet" is ± 0.1 S.U.

CLEAN WATER ACT, TEMPERATURE, SM 2550 B-2010 - The SOP does not state that all laboratory thermometers and temperature measuring devices must be tagged with the current temperature correction factor in addition to the date of accuracy verification and analyst's initials.

SAFE DRINKING WATER ACT, RESIDUAL CHLORINE, SM 4500-CL G-2011

1) The SOP does not state a sample duplicate is performed with each batch of 20 or fewer samples. A sample duplicate is prepared by collecting one sample and then splitting it into two separate containers for analysis.

2) Note 2 under section (I) of the SOP states "zero the HACH Pocket Colorimeter II with the standards or samples to be tested" which is incorrect when analyzing potassium permanganate standards. The instrument must be zeroed with deionized water for all potassium permanganate standards.

3) Section (J) of the SOP states that the instrument is zeroed with deionized water or the reagent blank and is unclear. The instrument must be zeroed with deionized water, then DPD reagent is added, and the blank is read within one minute. The blank reading must be recorded on calibration verification (initial and daily) records.

4) Section (J) of the SOP does not state that standards must be read within one minute after the addition of the free residual chlorine DPD reagent.

5) The SOP states that initial calibration verification is performed annually but does not state that it must also be performed when a new lot number of DPD reagent is used, whichever comes first. Note: Separate initial calibration verifications must be performed for free and total DPD reagents for each meter in use.

Recommendation: It is recommended that number 5 under section (L) of the SOP state the acceptance range for the 0.05 mg/L standard is ± 20% of the standard's true value or 0.04 - 0.06 mg/L, not 80 - 120%.

It is also recommended that the laboratory's SOPs for free and total residual chlorine be combined noting that the DPD reaction time is one minute for free residual chlorine and 3-6 minutes for total residual chlorine.

Requirement: The revised SOPs correcting the above findings must be submitted for review with a new revision date documented.

CLEAN WATER ACT

DISSOLVED OXYGEN - SM 4500-O G-2011

Laboratory instrumentation and/or equipment: YSI 550 dissolved oxygen (DO) meter with YSI 550A probe

Finding #1: The laboratory is not referencing an oxygen saturation/solubility table to verify that the DO calibration value is acceptable.

> Requirement: The DO calibration value must be within 2% or ± 0.2 mg/L of the theoretical DO value obtained from the oxygen saturation/solubility table. See attached table and example DO calibration and analysis record for guidance. **Submit two weeks of recent DO calibration and analysis records for review.**

Finding #2: The laboratory is not routinely changing the DO probe membrane or documenting probe maintenance.

> Requirement: All instrument maintenance (e.g. membrane changes, battery replacement) must be documented on a permanent laboratory record. **Submit laboratory records showing the probe membrane has been changed since the on-site evaluation on February 11, 2020.**

Recommendation: It was recommended during the on-site evaluation that the DO probe membrane be changed monthly and the maintenance be recorded on DO calibration and analysis records.

HYDROGEN-ION CONC. (PH) - SM 4500-H B-2011

Laboratory instrumentation and/or equipment: Orion Star A121 pH meter and probe

Finding: The pH buffers were not labeled with a received date.

> Requirement: Commercially prepared pH buffer containers must be labeled with the received date, open date, expiration date and analyst initials. **The pH SOP sign-off sheet submitted with IDOCs for each analyst will be reviewed for corrective action of this finding.**

TEMPERATURE - SM 2550 B-2010

Laboratory instrumentation and/or equipment: HB Instruments NIST-traceable thermometer (-1 to 61°C, 0.1°C increments), SQ 77.245 digital thermometer (0.1°C increments)

Finding: Laboratory instruments were not tagged with annual temperature accuracy verification information.

> Requirement: Each thermometer or temperature measuring device must be tagged with the current temperature correction factor, date of accuracy verification, and analyst's initials. **The temperature SOP sign-off sheet submitted with IDOCs for each analyst will be reviewed for corrective action of this finding.**

SAFE DRINKING WATER ACT

RESIDUAL CHLORINE - SM 4500-CL G-2011

Laboratory instrumentation and/or equipment: HACH Pocket Colorimeter II, HACH DPD free residual chlorine reagent pillows, USABlueBook Chlorine standard (potassium permanganate, 1000 ppm)

Finding #1: The DPD reagent lot A8318 was used prior to the initial calibration verification performed on January 24, 2020.

> Requirement: Initial calibration verification (a blank and five standards) is required for each meter on an annual basis or when a new lot number of DPD reagent is used, whichever comes first. **In the response, include the corrective action taken to ensure that initial calibration verification will be performed for each new lot of DPD reagent prior to use.**

Finding #2: The lot number of the potassium permanganate stock standard used for initial and daily calibration verification standard preparations is not documented on laboratory records.

> Requirement: Standards and reagents used for daily calibration verification must be traceable to initial calibration verification records. **Submit two weeks of recent daily calibration verification and distribution sample analysis records for review. Additionally, submit a revised copy of the initial calibration verification record that includes a field for the stock standard lot number.**

Finding #3: The laboratory is not analyzing a sample duplicate each day distribution samples are collected.

> Requirement: A sample duplicate must be analyzed with each batch of 20 or fewer samples. **The records submitted for finding #2 will be reviewed as corrective action for this finding.**

Finding #4: The laboratory is not analyzing a continuing calibration verification standard (CCV) at the end of each batch.

> Requirement: The laboratory must prepare and analyze a blank and two standards each day prior to sample analysis and at least one standard after every 10 samples and at the end of each batch (20 or fewer samples). **The records submitted for finding #2 will be reviewed as corrective action for this finding.**

Recommendation: It was recommended during the on-site evaluation that the laboratory purchase a secondary Gel standard (≥ 1.0 mg/L) to use for continuing calibration verification.

Conclusion

The laboratory will have a thirty-day period upon receipt of this report to address the recommendations, adjustments, and requests for documentation listed in the report. The laboratory response should be received by April 8, 2020.

Candace R Medlin
Laboratory Certification Officer
Bureau of Environmental Health Services

Nydia F Burdick
Laboratory Certification Officer
Bureau of Environmental Health Services

Laboratory Name: Town of Edisto Beach
Laboratory ID # 15555
Certificate # 15555001
Revision Date: 1/24/20
Revision # 2
Issue Date: 1/24/20

TOWN OF EDISTO BEACH

CERTIFIED OPERATORS

1/24/20

ROBERT W. DOUB, JR.

BIOLOGICAL WASTEWATER	#B 12083
WATER DISTRIBUTION	#A 00079
WATER TREATMENT	#C 07002
WASTEWATER COLLECTION	#C 2800

MARSHALL HORSTMANN

BIOLIGICAL WASTEWATER	#C 16114
WATER DISTRIBUTION	#T 5255
WATER TREATMENT	#C 9811

PETER LALA

BIOLOGICAL WASTEWATER	#D 15531
WATER DISTRIBUTION	#C 4648
WATER TREATMENT	#T 9669

Laboratory Name: Town of Edisto Beach
Laboratory ID # 15555
Certificate # 15555001
Revision Date: 1/24/20
Revision # 2
Issue Date: 1/24/20

JAMES B. MELLERSTEN

BIOLOGICAL WASTEWATER	#C 13827
WATER DISTRIBUTION	#C 2757
WASTEWATER COLLECTION	#D D4055
WATER TREATMENT	#D 8969

PAUL OTTE

BIOLOGICAL WASTERWATER	#T 16030
WATER DISTRIBUTION	#T 5099
WATER TREATMENT	#T 9751

PATRICK D. ZEMP

BIOLOGICAL WASTEWATER	#B15043
WATER DISTRIBUTION	#C 4134
WASTEWATER COLLECTION	#D D4057

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Technical Instructions
YSI, a Xylem brand • XA00055

Dissolved Oxygen Tables

CALIBRATION AND OXYGEN SOLUBILITY TABLES

Calibration Table Calibration Values for Various Atmospheric Pressures and Altitudes

PRESSURE			ALTITUDE		CALIBRATION VALUE
Inches Hg	mm Hg	kPa	Feet	Meters	Percent Saturation
30.23	768	102.3	-276	-84	101
29.92	760	101.3	0	0	100
29.61	752	100.3	278	85	99
29.33	745	99.3	558	170	98
29.02	737	98.3	841	256	97
28.74	730	97.3	1126	343	96
28.43	722	96.3	1413	431	95
28.11	714	95.2	1703	519	94
27.83	707	94.2	1995	608	93
27.52	699	93.2	2290	698	92
27.24	692	92.2	2587	789	91
26.93	684	91.2	2887	880	90
26.61	676	90.2	3190	972	89
26.34	669	89.2	3496	1066	88
26.02	661	88.2	3804	1160	87
25.75	654	87.1	4115	1254	86
25.43	646	86.1	4430	1350	85
25.12	638	85.1	4747	1447	84
24.84	631	84.1	5067	1544	83
24.53	623	83.1	5391	1643	82
24.25	616	82.1	5717	1743	81
23.94	608	81.1	6047	1843	80
23.62	600	80.0	6381	1945	79
23.35	593	79.0	6717	2047	78
23.03	585	78.0	7058	2151	77
22.76	578	77.0	7401	2256	76
22.44	570	76.0	7749	2362	75
22.13	562	75.0	8100	2469	74
21.85	555	74.0	8455	2577	73
21.54	547	73.0	8815	2687	72
21.26	540	71.9	9178	2797	71
20.94	532	70.9	9545	2909	70
20.63	524	69.9	9917	3023	69
20.35	517	68.9	10293	3137	68
20.04	509	67.9	10673	3253	67
19.76	502	66.9	11058	3371	66

YSI
a xylem brand

Oxygen Solubility Table Solubility of Oxygen (mg/L) in Water Exposed to Water-Saturated Air at 760 mm Hg Pressure

Temp °C	Chlorinity: 0 Salinity: 0	5.0 ppt 9.0 ppt	10.0 ppt 18.1 ppt	15.0 ppt 27.1 ppt	20.0 ppt 36.1 ppt	25.0 ppt 45.2 ppt
0.0	14.62	13.73	12.89	12.10	11.36	10.66
1.0	14.22	13.36	12.55	11.78	11.07	10.39
2.0	13.83	13.00	12.22	11.48	10.79	10.14
3.0	13.46	12.66	11.91	11.20	10.53	9.90
4.0	13.11	12.45	11.61	10.92	10.27	9.66
5.0	12.77	12.02	11.32	10.66	10.03	9.44
6.0	12.45	11.73	11.05	10.40	9.80	9.23
7.0	12.14	11.44	10.78	10.16	9.58	9.02
8.0	11.84	11.17	10.53	9.93	9.36	8.83
9.0	11.56	10.91	10.29	9.71	9.16	8.64
10.0	11.29	10.66	10.06	9.49	8.96	8.45
11.0	11.03	10.41	9.84	9.29	8.77	8.28
12.0	10.78	10.18	9.62	9.09	8.59	8.11
13.0	10.54	9.96	9.42	8.90	8.41	7.95
14.0	10.31	9.75	9.22	8.72	8.24	7.79
15.0	10.08	9.54	9.03	8.54	8.08	7.64
16.0	9.87	9.34	8.84	8.37	7.92	7.50
17.0	9.67	9.15	8.67	8.21	7.77	7.36
18.0	9.47	8.97	8.50	8.05	7.62	7.22
19.0	9.28	8.79	8.33	7.90	7.48	7.09
20.0	9.09	8.62	8.17	7.75	7.35	6.96
21.0	8.92	8.46	8.02	7.61	7.21	6.84
22.0	8.74	8.30	7.87	7.47	7.09	6.72
23.0	8.58	8.14	7.73	7.34	6.96	6.61
24.0	8.42	7.99	7.59	7.21	6.84	6.50
25.0	8.26	7.85	7.46	7.08	6.72	6.39
26.0	8.11	7.71	7.33	6.96	6.62	6.28
27.0	7.97	7.58	7.20	6.85	6.51	6.18
28.0	7.83	7.44	7.08	6.73	6.40	6.09
29.0	7.69	7.32	6.96	6.62	6.30	5.99
30.0	7.56	7.19	6.85	6.51	6.20	5.90
31.0	7.43	7.07	6.73	6.41	6.10	5.81
32.0	7.31	6.96	6.62	6.31	6.01	5.72
33.0	7.18	6.84	6.52	6.21	5.91	5.63
34.0	7.07	6.73	6.42	6.11	5.28	5.55
35.0	6.95	6.62	6.31	6.02	5.73	5.46
36.0	6.84	3.52	6.22	5.93	5.65	5.38
37.0	6.73	6.42	6.12	5.84	5.56	5.31
38.0	6.62	6.32	6.03	5.75	5.48	5.23
39.0	6.52	6.22	5.98	5.66	5.40	5.15
40.0	6.41	6.12	5.84	5.58	5.32	5.08
41.0	6.31	6.03	5.75	5.49	5.24	5.01
42.0	6.21	5.93	5.67	5.41	5.17	4.93
43.0	6.12	5.84	5.58	5.33	5.09	4.86
44.0	6.02	5.75	5.50	5.25	5.02	4.79
45.0	5.93	5.67	5.41	5.17	4.94	4.72

YSI, a Xylem brand
1725 Brannum Lane
Yellow Springs, OH 45387

+1.937.767.7241
info@ysi.com
YSI.com

Who's Minding the Planet?®

YSI.com/DO

Laboratory Name:_____ Laboratory ID #_____

Dissolved Oxygen Calibration and Sample Analysis for SM 4500 OG-2011

Meter ID _____

Analyst initials	Date	Calibration Time	Calibration Temp	Altitude or Pressure	DO reading after cal, mg/L	Saturation Chart, mg/L	Pass? (±0.2 mg/L or 2%) √	Sample ID	Time of Collection	Time of Analysis*	Sample Reading, mg/L	Membrane/Battery change? Comments

* Samples analyzed *in-situ* will mean that the collection and analysis time are the same. All samples must be analyzed within 15 minutes of collection.

Unless otherwise noted samples are collected: In-situ or Grab (circle)

Compliance Sampling Inspection

(Dated May 24, 2021)

dhec
Healthy People. Healthy Communities.

5/24/2021

Attn: PATRICK ZEMP
EDISTO BEACH TOWN OF
2414 MURRAY ST
EDISTO BEACH, SC 29438

RE: PERMIT # ND0063789
TOWN OF EDISTO BEACH WWTP
COLLETON COUNTY

Dear PATRICK ZEMP :

Thank you for your assistance provided to the South Carolina Department of Health and Environmental Control (Department) representatives during the **Compliance Sampling Inspection (SC/ND)** conducted at your facility on **3/29/2021** and completed on **4/1/2021**.

The review indicates that the permit requirements evaluated during the inspection were being met, resulting in a rating of **Satisfactory**. Therefore, no response is necessary.

If you have any questions regarding this inspection, please contact the inspector Jacob A. Terry at (843) 473-6192 or TERRYJA@dhec.sc.gov.

Sincerely,

Ashley Auerbach
Charleston Environmental Affairs Office
Water Pollution Compliance Section
Bureau of Water

TOWN OF EDISTO BEACH WWTP :
KPJ7-AWG1-QH2

WW Supplement 3 (CEI/CSI) - Effluent Land App.

Inspector: Jacob Terry
Start Date: 05/24/2021 Completed Date: 05/24/2021

Wastewater Effluent Land Application Site: Land Application

	Yes	No	NA
1. Groundwater monitoring required by permit? Explain deficiencies in the comments. [Not Rated]	☑	☐	☐
2. Groundwater monitoring records available? Explain deficiencies in the comments. [Minor (Required)]	☑	☐	☐
3. Agronomic plan required, available, and followed? Explain deficiencies in the comments. [Major]	☑	☐	☐
4. Application site is free of ponding issues? If no, explain. [Minor (Required)]	☑	☐	☐
5. Application area is free of surface water runoff issues? If no, explain. [Critical]	☑	☐	☐
6. Cover crop displays even distribution of effluent? (e.g. no dead areas, even crop growth) Explain deficiencies in the comments. [Minor (Required)]	☑	☐	☐
7. Spray heads maintained in good condition? Explain deficiencies in the comments. [Major]	☑	☐	☐
Maintained by Wyndham Resort			
8. Cover crop harvested and removed from site if required? Explain deficiencies in the comments. [Major]	☐	☐	☑
9. No signs of stressed vegetation surrounding the site? No contamination migrating away from site? (e.g. dead trees down gradient) Explain deficiencies in the comments. [Critical]	☑	☐	☐
10. Permitted buffers suitable for site boundaries, water bodies, or drinking water wells? Explain deficiencies in the comments. [Major]	☑	☐	☐

Wastewater Effluent Land Application Site: Monitoring Wells, Well Condition

Complete this section if evaluating land application monitoring wells.

	Yes	No	NA
1. Do all wells have secure locking caps? Explain deficiencies in the comments. [Minor (Required)]	☑	☐	☐
MW8 evaluated			
2. Do all wells have permanent ID place? Explain deficiencies in the comments. [Minor (Required)]	☑	☐	☐
3. Concrete surface pad free of cracks or damage? Explain deficiencies in the comments. [Minor (Required)]	☑	☐	☐

TOWN OF EDISTO BEACH WWTP :
KPJ7-AWG1-QH2

WW Supplement 3 (CEI/CSI) - Effluent Land App.

Inspector: Jacob Terry
Start Date: 05/24/2021 Completed Date: 05/24/2021

Wastewater Effluent Land Application Site: Monitoring Wells, Well Condition	
4. Wells were free of deficiencies or problems? (Explain and include well ID# in the comment area if answered "No")	Yes

TOWN OF EDISTO BEACH WWTP : KPJ7-AWG1-QH2

WW Supplement 4 (CEI/CSI) – Field Parameters

Inspector: Jacob Terry
Start Date: 05/24/2021 Completed Date: 05/24/2021

pH	
pH Instrument make and model:	TS Orion Star A121
Complete the following Supplement 4 sections if conducting a Compliance Sampling Inspection or a detailed review of the field parameter equipment and procedures is warranted.	
1. Meter calibration and analysis is performed by a properly certified laboratory? [Critical]	Yes
1a. Analysis performed placing probe in effluent stream? Explain deficiencies in the comments section. [Major]	Yes
1b. If not performed in effluent stream, 15 minute holding time met? Explain deficiencies in the comments. [Major]	NA
2. Meter calibrated each day of use? Explain deficiencies in the comments. [Major]	Yes
3. Records include: date, time, analyst, temp of buffers and slope (if appl.)? Explain deficiencies in the comments. [Major]	Yes
4. Fresh buffers used for each calibration? Explain deficiencies in the comments. [Major]	Yes
4a. Buffers used:	4, 7, 10
5. Buffers bracket the expected pH of samples? Explain deficiencies in the comments. [Major]	Yes
6. Buffers labeled with date received and opened? Explain deficiencies in the comments. [Minor (Required)]	Yes
7. Buffers not expired (1 yr after opening if not specified)? Explain deficiencies in the comments. [Minor (Required)]	Yes
8. Electrode in good repair (filling solution at proper level, no excess crystallization, bulb in proper solution, etc.) Explain deficiencies in the comments. [Major]	Yes
9. If equipped w/ ATC, device checked against NIST or NIST traceable thermometer. Explain deficiencies in the comments. [Major]	Yes
10. Continuous pH monitoring required? Explain deficiencies in the comments. [Not Rated]	NA
11. If continuous required, facility is certified for EPA method 150.2? Explain deficiencies in the comments. [Major]	NA
12. Continuous monitoring calibration method followed? Explain deficiencies in the comments. [Major]	NA

TOWN OF EDISTO BEACH WWTP : KPJ7-AWG1-QH2

WW Supplement 4 (CEI/CSI) – Field Parameters

Inspector: Jacob Terry
Start Date: 05/24/2021 Completed Date: 05/24/2021

Dissolved Oxygen	
DO Instrument make and model:	YSI 550A
1. Meter calibration and analysis is performed by a properly certified laboratory? [Critical]	Yes
2a. DO measurement performed placing probe in the effluent stream? Explain deficiencies in the comments. [Major]	Yes
2b. If not performed in effluent stream, 15 minute holding time met and sample collected and transported in a zero headspace container? Explain deficiencies in the comments. [Major, Must be yes if 2a was answered no]	NA
3. Meter calibrated each day of use? Explain deficiencies in the comments. [Major]	Yes
4. Records include date, time, air temp, initial DO, analyst, membrane and battery, zero altitude adjustment and adjusted DO (if applicable)? Explain deficiencies in the comments. [Major]	Yes
5. Temperature sensor checked against NIST or NIST traceable thermometer? Explain deficiencies in the comments. [Major]	Yes
6. Electrode tagged with: date of check, analyst, and adjustment? Explain deficiencies in the comments. [Major]	Yes
7. Lab corrected altitude or barometric pressure for height above sea level? Explain deficiencies in the comments. [Major]	Yes
8. Air calibrations conducted in closed chamber with 100% humidity? Explain deficiencies in the comments. [Major]	Yes
9. Membrane changed regularly (approximately monthly)? Explain deficiencies in the comments. [Minor (Required)]	Yes
10. Probe membrane is free of air bubbles? Explain deficiencies in the comments. [Major]	Yes
11. Anode (A) is free of discoloration? Explain deficiencies in the comments. [Major]	Yes
Luminescent Dissolved Oxygen	
LDO/ODO Instrument make and model:	NA
1a. DO measurement performed placing probe in the effluent stream? (Major)	NA
1b. If not performed in effluent stream, 15 minute holding time met and sample collected and transported in a zero headspace container? (Major, Required if 1a was answered no)	NA

TOWN OF EDISTO BEACH WWTP :
KPJ7-AWG1-QH2

WW Supplement 4 (CEI/CSI) – Field Parameters

Inspector: Jacob Terry
Start Date: 05/24/2021 Completed Date: 05/24/2021

Luminescent Dissolved Oxygen	
1c. Sample is stirred during analysis? (Major)	NA
2. All appropriate QA/QC has been performed each day of use? (Cleaning, IDOC with 4 replicates, Water/Air calibration, LCS and dup., CV/ORP check samples,...) (Major)	NA
3. Records include date, time, calibration temp, meter ID, instrument reading after calibration, solubility table reading, LCS/CV results, barometric pressure/altitude, and analyst's initials? (Major)	NA
4. Temperature sensor checked against NIST or NIST traceable thermometer? (Major)	NA
5. Probe tagged with: date of check, analyst, and adjustment. (Major)	NA
6. Laboratory is documenting routine maintenance such as battery or sensor changes? (Major)	NA
7. Meter calibration and analysis is performed by a properly certified laboratory? [Critical]	NA
Temperature	
Temperature	Yes
1. Meter calibration and analysis is performed by a properly certified laboratory? [Critical]	Yes
2. Thermometer/sensors checked against NIST or NIST traceable thermometer? Explain deficiencies in the comments. [Major]	Yes
3. Thermometer/sensors tagged: Date of check, analyst, adjustment? Explain deficiencies in the comments. [Major]	Yes
Chlorine	
Chlorine instrument make and model:	NA
1. Meter calibration and analysis is performed by a properly certified laboratory? [Critical]	NA
2. Vials clean and free of cracks and scratches? Explain deficiencies in the comments. [Major]	NA
3. Samples analyzed within 15 minutes holding time? Explain deficiencies in the comments. [Major]	NA
4. Primary stock solution protected from light, refrigerated and <6 months old? Explain deficiencies in the comments. [Major]	NA

TOWN OF EDISTO BEACH WWTP :
KPJ7-AWG1-QH2

WW Supplement 4 (CEI/CSI) – Field Parameters

Inspector: Jacob Terry
Start Date: 05/24/2021 Completed Date: 05/24/2021

Chlorine	
5. Volumetric glassware used to make secondary stock and working standards? Explain deficiencies in the comments. [Major]	NA
6. Secondary standards refrigerated and made fresh each week? Explain deficiencies in the comments. [Major]	NA
7. Working standards made daily? Explain deficiencies in the comments. [Major]	NA
8. Instrument calibrated each day it is used? Explain deficiencies in the comments. [Major]	NA
9. Records include date, time, true concentration, observed concentration, and analysts' initials? Explain deficiencies in the comments. [Major]	NA
10. Standard calibration verification generated with each lot or annually. Explain deficiencies in the comments. [Major]	NA
10a. Standards used: NA	
Standard Laboratory Practices	
1. Lab glassware appears to be clean, with no noticeable sheen or build up? Explain deficiencies in the comments. [Minor (Required)]	Yes
2. Laboratory is clean and orderly? Explain the deficiencies in the comments. [Minor (Required)]	Yes
3. Lab can control the facility temperature (between 60-80 degrees for stability of reagents)? Explain deficiencies in the comments. [Major]	Yes
Deficiencies	
1. Is the facility in compliance with providing proper sample collection, preservation, and/or holding time(s).	☑ Yes ☐ No
2. Is the facility in compliance with ensuring the use of a certified laboratory?	☑ Yes ☐ No
3. Is the facility in compliance with ensuring suitable QA/QC procedures when conducting compliance analyses?	☑ Yes ☐ No

TOWN OF EDISTO BEACH WWTP :
KPJ7-AWG1-QH2
WW Compliance Sampling Inspection

Inspector: Jacob Terry
Start Date: 05/24/2021 Completed Date: 05/24/2021

Compliance Evaluation Inspection Cover: Site Information

Permit No.:	ND0063789
Start Date of Inspection	03/29/2021
Entry Time:	10:30 AM
End Date of Inspection (including sampling)	04/01/2021
Exit Time:	12:00 PM
Permit Effective Date:	04/01/2013
One additional day of sampling was conducted due sampler not working on 3/29	
Permit Expiration Date:	02/28/2022
Name of Facility	TOWN OF EDISTO BEACH WWTP
Location of Facility	2518 HOLMES ST, EDISTO BEACH, SC 29438
County of Facility	Colleton

Compliance Evaluation Inspection Cover: Representative Information

Facility/Department On-Site Representative Information

Name	Title	Telephone Number
Patrick Zemp	Utilities Director	8436030989

Compliance Evaluation Inspection Cover: Responsible Official Information

Name	Jane Darby, Town of Edisto Beach
Responsible Official Address	2414 Murray St Edisto Beach, SC 29438
Responsible Official Title	Town Mayor
Responsible Official Phone	843-869-2505
Roles	Responsible Official

Permit General Requirements

1. Responsible Official/Permittee Name is correct? [Minor (Required)]	☑ Yes ☐ No ☐ NA
2. Responsible Official mailing address is correct? [Minor (Required)]	☑ Yes ☐ No

TOWN OF EDISTO BEACH WWTP :
KPJ7-AWG1-QH2
WW Compliance Sampling Inspection

Inspector: Jacob Terry
Start Date: 05/24/2021 Completed Date: 05/24/2021

Permit General Requirements

3. Location and number of discharge points are as described in the permit? [Minor (Required)]	☑ Yes	☐ No	☐ NA
4. Name and location of receiving water is correct on the permit? [Minor (Required)]	☐ Yes	☐ No	☑ NA

Compliance Schedule, Administrative Order, or Consent Order

This Section applies to Enforcement, Compliance Schedules, AO's, CO's, and Permit Compliance Schedules.

1. Is the Permittee under a Compliance Schedule, Administrative Order, or Consent Order?	☐ Yes	☑ No	
2. Is the permittee meeting the permit compliance schedule, administrative order, or consent order? If no, list correction in comments.	N/A		

Operator Information

1. Does this facility have an operator requirement?	☑ Yes	☐ No	
2. Is the operator of proper grade performing the required inspections? [Critical]	☑ Yes	☐ No	☐ NA
3. Is a Trainee operator being utilized at this facility?	☐ Yes	☑ No	☐ NA
3a. Is the Trainee accompanied onsite by at least a level D licensed operator?	☐ Yes	☐ No	☑ NA

Records and Reports

1. Plant and laboratory records and results maintained for required period and include all permitted parameters? (Bio-solids 5 years, all other records 3 years). [Major]	☑ Yes	☐ No	☐ NA
2. Operator's log contains documentation of daily maintenance activities, name of operator performing tasks and time activities performed? [Major]	☑ Yes	☐ No	☐ NA
3. Is this facility required to submit DMRs?	☑ Yes	☐ No	
3a. Are all DMR records accurately completed?	☑ Yes	☐ No	☐ NA
3b. Laboratory analytical results are consistent with DMR?	Yes		
3c. DMR dates and parameters checked: DMR dates: October, November, and December 2020 DMR parameters: DO, BOD5, pH, TSS, Nitrate Nitrogen, Flow, Fecal Coliform			
4. If facility monitors more frequently than required, are results reported on DMR? [Critical]	☑ Yes	☐ No	☐ NA

TOWN OF EDISTO BEACH WWTP :
KPJ7-AWG1-QH2
WW Compliance Sampling Inspection

Inspector: Jacob Terry
Start Date: 05/24/2021 Completed Date: 05/24/2021

Records and Reports	
5. O&M manual available onsite?	Yes
5a. O&M manual last updated:	10/1/1997
6. Are BMPs required for the facility's treatment plan?	☐ Yes ☑ No
6a. Is the BMP manual available for review? (if required)	N/A
6b. BMP manual last updated:	
7. Is an Odor Abatement Plan required for this facility?	☐ Yes ☑ No
7a. Is the Odor abatement plan available for review? (if required)	N/A
7b. Odor abatement plan last updated:	
8. Is Groundwater monitoring required for this facility?	☐ Yes ☑ No
8a. Are Groundwater monitoring records maintained? (if required) [Minor (Required)]	☐ Yes ☐ No ☑ NA
9. Is Soil monitoring required for this facility?	☐ Yes ☑ No
9a. Are Soil monitoring records available? (if required) [Minor (Required)]	☐ Yes ☐ No ☑ NA
Sampling and Analysis Data: Onsite Laboratory (1)	
Onsite Laboratory: (not applicable only if evaluated within the last 6 months)	Applicable
Expiration Date:	5/31/2023
Date of last certification inspection:	2/11/2020
CWA Certification Number: [Critical]	15555
Are onsite labs certified for all parameters contracted under CWA? [Critical]	Satisfactory
Solid and Hazardous Waste Act Certification Number: [Critical]	NA
Are onsite labs certified for all parameters contracted under the Solid and Hazardous Waste Act? [Critical]	N/A
1. Date, times, location, and individual collecting sample listed? Explain deficiencies in the comments. [Minor (Required)]	☑ Yes ☐ No ☐ NA
2. Date, time, analytical methods used, analyst, and analytical result listed? Explain deficiencies in the comments. [Minor (Required)]	☑ Yes ☐ No ☐ NA
3. Sampler environment temp for composite samples is correct? (0.5-6°C, no ice in sample) Explain deficiencies in the comments. [Major]	☑ Yes ☐ No ☐ NA

TOWN OF EDISTO BEACH WWTP :
KPJ7-AWG1-QH2

WW Compliance Sampling Inspection

Inspector: Jacob Terry
Start Date: 05/24/2021 Completed Date: 05/24/2021

Sampling and Analysis Data: Onsite Laboratory (1)	
4. Sample preservatives are correct? (H2SO4, ice, etc) Bacteria samples must indicate Sodium Thiosulfate for dechlorination. Explain deficiencies in the comments. [Major]	☑ Yes ☐ No ☐ NA
5. Program area, sample matrix, and analytical methods are listed and correct? Explain deficiencies in the comments. [Major]	☑ Yes ☐ No ☐ NA
6. Date, time, analyst, and analytical result listed? Explain deficiencies in the comments. [Minor (Required)]	☑ Yes ☐ No ☐ NA
Sampling and Analysis Data: Outside Laboratory (1)	
Outside Laboratory	Applicable
Lab Name:	Access Analytical Inc
CWA Certification Number: [Critical]	32571
Parameters Contracted:	BOD5, Nitrate Nitrogen, TSS, Fecal Coliform
Are outside labs certified for all parameters contracted under CWA? [Critical]	Satisfactory
Solid and Hazardous Waste Act Certification Number: [Critical]	NA
Parameters Contracted:	NA
Are outside labs certified for all parameters contracted under the Solid and Hazardous Waste Act? [Critical]	N/A
1. Date, times, location, and signature of sampler listed? Explain deficiencies in the comments. [Minor (Required)]	☑ Yes ☐ No ☐ NA
2. Sample type (eg. Grab), # of containers and type (eg. Plastic) listed? Explain deficiencies in the comments. [Major]	☑ Yes ☐ No ☐ NA
3. Sampler environment temp for composite samples is correct? (0.5-6°C, no ice in sample) Explain deficiencies in the comments. [Major]	☑ Yes ☐ No ☐ NA
4. Sample preservatives are correct? (H2SO4, ice, etc) Bacteria samples must indicate Sodium Thiosulfate for dechlorination. Explain deficiencies in the comments. [Major]	☑ Yes ☐ No ☐ NA
5. Program area, sample, matrix, and analytical methods are listed and correct? Explain deficiencies in the comments. [Major]	☑ Yes ☐ No ☐ NA
6. Date, time, analyst, and analytical result listed? Explain deficiencies in the comments. [Minor (Required)]	☑ Yes ☐ No ☐ NA

TOWN OF EDISTO BEACH WWTP :
KPJ7-AWG1-QH2
WW Compliance Sampling Inspection

Inspector: Jacob Terry
Start Date: 05/24/2021 Completed Date: 05/24/2021

Flow Measurement: General Requirements (1)	
1. Does this facility have a Flow measurement device?	☑ Yes ☐ No ☐ NA
2. Outfall designation.	001
3. Facility design flow: (in MGD)	0.350
4. Average facility flow: (in MGD)	0.150
5. Routine calibration check frequency:	As Needed
6. Flow meter calibration frequency:	Annually
7. Recorded Flow: (in MGD)	0.149
8. Actual Flow: (in MGD)	
9. Error: (in %) [Critical]	
10. Is primary flow measurement equipment located in a confined space?	☑ Yes ☐ No ☐ NA
11. Date of last calibration:	12/09/2020
Flow Measurement: Flow	
1. Proper flow tables used by facility? Explain deficiencies in the comments. [Major]	☑ Yes ☐ No ☐ NA
2. Effluent flow measured after all return lines? Explain deficiencies in the comments. [Major]	☑ Yes ☐ No ☐ NA
3. Flow measurement equipment adequate to handle expected ranges of flow? Explain deficiencies in the comments. [Major]	☑ Yes ☐ No ☐ NA
Flow Measurement: Flumes (0)	
Does this facility have a flume?	☐ Yes ☐ No
1. Outfall designation.	
2. Type of flume:	
2a. Size of Flume:	
3. Flow well distributed and free of turbulence across flume channel and cross-sectional velocities appear relatively uniform? Explain deficiencies in the comments. [Minor (Required)]	☐ Yes ☐ No ☐ NA
4. Flume appears to be properly installed and maintained? Explain deficiencies in the comments. [Minor (Required)]	☐ Yes ☐ No ☐ NA
5. Flume walls and throat appear vertical and smooth with correct dimensions? Explain deficiencies in the comments. [Minor (Required)]	

TOWN OF EDISTO BEACH WWTP :
KPJ7-AWG1-QH2

WW Compliance Sampling Inspection

Inspector: Jacob Terry
Start Date: 05/24/2021 Completed Date: 05/24/2021

Flow Measurement: Flumes (0)	
6. Flume clean and free of debris or deposits? Explain deficiencies in the comments. [Minor (Required)]	☐ Yes ☐ No ☐ NA
7. Operating under free-flow conditions? Explain deficiencies in the comments. [Minor (Required)]	☐ Yes ☐ No ☐ NA
Flow Measurement: Weirs (1)	
Does this facility have a weir?	☑ Yes ☐ No ☐ NA
1. Outfall designation.	001
2. Type of weir:	Triangular V-Notch Weir score='null'
2a. Size of weir:	45*
3. Is the weir properly installed and maintained? Explain deficiencies in the comments. [Major]	Yes
4. Weir is level and weir plate is plumb, top edges sharp and clean? Explain deficiencies in the comments. [Minor (Required)]	Yes
5. Free access for air below the nappe of the weir? [Minor (Required)]	☑ Yes ☐ No ☐ NA
6. Upstream channel is free of disturbing influences. Explain deficiencies in the comments. [Minor (Required)]	☑ Yes ☐ No ☐ NA
7. Stilling basin is of sufficient size and clear of debris? Explain deficiencies in the comments. [Minor (Required)]	☑ Yes ☐ No ☐ NA
Dead minnows were found in stilling basin during Day 2(3/30) of sampling. Patrick Zemp cleaned stilling basin out.	
8. Head measurements are made at proper location? Explain deficiencies in the comments. [Minor (Required)]	Yes
Flow Measurement: Other Types	
1. Does this facility have another type of flow measurement?	☑ Yes ☐ No
2. Describe the type of flow measurement facility uses. ISCO Signature Flow Meter	
Self-monitoring Program	
Does this facility require Self-Monitoring?	☑ Yes ☐ No
1. Was composite sampler set up properly?	Yes
2. DO, pH, TRC analyses performed within 15 minutes of collection? Explain deficiencies in the comments. [Major]	☑ Yes ☐ No ☐ NA

TOWN OF EDISTO BEACH WWTP :
KPJ7-AWG1-QH2

WW Compliance Sampling Inspection

Inspector: Jacob Terry
Start Date: 05/24/2021 Completed Date: 05/24/2021

Self-monitoring Program	
3. Sampling and analyses completed at required frequencies and on day specified in permit? Explain deficiencies in the comments. [Minor (Required)]	☑ Yes ☐ No ☐ NA
4. Composite sample method used as defined in permit? (Flow proportional unless the flow varies by 15% and they have Department approval.) Explain deficiencies in the comments. [Minor (Required)]	☑ Yes ☐ No ☐ NA
5. Composite sampler refrigerated or iced and sample environment temp recorded? (0.5-6°C, no ice in sample) Explain deficiencies in the comments. [Major]	Yes
6. Proper sample preservation techniques used? Explain deficiencies in the comments. [Major]	☑ Yes ☐ No ☐ NA
7. Sample collection time consistent with permit? (eg. 8, 16, or 24 hours) Explain deficiencies in the comments. [Major]	☑ Yes ☐ No ☐ NA
8. Sample containers and holding times conform to 40 CFR 136.3? Explain deficiencies in the comments. [Major]	☑ Yes ☐ No ☐ NA
9. Sampler tubing and container clean and intake header located in proper position to collect representative sample? Explain deficiencies in the comments. [Minor (Recommended)]	Yes
10. Fecal/E. Coli samples collected directly into sterilized container and sample incubation started no later than 8 hours from collection? Explain deficiencies in the comments. [Critical]	☑ Yes ☐ No ☐ NA
Facility Site Review: General Requirements	
1. Standby power or equivalent available and able to power entire plant? Explain deficiencies in the comments. Equivalent could be a shut-down plan. [Minor (Required)]	☑ Yes ☐ No ☐ NA
2. Does this facility use Chlorine gas?	☐ Yes ☑ No
2a. Chlorine safety precautions (standing cylinders chained, leak detector with alarm, stored in ventilated area) in place? Explain deficiencies in the comments. [Minor (Recommended)]	☐ Yes ☐ No ☑ NA
3. Facility marked with weather durable sign w/ 24 hour emergency phone #? Explain deficiencies in the comments. [Minor (Required)]	☑ Yes ☐ No ☐ NA
4. Is the facility secure? Explain deficiencies in the comments. [Minor (Required)]	☑ Yes ☐ No
5. Is this facility required to have a Back Flow Prevention device?	☑ Yes ☐ No
5a. Backflow prevention devices installed and inspected by a certified tester annually? Explain deficiencies in the comments. [Minor (Recommended)]	☑ Yes ☐ No ☐ NA

TOWN OF EDISTO BEACH WWTP :
KPJ7-AWG1-QH2
WW Compliance Sampling Inspection

Inspector: Jacob Terry
Start Date: 05/24/2021 Completed Date: 05/24/2021

Facility Site Review: General Requirements	
5b. Date of last inspection or replacement:	2/8/2020
6. Facility grounds and access road are maintained? Explain deficiencies in the comments. [Minor (Required)]	☑ Yes ☐ No
7. Sludge dewatering type: [Minor (Required)]	NA
7a. Is the Sludge Dewatering being performed satisfactorily?	N/A
Facility Site Review: Monitoring Wells	
Does this facility have monitoring wells	☐ Yes ☑ No
Complete this section if evaluating monitoring wells required by the permit.	
1. Were the facility monitoring wells evaluated?	☐ Yes ☐ No ☑ NA
2. Do all wells have secure locking caps? Explain deficiencies in the comments. [Minor (Required)]	☐ Yes ☐ No ☑ NA
3. Do all wells have permanent ID plate? Explain deficiencies in the comments. [Minor (Required)]	☐ Yes ☐ No ☑ NA
4. Concrete pad surface is free of cracks or damage? Explain deficiencies in the comments. [Minor (Required)]	☐ Yes ☐ No ☑ NA
5. Wells were free of deficiencies or problems? (Explain in comments and include well ID # below if answered "No") [Minor (Required)]	☐ Yes ☐ No ☑ NA
Operation and Maintenance	
1. All treatment units in service or operational? Explain deficiencies in the comments. [Critical]	☑ Yes ☐ No ☐ NA
1a. All backup units capable of being in service or operational? Explain deficiencies in the comments. [Minor (Required)]	☑ Yes ☐ No ☐ NA
2. Routine and preventive maintenance performed on equipment? Explain deficiencies in the comments. [Major]	☑ Yes ☐ No ☐ NA
Treatment Units [Major]	
3a. Screening	Satisfactory
3b. Grinder/Comminutor	N/A
3c. Grit Chamber	Satisfactory
3d. Primary Sedimentation	Satisfactory
3e. Trickling Filters	N/A

TOWN OF EDISTO BEACH WWTP :
KPJ7-AWG1-QH2
WW Compliance Sampling Inspection

Inspector: Jacob Terry
Start Date: 05/24/2021 Completed Date: 05/24/2021

Operation and Maintenance	
3f. Rotating Biological Contactor	N/A
3g. Aeration:	Satisfactory
3g.A. What is the aeration type?	Surface
3h. Secondary Sedimentation	N/A
3i. Digester:	N/A
3j. Pond(s):	Satisfactory
3j.A. What is the pond type?	Holding
3k. Disinfection:	Satisfactory
3k.A. What is the disinfection type?	Calcium hypochlorite tablets
3k.B. If Chlorine, are 150lbs or ton cylinders being used?	
3l. Contact Chamber	Satisfactory
3m. Dechlorination:	N/A
3m.A. What is the dechlorination type?	NA
3m.B. If SO2, are 150lbs or ton cylinders being used?	
3n. Other process:	
Process Type **Satisfactory** **Unsatisfactory**	
3n.1. Were all added processes Satisfactory? (If no, specify which process(s) were Unsatisfactory and why in comments.)	☐ Yes ☐ No ☑ NA
4. Effluent appearance [Critical] (Describe in comments if Unsatisfactory.)	Satisfactory
5. Facility receives other waste (e.g. Septic waste)? If yes, list: [Not Rated]	☐ Yes ☑ No ☐ NA

TOWN OF EDISTO BEACH WWTP
(KPJ7-AWG1-QH2)
Violation List

No Violations Found

South Carolina Department of Health and Environmental Control
Analytical & Radiological Environmental
Services Division - Laboratory Report

Station Code: ND63789G
Location Description: 001 EDISTO BEACH
Matrix: WATER
County: COLLETON
Sample Type: GR3
Additional Info:

Laboratory Sample Number: AE63340
Program Charge: WPC
Collected By: HOLGATE S
Date of Collection: 03/29/2021
Time of Collection: 11:50

Weather: 01
Temp. Air: 16.67
Field pH: 6.30

Temp Water: 20.9

Flow Facility: 0.084

Laboratory Sample Number: **AE63340**

	Analyte	Result	Units	Method Reference
Quanti-tray Fecal Coliform Analysis	Quanti-tray Fecal Coliform Analysis	< 1.0	MPN/100mL	IDEXX

Sample Comments:

South Carolina Department of Health and Environmental Control
Analytical & Radiological Environmental
Services Division - Laboratory Report

Station Code: ND63789G
Location Description: 001 EDISTO BEACH
Matrix: WATER
County: COLLETON
Sample Type: GR3
Additional Info:

Laboratory Sample Number: AE63431
Program Charge: WPC
Collected By: HOLGATE S
Date of Collection: 03/31/2021
Time of Collection: 14:17

Weather: 00
Temp. Air: 22.8
Field pH: 6.75

Temp Water: 19.3

Flow Facility: 0.104

Laboratory Sample Number: **AE63431**

	Analyte	Result	Units	Method Reference
Quanti-tray Fecal Coliform Analysis	Quanti-tray Fecal Coliform Analysis	<1	MPN/100mL	IDEXX

Sample Comments:

South Carolina Department of Health and Environmental Control
Analytical & Radiological Environmental Services Division - Laboratory Report

Station Code: ND63789C
Location Description: 001 EDISTO BEACH
Matrix: WATER
County: COLLETON
Sample Type: CP3
Additional Info:

Laboratory Sample Number: AE63432
Program Charge: WPC
Collected By: HOLGATE S
Date of Collection: 03/31/2021
Time of Collection: 12:15

Laboratory Sample Number: **AE63432**

	Analyte	Result	Units	Method Reference
Nitrate/Nitrite	Nitrate/Nitrite	19	mg/L	LACHAT 10107041C
Total Suspended Solids	Total Suspended Solids	18	mg/L	SM2540 D

Sample Comments: Data is being reported as suspect for BOD-F analysis because one of the QC parameters was not met.

South Carolina Department of Health and Environmental Control
Analytical & Radiological Environmental Services Division - Laboratory Report

Station Code: ND63789C
Location Description: 0011 EDISTO BEACH
Matrix: WATER
County: COLLETON
Sample Type: CP3
Additional Info:

Laboratory Sample Number: AE63504
Program Charge: WPC
Collected By: HOLGATE S
Date of Collection: 04/01/2021
Time of Collection: 14:25

Laboratory Sample Number: **AE63504**

	Analyte	Result	Units	Method Reference
Nitrate/Nitrite	Nitrate/Nitrite	20	mg/L	LACHAT 10107041C
Total Suspended Solids	Total Suspended Solids	23	mg/L	SM2540 D

Sample Comments: GGA and Seed QC Failed
Data is being reported as suspect for BOD-F analysis because one of the QC parameters was not met.

South Carolina Department of Health and Environmental Control
Analytical & Radiological Environmental
Services Division - Laboratory Report

Station Code: ND63789G
Location Description: 0011 EDISTO BEACH
Matrix: WATER
County: COLLETON
Sample Type: GR3
Additional Info:

Laboratory Sample Number: AE63513
Program Charge: WPC
Collected By: HOLGATE S
Date of Collection: 03/30/2021
Time of Collection: 12:12

Weather: 22
Temp. Air: 18.89
Field pH: 6.61

Temp Water: 19.5

Flow Facility: 0.12

Laboratory Sample Number: **AE63513**

	Analyte	Result	Units	Method Reference
Quanti-tray Fecal Coliform Analysis	Quanti-tray Fecal Coliform Analysis	1.0	MPN/100mL	IDEXX

Sample Comments:

Attachment 3B

Compliance & Enforcement Actions

SCDHEC Notices of Violation

(September 2018)

dhec
Healthy People. Healthy Communities.

September 06, 2018

CERTIFIED MAIL 9214-8969-0099-9790-1412-6451-07

Mr. Robert Doub, Jr., Utilities Director
Town of Edisto Beach
2414 Murray Street
Edisto Beach, South Carolina, 29438

Re: Notice of Violation 176697
Town of Edisto Beach WWTP
State Land Application Permit ND0063789
Colleton County

43368

Dear Mr. Doub:

A review of the discharge monitoring reports (DMRs) submitted to the Department for the June 2018 monitoring period has revealed the following violation:

PIPE #	PARAMETER	DATE	LIMIT	DMR	AVG/MAX
001	74055 FECAL COLIFORM	06/30/2018	14	22.30	LCMX

You are hereby notified that failure to comply with the effluent limits of the State Land Application Permit is a violation of the Pollution Control Act, S.C. Code Ann. 48-1-110(d) (Supp. 2017) and Water Pollution Control Permits, 3 S.C. Code Ann. Regs. 61-9.122.41(a) (Supp. 2017). The violation makes the Town of Edisto Beach subject to further enforcement action, which may include assessment of civil penalties as set forth in the Pollution Control Act, S.C. Code Ann. 48-1-330 (2008).

Since an explanation for the violation cited was submitted as a comment on the June 2018 DMR, a written response to this Notice of Violation is not required at this time. This explanation, however, will not relieve the Town of Edisto Beach of responsibility for the violation cited.

If you have any questions concerning this notice, you may call me at 803-898-4246. I will be glad to assist you.

Sincerely,

Melanie Hindman
Environmental Quality Manager
Bureau of Water

cc: Lowcountry, Beaufort EA Office

Healthy People. Healthy Communities.

September 27, 2018

CERTIFIED MAIL 9214-8969-0099-9790-1412-9196-73

Mr. Robert Doub, Jr., Utilities Director
Town of Edisto Beach
2414 Murray Street
Edisto Beach, South Carolina, 29438

Re: Notice of Violation 176851
Town of Edisto Beach WWTP
State Land Application Permit ND0063789
Colleton County

Dear Mr. Doub:

A review of the discharge monitoring reports (DMRs) submitted to the Department for the July 2018 monitoring period has revealed the following violations:

PIPE #	PARAMETER	DATE	LIMIT	DMR	AVG/MAX
001	00310 BOD - 5 DAY	07/31/2018	30	55.20	LCAV
001	00310 BOD - 5 DAY	07/31/2018	45	79.20	LCMX

You are hereby notified that failure to comply with the effluent limits of the State Land Application Permit is a violation of the Pollution Control Act, S.C. Code Ann. 48-1-110(d) (Supp. 2017) and Water Pollution Control Permits, 3 S.C. Code Ann. Regs. 61-9.122.41(a) (Supp. 2017). The violations make the Town of Edisto Beach subject to further enforcement action, which may include assessment of civil penalties as set forth in the Pollution Control Act, S.C. Code Ann. 48-1-330 (2008).

Since an explanation for the violations cited was submitted as a comment on the July 2018 DMRs, a written response to this Notice of Violation is not required at this time. This explanation, however, will not relieve the Town of Edisto Beach of responsibility for the violations cited.

If you have any questions concerning this notice, you may call me at 803-898-4246. I will be glad to assist you.

Sincerely,

Melanie Hindman
Environmental Quality Manager
Bureau of Water

cc: Lowcountry, Beaufort EA Office

Corrective Action Plan

Consent Order

SCDHEC Closure Letter

(2016)

Healthy People. Healthy Communities.

December 6, 2016

FIRST CLASS
& CERTIFIED MAIL # 9214 8969 0099 9790 1406 7687 51

Mr. Bob Doub
Town of Edisto Beach
2414 Murray St.
Edisto Beach, SC 29438

Re: **CAP approval and Order Closure**
NPDES Permit ND006379
Colleton County

Dear Mr. Doub:

The Department has completed its review of the revised Corrective Action Plan (CAP), signed by Town Administrator Iris Hill and submitted on November 3, 2016 by representatives of American Engineering Consultants, Inc. on behalf of the Town of Edisto Beach. Based on the information provided, the Department has **accepted** the revised CAP as adequately addressing the potential sources of Biochemical Oxygen Demand (BOD) violations cited in the Order.

Upon acceptance of the CAP, it has been determined that all requirements of Consent Order 15-027-WP have been satisfied and the Order is considered **CLOSED** on December 6, 2016.

If you have any questions, or would like to discuss this matter further, please contact me at (803) 898-0075 or by email at Stonere@dhec.sc.gov. I will be glad to assist you.

Sincerely,

Richard Stone, Enforcement Project Manager
Water Pollution Enforcement Section
Bureau of Water
SCDHEC

cc: Jamie Teraoka, SCDHEC, WP Compliance
Weija Hu, SCDHEC, Water Facilities Permitting
Penny Cornett, SCDHEC, Low Country EQC Office - Beaufort

SUMMARY OF CORRECTIVE ACTIONS

RE: CONSENT ORDER NO. 15-027-WP & CORRECTIVE ACTION PLAN DATED FEB. 5, 2016

TOWN OF EDISTO BEACH WASTEWATER TREATMENT FACILITY

PERMIT NO. ND0063789

OCTOBER 2016

AMERICAN ENGINEERING CONSULTANTS, INC.

SUMMARY OF CORRECTIVE ACTIONS

RE: CONSENT ORDER NO. 15-027-WP &
CORRECTIVE ACTION PLAN DATED FEB. 5, 2016

TOWN OF EDISTO BEACH
WASTEWATER TREATMENT FACILITY

PERMIT NO. ND0063789

OCTOBER 2016

PREPARED FOR:

TOWN OF EDISTO BEACH
2414 Murray Street
Edisto Beach, SC 29438

PREPARED BY:

AMERICAN ENGINEERING CONSULTANTS, INC.
1300 12TH STREET
P.O. BOX 2299
CAYCE, SC 29171
PH.: (803)-791-1400 FAX: (803)-791-8110

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1.0 INTRODUCTION

As a result of multiple violations of permitted effluent biochemical oxygen demand levels at the Town of Edisto Beach (Town) wastewater treatment plant, and in accordance with the Corrective Action Plan required by SCDHEC Consent Order No. 15-027-WP, the Town retained On Line Environmental, Inc. (OLE) and American Engineering Consultants, Inc. (AEC) to evaluate BOD exceedances and provide recommended corrective actions. The purposes of this report are:

1) Summarize the past operational issues experienced by the Town's wastewater treatment plant (WWTP), the resulting SCDHEC Enforcement Actions, and the Town's responses to these Enforcement Actions
2) Summarize the corrective actions taken
3) Propose final actions to enable closure of the Consent Order

2.0 BACKGROUND

In order to summarize past operational issues related to effluent BOD exceedance, Enforcement Actions, and the Town's responses, a general timeline has been included as follows. The details of specific items are included as appendices to this report and are referenced accordingly.

Table 1: Timeline of Events

Date	SCDHEC Enforcement Action	Town of Edisto Beach Action	Result
October 21, 2014	Notice of Violation (NOV) issued for BOD related to July 2014 and August 2014 discharge monitoring reports (DMRs).	Written response by Mr. Bob Doub (Town of Edisto Beach Utilities Director) on October 28, 2014. Five (5) failed aerators implicated in permit exceedance.	September and October 2014 BOD levels below permit limit.

Date	SCDHEC Enforcement Action	Town of Edisto Beach Action	Result
January 12, 2015	NOV issued for BOD related to November 2014 DMR.	Written response by Mr. Bob Doub on January 16, 2015. No cause for the exceedance was known at that time, but it was noted that the Town had engaged Mr. Jim Matthews of On Line Environmental in November 2014 to perform additional sampling in order to determine a cause and corrective actions.	Based upon inspections by Mr. Matthews, it was believed that the elevated BOD levels were a result of a significant duckweed die-off. Sampling results from January 21, 2015 showed effluent BOD within permit limits. These results were submitted to SCDHEC. A report from Mr. Matthews dated February 17, 2015 detailed four (4) action items: remove duckweed build-up, reduce over-aeration, monitor sludge depth, and explore modification of permit limits to cBOD. However, the report was generally inconclusive concerning the root cause of BOD permit limit exceedance.
March 16, 2015	Notice of Enforcement Conference - April 7, 2015. Consent Order No. 15-027-WP was issued on June 15, 2015 **(Appendix A)**.	Mr. Doub and Mr. Matthews met with Mr. Stone and Ms. Teraoka of SCDHEC to discuss the problem and the Town's plans to address it. The Town paid a $3,000.00 civil penalty for violations of the Pollution Control Act.	A Corrective Action Plan (CAP) was submitted by the Town on May 26, 2015. The CAP committed to implementing the recommendations of Mr. Matthews February 2015 report. However, as the Town moved forward with this plan, BOD levels remained above permit limits.
January 15, 2016	SCDHEC requested a revised CAP	A revised CAP was submitted by the Town on February 5, 2016 **(Appendix B)**. The CAP included engaging the services of American Engineering Consultants (AEC) to evaluate the regulatory compliance issues related to Consent Order No. 15-027-WP, along with plant upgrades required for future growth/demand. In order to understand and resolve the BOD exceedance issues, AEC proposed to perform additional process control sampling over an extended period of time (90-days).	Included within **Section 3**

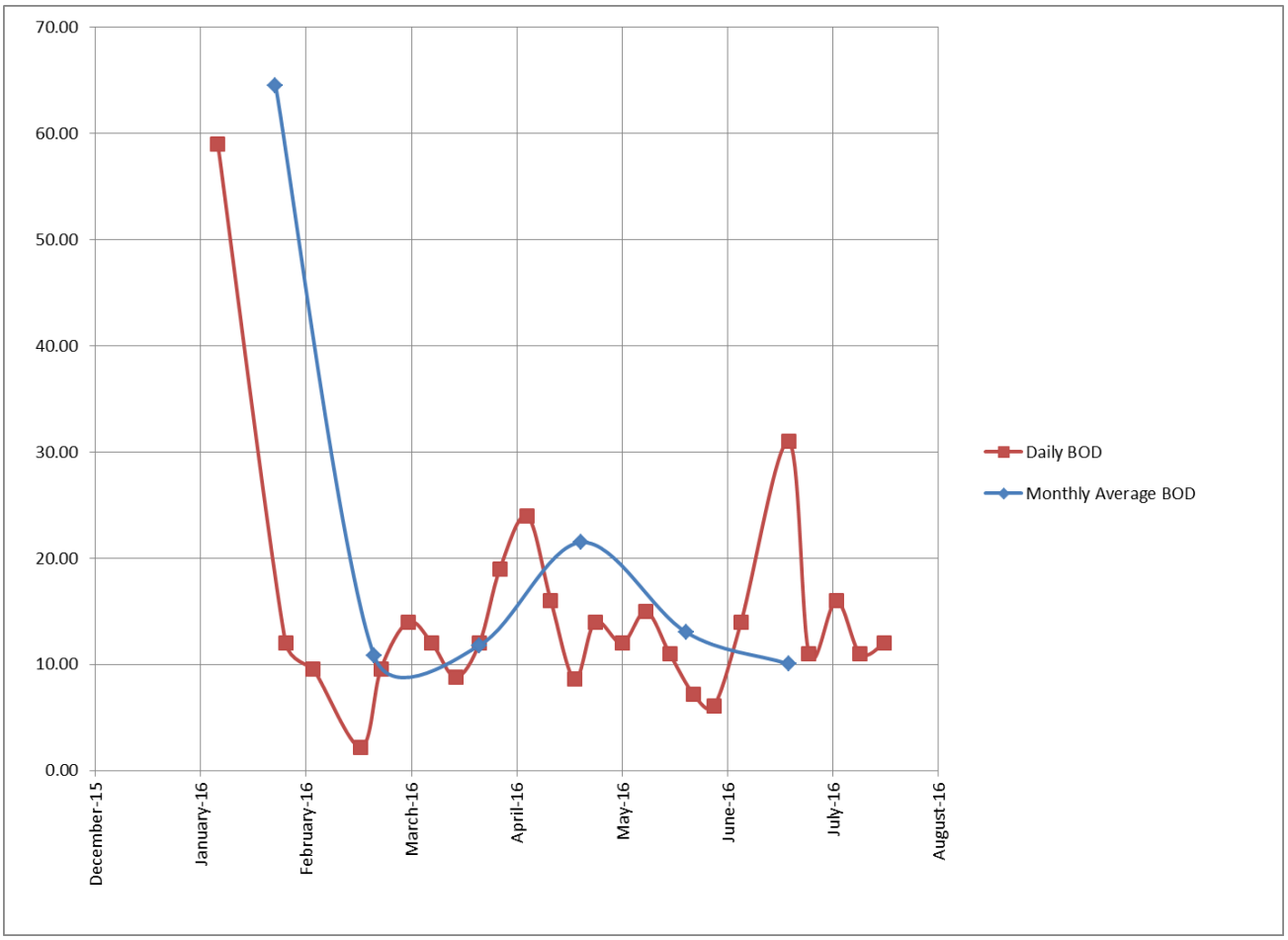
3.0 SUMMARY OF CORRECTIVE ACTIONS

In order to evaluate future sewer system demand and any required capacity improvements, the Town retained AEC in October 2015 to develop a Preliminary Engineering Report (PER). Due to the BOD regulatory problems the Town was experiencing, the Town asked AEC to also include a detailed evaluation of the effluent BOD issue. AEC developed an extensive sampling plan that would provide process control data for sizing future plant improvements (PER items), while also providing data to gain a better understanding of the BOD exceedances (CAP items). The sampling included:

1) Weekly influent sampling for BOD, Ammonia, & pH
2) Weekly effluent sampling for BOD, Ammonia, Nitrate, Nitrite, TKN, & pH
3) One (1) set of DO readings from each cell in the lagoon in multiple locations
4) A microscopic evaluation in Cells 1 and 4; evaluation to quantify and identify protozoa, rotifers, and other microorganisms that are helpful in indicating plant performance and effluent quality.
5) One (1) set of TSS and TVSS samples in Cells 1 and 4 of the lagoon
6) Toxicity testing in Cell 1
7) One (1) alkalinity sample on influent and one (1) on effluent

This process control sampling regiment began in February 2016, and the results are included within **Appendix C**.

Figure 1: 2016 Effluent BOD (mg/L) Trend



As presented in **Figure 1**, effluent BOD returned to historical levels during the sampling period and remains within permit limits at this time. The available data indicated no clear cause of the elevated BOD levels. Toxicity was not present in the effluent, DO and pH levels were normal, the microscopic examination revealed nothing abnormal, and the BOD/Ammonia/TSS levels are typical for a normally functioning aerated lagoon. It should also be noted that the effluent sampling values from this period are comparable to values from 2014, prior to the upset in operation. It is believed that the BOD issues stemmed primarily from effluent sampling procedures. During a site visit in February of 2016, Mr. Jim Matthews observed the automatic sampler in operation and noted that the sampler tubing was fouled and that it required reprogramming based upon the diameter and length of sampler tubing. It is believed that these things in combination lead to improper flushing of the tubing during a sample run, which allowed solids to build up in the tubing and caused the solids to periodically slough off the growth into the sample. This was brought to the Town's attention, which lead to the

immediate replacement of tubing and reprogramming of the sampler. Since these modifications were made, no additional BOD violations have occurred

4.0 CONCLUSIONS

CAP

Based upon the sustained compliance that has been achieved since February of 2016, it appears that the BOD exceedance issues have been resolved. The most likely cause of prior exceedances appears to be the effluent sampler. Other factors such as the significant duckweed die-off and the multiple failed aerators could have contributed to the violations in 2014, but this has not been observed by AEC during the evaluation. The recommendations below are advisable as a precautionary measure for the Town in order to prevent the same problems from occurring again:

1) Revise the Town's effluent sampling Standard Operating Procedures to incorporate recommended sampler maintenance schedules and tubing replacement frequency. Ensure that operations staff is trained on the revised procedures and re-train on a yearly basis thereafter.
2) Continue to monitor duckweed on a continual basis and restart removal operations if the level increases beyond current levels.
3) Check the sludge level immediately and continue to check the sludge level on a twice per year basis thereafter.

PER

The Town's current flow inventory shows that permitted flow is approximately 67% of design flow and based upon a review of the existing collection system, there appears to be very few unserved properties. Although the Town has long range plans to possibly expand the collection system to serve beachfront properties, there are no immediate plans to undertake this project. Therefore, it is AEC's recommendation that the PER be postponed until such time that the Town wishes to consider expanding the collection system, and it is hereby requested that the PER be removed from the requirements of the approved CAP.

Appendix A

Consent Order No. 15-027-WP

D H E C
PROMOTE PROTECT PROSPER

Catherine E. Heigel, Director
Promoting and protecting the health of the public and the environment

June 23, 2015

FIRST CLASS
& CERTIFIED MAIL #: 9214 8969 0099 9790 1401 3495 80

Mr. Robert W. Doub Jr., Utilities Director
Town of Edisto Beach
2412 Murray St.
Edisto Beach, SC 29438

Re: **Consent Order 15-027-WP**
Town of Edisto Beach
NPDES Permit ND0063789
Colleton County

Dear Mr. Doub:

Enclosed, please find fully executed Consent Order 15-027-WP for the above reference facility. The Order is considered executed on June 15, 2015.

If you have any questions, please contact me at (803) 898-0075 or by e-mail at stonere@dhec.sc.gov.

Sincerely,

Richard Stone

Richard Stone, Enforcement Officer
Bureau of Water - WP Control Division
WP Compliance and Enforcement Section

cc: Jamie Teraoka, SCDHEC, WP Compliance
Weija Hu, SCDHEC, Water Facilities Permitting
Penny Cornett, Low Country EQC Office, Beaufort

Attachment as stated

THE STATE OF SOUTH CAROLINA
BEFORE THE DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

IN RE: THE TOWN OF EDISTO BEACH
COLLETON COUNTY

CONSENT ORDER
15 -027-WP

The Town of Edisto Beach (Edisto) owns and is responsible for the proper operation and maintenance of a wastewater treatment plant (WWTP) located in Colleton County, South Carolina that serves the residents and businesses within its designated service area.

Edisto failed to comply with the effluent discharge limits of its State Land Application Permit ND0063789 (ND Permit) for Biochemical Oxygen Demand (BOD).

Following approved procedures and based upon discussions with agents of Edisto on April 7, 2015, the parties agree to the issuance of this Order to include the following Findings of Fact and Conclusions of Law.

FINDINGS OF FACT

1. Edisto owns and is responsible for the proper operation and maintenance of a WWTP located in the Town of Edisto Beach, in Colleton County, South Carolina. The WWTP serves the residents and businesses within its designated service area.

2. The South Carolina Department of Health and Environmental Control (Department) issued State Land Application Permit ND0063789 authorizing Edisto to discharge treated wastewater in accordance with effluent limitations, monitoring requirements and other permit

conditions.

3. Edisto reported violations of the permitted limit for BOD on discharge monitoring reports (DMRs) submitted to the Department for the July 2014, August 2014, November 2014, and December 2014 monitoring periods.

4. On October 21, 2014, Department staff issued a Notice of Violation (NOV) via certified mail to Edisto for failure to comply with the effluent limits contained in its ND Permit for BOD during the monitoring periods ending July 31, 2014 and August 31, 2014. The NOV required that Edisto submit a written explanation to the Department within ten (10) days of the date of receipt of the NOV. An agent for Edisto signed for the NOV on October 28, 2014.

5. On October 28, 2014, an agent of Edisto responded to the NOV with a written explanation detailing that they determined the cause of the BOD violations, occurring in the July 2014 and August 2014 monitoring periods, to be caused by a lack of proper aeration in the lagoon. During this time frame they had five (5) aerators with motors that had previously failed. They had since replaced the same five (5) aerators and as a result of that action, the BOD results dropped dramatically. The agent for Edisto also stated that the BOD results for the month of September 2014 were seventeen (17 mg/l) and fourteen (14 mg/l) with a monthly average of fifteen point five (15.5 mg/l) which is well below their permitted requirements of a thirty (30) monthly average.

6. On January 12, 2015, Department staff issued an NOV via certified mail to Edisto for failure to comply with the effluent limits contained in its NPDES Permit for BOD during the monitoring period ending November, 30, 2014. It was also stated in the NOV that the BOD sample collected on November 12, 2014 did not meet QA/QC criteria. The NOV required that the Town submit a written explanation to the Department within ten (10) days of the date of

receipt of the NOV.

7. On January 16, 2015, an agent of Edisto responded to the January 2014 NOV, stating that he has been working with an agent from On Line Environmental on the BOD issue since November 2014. The agent also stated that the WWTP would be out of compliance in December 2014 with the same problem and that they would be pulling samples on January 21, 2015, and sending them to the lab for analysis to try and determine what the problem is so corrective measures can be taken.

8. On January 21, 2015, an agent of Edisto submitted to the Department the results from the sampling of the effluent from cell number four (4). In a comment attached to the results, the agent stated that after speaking with Jim Matthews, a consultant and lab technician with On Line Environmental, he seemed to think that the pond was trying to turn over.

9. On April 7 2015, Department staff conducted an enforcement conference with the following individuals acting as agents of Edisto: Mr. Robert Doub, Utilities Director and Mr. James Matthews from On Line Environmental Laboratories. During the conference the agents of Edisto stated that originally the violations were due to the replacement of five (5) aerators. At that time, while maintenance was being conducted, the aerators were turned off for safety reasons. The Agents of Edisto stated that they believed the lack of aeration in the lagoon caused the spike in BOD levels. However, they also stated that the cause of the more recent BOD violations remains somewhat unknown. At first it was believed that the increase in BOD was caused by a seasonal turn over but that theory was ruled out due to the persistence of the BOD increase. The current theory proposed by Mr. Doub and Mr. Matthews is that there has been a mass die out of a layer of duckweed which had covered the cells of the WWTP for decades. Google earth imagery of the site confirms the presence of duckweed on the pond since the early

1990's. It is believed that the die out of duckweed caused particulates to be released in the cells which subsequently caused a spike in BOD. Edisto is currently engaging in clean up efforts to remove the duckweed from the cells in hopes of stabilizing the BOD levels such that they fall within the standards of their permit.

On April 15, 2015, Department staff received a call from Mr. Doub stating that during cleanup efforts on the pond a black slime had been found under a living layer of duckweed. After consultation with On Line Environmental it is believed that the presence of this slime is likely the cause of the recent BOD violations.

CONCLUSIONS OF LAW

Based upon the above Findings of Fact the Department reaches the following Conclusions of Law:

1. Edisto violated the Pollution Control Act, S.C. Code Ann. § 48-1-110 (d) (Supp. 2014) and Water Pollution Control Permits, 3 S.C. Code Ann Rags. 61-9.122.41(a) and (d) (2014) in that it failed to comply with the effluent discharge limits of ND Permit ND0063789 for BOD.
2. The Pollution Control Act, S.C. Code Ann. § 48-1-330 (2008), provides for a civil penalty not to exceed ten thousand dollars ($10,000.00) per day of violation for any person violating the Act or any rule, regulation, permit, permit condition, final determination, or Order of the Department.

NOW, THEREFORE, IT IS ORDERED, CONSENTED TO AND AGREED, pursuant to the Pollution Control Act, S.C. Code Ann. § 48-1-50 (Supp. 2014), and S.C. Code Ann. § 48-1-100 (Supp. 2014), that the Town of Edisto Beach shall:

1. Within thirty (30) days of the execution date of this Order, submit to the Department a Corrective Action Plan (CAP) reporting the corrective actions that have been taken and corrective actions planned to prevent future effluent violations and adequately address the potential sources(s) contributing to the BOD violations. Any schedules for implementation of specific corrective action steps proposed under the CAP shall be evaluated and approved by the Department. Upon Department approval, the schedule for implementation shall be incorporated into and become an enforceable part of this Order.
2. Within thirty (30) days of the execution date of this Order, pay to the Department a civil penalty in the amount of three thousand dollars ($3,000.00).

PURSUANT TO THIS ORDER, communications regarding this Order and its requirements, including civil penalty payments, shall be addressed as follows:

Richard Stone
SCDHEC - Bureau of Water
WP Compliance and Enforcement Section
2600 Bull Street
Columbia, S.C. 29201

IT IS FURTHER ORDERED AND AGREED that failure to comply with any provision of this Order shall be grounds for appropriate sanctions and further enforcement action pursuant to the Pollution Control Act, S.C. Code Ann. § 48-1-330 (2008), to include the assessment of additional civil penalties.

IT IS FURTHER ORDERED AND AGREED that this Consent Order governs only Edisto's civil liability to the Department for civil sanctions arising from the matters set forth herein and constitutes the entire agreement between the Department and the Town of Edisto Beach, with respect to the resolution and settlement of these civil matters. The parties are not relying upon any representations, promises, understandings or agreements except as expressly set forth within

this Order.

THE PARTIES UNDERSTAND that the "execution date" of the order is the date the order is signed by the Director of Environmental Affairs.

FOR THE SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Elizabeth A. Dieck
Director of Environmental Affairs

Date: 6-15-2015

David E. Wilson, Jr., P.E.
Bureau Chief
Bureau of Water

Date: 6-3-15

Glenn E. Trofatter, Director
Water Pollution Control Division
Bureau of Water

Date: June 3 2015

Reviewed By:

Attorney
Office of General Counsel

Date: 6-9-15

WE CONSENT:

The Town of Edisto Beach

Mr. Robert Doub Jr., Utilities Director

Date: 5-18-15

Appendix B

Corrective Action Plan

D H E C

PROMOTE PROTECT PROSPER

Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

January 15, 2016

FIRST CLASS
& CERTIFIED MAIL # 9214 8969 0099 9790 1403 4464 30

Mr. Bob Doub
Town of Edisto Beach
2414 Murray St.
Edisto Beach, SC 29438

Re: **Consent Order # 15-027-WP**
State Land Application Permit ND0063789
Colleton County

Dear Mr. Doub:

The Department has reviewed the Corrective Action Plan (CAP) prepared by the Town of Edisto Beach (Town) and submitted on May 26, 2015. However, based upon review of the State Land Application File, Compliance File, Enforcement File, and discussions with the Town on January 13, 2015, the Department concludes that a revised CAP is required to adequately address the sources contributing to the violations described in the Order.

Submit to the Department a revised Corrective Action Plan, including a revised schedule of implementation, reporting the corrective actions taken and corrective actions planned to address the sources contributing to biochemical oxygen demand violations by February 15, 2016. Upon Department approval, the schedule for implementation shall be incorporated into and become an enforceable part of the Order.

If you have any questions, please contact me at (803) 898-0075 or by email at stonere@dhec.sc.gov.

Sincerely,

Richard Stone, Enforcement Officer
Bureau of Water - WP Control Division
WP Enforcement Section

cc: Adam Cannon, SCDHEC, WP Compliance and Enforcement
Jamie Teraoka, SCDHEC, WP Compliance and Enforcement
Penny Cornett, SCDHEC, Beaufort EQC
Iris Hill, Town of Edisto Beach, Town Administrator

Town of Edisto Beach

Mr. Richard Stone
Enforcement Officer
South Carolina Department of Health and Environmental Control
Bureau of Water-WP Control Division
WP Enforcement Section
2600 Bull Street, Office #4424
Columbia, SC 29201

Re: Consent Order # 15-027-WP
State Land Application Permit ND0063789
Colleton County

February 5, 2016

Dear Mr. Stone:

Thank you for the opportunity to submit our revised Corrective Action Plan for Consent Order # 15-027-WP showing DHEC how the Town is addressing the biochemical oxygen demand (BOD) violations described in the Order. An updated schedule of implementation is included in this revised CAP.

First, it is important to understand the history of the violation and how the Town has addressed the issue to date. The Town of Edisto Beach was issued a Notice of Violation (NOV) by the South Carolina Department of Health and Environmental Control (SCDHEC) on October 21, 2014, for violations of BOD permitted levels on discharge monitoring reports (DMRs) submitted to DHEC for the July 2014 and August 2014 reporting periods under its State Land Application Permit ND0063789. The Town's permitted requirements for BOD is a thirty (30) monthly average. In July 2014, the monthly average was 32.5 (mg/l) and in August 2014, the monthly average was 34. The NOV required a written response to the Department with-in ten days. Mr. Robert Doub, Utilities Director, responded to the Notice of Violation on October 28, 2014, which is attached for reference. During this time frame there were five aerators that had failed. These were replaced and the BOD monthly levels for September 14 was 15.5 and for October 2014 was 21 both below the 30 monthly average.

However, this was short-lived and in November 2014, the Town was notified by On-Line Environmental that the BOD values exceeded the permit limits again. The November 2014 monthly average was 44. On January 12, 2015, DHEC issued another NOV for failure to

comply with the effluent limits contained in the NPDES Permit for BOD during the monitoring period ending November 30, 2014. The NOV required that the Town submit a written explanation to DHEC within 10 days of the date of the NOV. Mr. Doub responded on January 16, 2015, stating the Town HAD BEEN working with an agent from On-Line Environmental on the BOD issue since November 2014. The agent stated the WWTP would be out of compliance in December 2014, with the same problem. The Town would be pulling samples on January 21, 2015, and sending them to the lab for additional analysis to try and determine the problem cuase so corrective measures could be taken.

On January 21, 2015, the Town submitted to DHEC the results from the sampling of the effluent from cell number four. According to On-line Environmental, it appeared the pond was trying to turn over which could be caused by temperature changes. There was also a blanket of duckweed in cell 5 that had been herbicided and was dying off and settling possibly contributing to the problem.

In December 2014, the monthly average was 85. In January 2015, the monthly average was 42.5. In February 2015, the monthly average was 53, March 2015-70.5; and in April 2015-64.5. The elevated BODs values have continued. They are as follows: May 2015-39; June 2015-61.5; July 2015-76.5; August 2015-54; September 2015-27; October 2015-56.5; November 2015-86; and in December 2015-64.75.

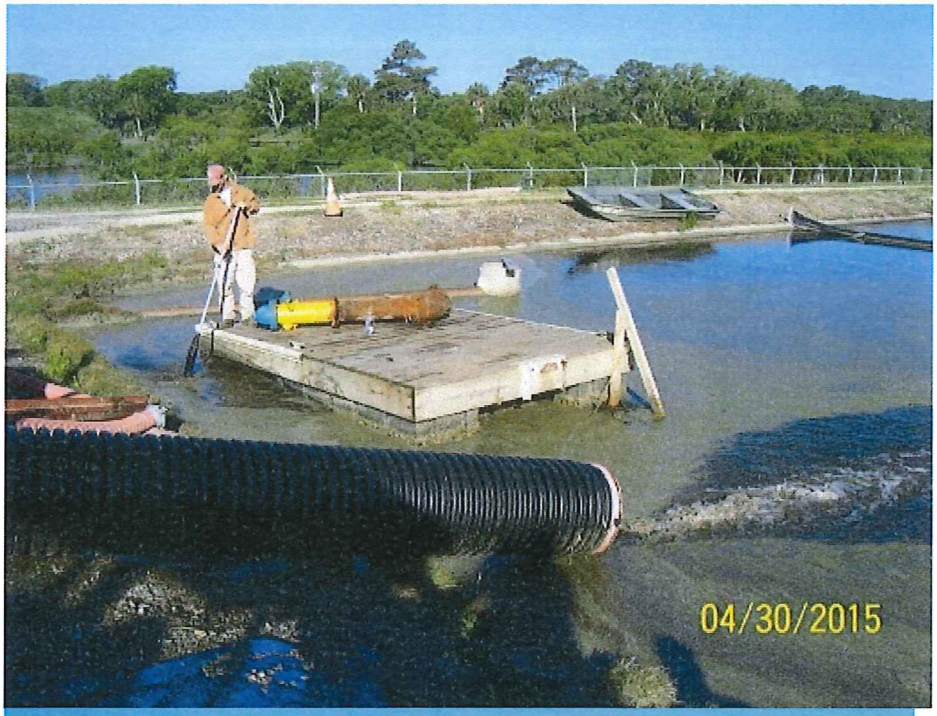
In the On-Line Environmental report dated February 17, 2015, the data from January 21, 2015 testing showed effluent parameters within permit limits (BOD 27), as if the problem had been resolved. In Cell #4 (BOD 53) there was an unusually large amount of solids in suspension, possibly due to the lifting of solids by the aerators.

On-Line Environmental provided several observations from the testing results on January 21, 2015, but nothing in any of the data led to a solid conclusion regarding the elevated BOD values. These observations are as follows:

1. Minimize aeration in Cells 2, 3 and 4 to minimize interference with sludge blanket.
2. Measure sludge depths twice per year in Cells 2,3,4 and 5.
3. Remove dying duckweed from the cells.
4. Consider modifying the permit to remove BOD limits and replace with CBOD limits.

On March 16, 2015, The Town received notification of the Notice of Enforcement Conference. Mr. Doub, Utilities Director, and Mr. Matthews of On-Line Environmental, met with Mr. Stone and Ms. Teraoka of the SCDEHC at a Notice of Enforcement Conference on April 7, 2015 at 10:30 A.M. to discuss the problem and address how the problem was being resolved. The Town was issued a consent order (15-027-WP) on June 15, 2015, and ordered to pay a $3,000.00 civil penalty for violations of the Pollution Control Act, S.C. Code Ann. 48-1-110 (d) (Supp. 2014) and Water Pollution Control Permits, 3 S.C. Code Ann Rags. 61-9.122.41(a) and (d) (2014).

On May 26, 2015, an agent of the Town submitted a Corrective Action Plan (CAP) to Mr. Stone. As indicated in the CAP, the Town began implementing the recommendations from On-Line Environmental in an effort to reduce the BOD levels. The duckweed was manually removed by suctioning the duckweed into an old static screen to remove the solids and then disposing of the solids. The duckweed had been herbicided in May 2014, by South Santee Aquaculture, Inc., but a thick blanket of dead vegetation remained on the surface. Seventy-five percent to 80% of the duckweed was removed. The pump, dock and static screen were left in place to remove any duckweed accumulations on an as needed basis.

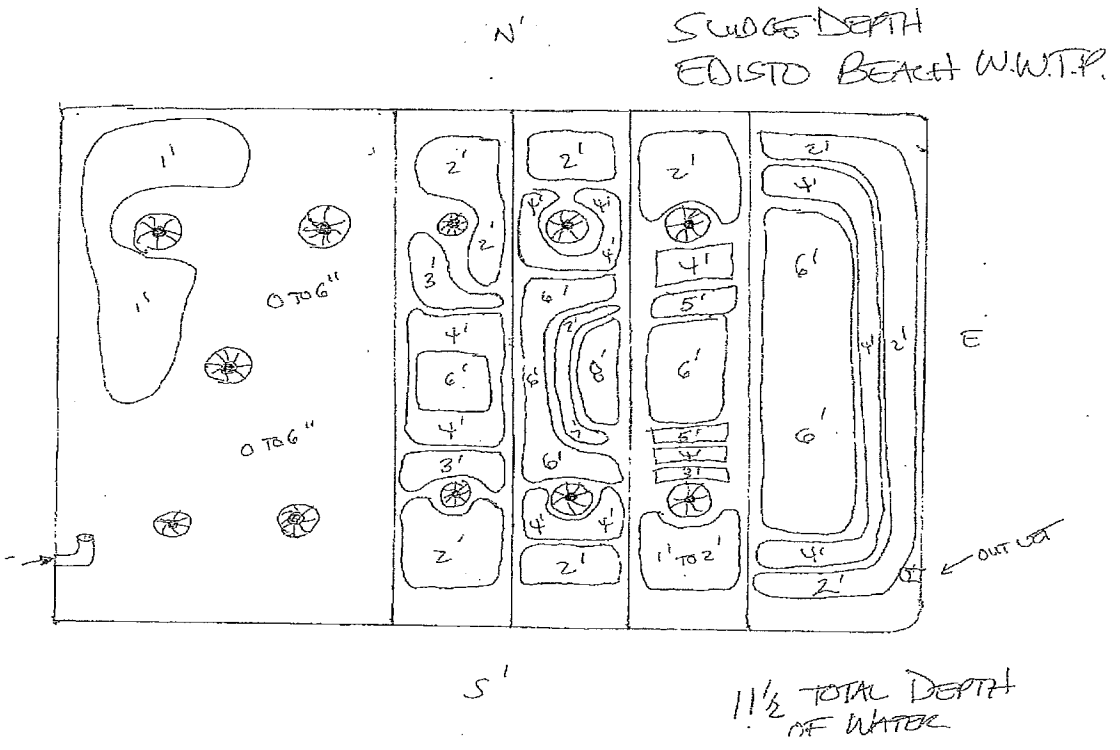


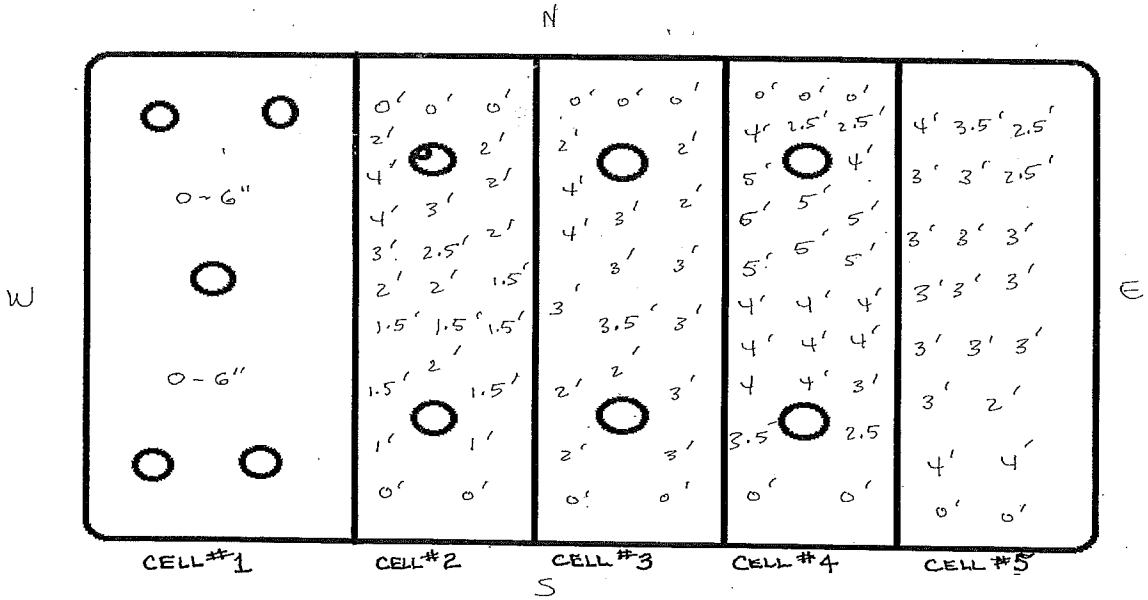
The chlorine contact chamber was cleaned and pressure washed. The Town then began pumping sludge from Cell 5 to Cell 1 on May 25, 2015, to allow for additional treatment. This operation has been ongoing.

Regular monthly samples were taken on June 2, 2015 and June 10, 2015 and the BOD levels were 72 and 68 respectively. On June 23, 2015, additional samples were taken. One sample was taken from each cell to analyze Sulfite, BOD and TSS, plus a Sulfide sample at the influent.

On June 29, 2015, a Sulfite sample was taken and analyzed. After the results were determined, Mr. Matthews of On-Line Environmental visited Edisto to take additional samples. On July 8, 2015, On-Line Environmental met on site and checked sludge levels in each cell and took samples from the sludge blanket.

Sludge accumulation is of concern since the pond was dredged in 2013 (less than 1' of sludge remained in each cell after dredging) and 80% of the solids were removed. Recent testing shows there is a substantial amount of sludge in the lagoon which has accumulated since 2012.





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To no avail, there has been a continuation of elevated BOD values. According to On-Line Environmental, they do not believe there is any single factor responsible for the high effluent BOD values, but a combination of several things. The Town received additional

guidance from On-Line Environmental on July 31, 2015, which is attached for reference. In summary, On-Line environmental observed:

1. An unusually high sludge blanket in Cell 1
2. Sludge blanket depths increased through the cells which is opposite of what is expected in a normal lagoon system
3. Cell # 5 had the highest sludge blanket
4. In Cell # 4 one of aerators was lifting a portion of the sludge blanket and mixing it throughout the cell.

As a result, On-line Environmental recommended the following as prioritized:

1. Determine the relationship between effluent BOD and CBOD and possibly modify the permit
2. Maximize aerator performance
3. Increase detention time in Cell #1 to establish a biomass. This will require removal of solids.
4. Remove the sludge from Cell # 5.
5. Correct hydraulic short-circuiting issues. (Inspect curtains and reset breeches in the curtains around edges of the lagoon)
6. Operate the aerators in Cells # 2 and 4 to maximize settling of the biomass.
7. Make modifications in the cells to prevent lifting of sludge blanket.
8. Implement operational controls
    a. Routine D.O measurements in each cell
    b. Routine measurements of the sludge blanket in each cell
    c. Routine measurement of influent BOD and TSS
    d. Routine cleaning of the aerator discharge
    e. Prevent proliferation of duckweed.

Despite all of these efforts the BOD levels have not stabilized as can be seen in Figures 1 and 2.

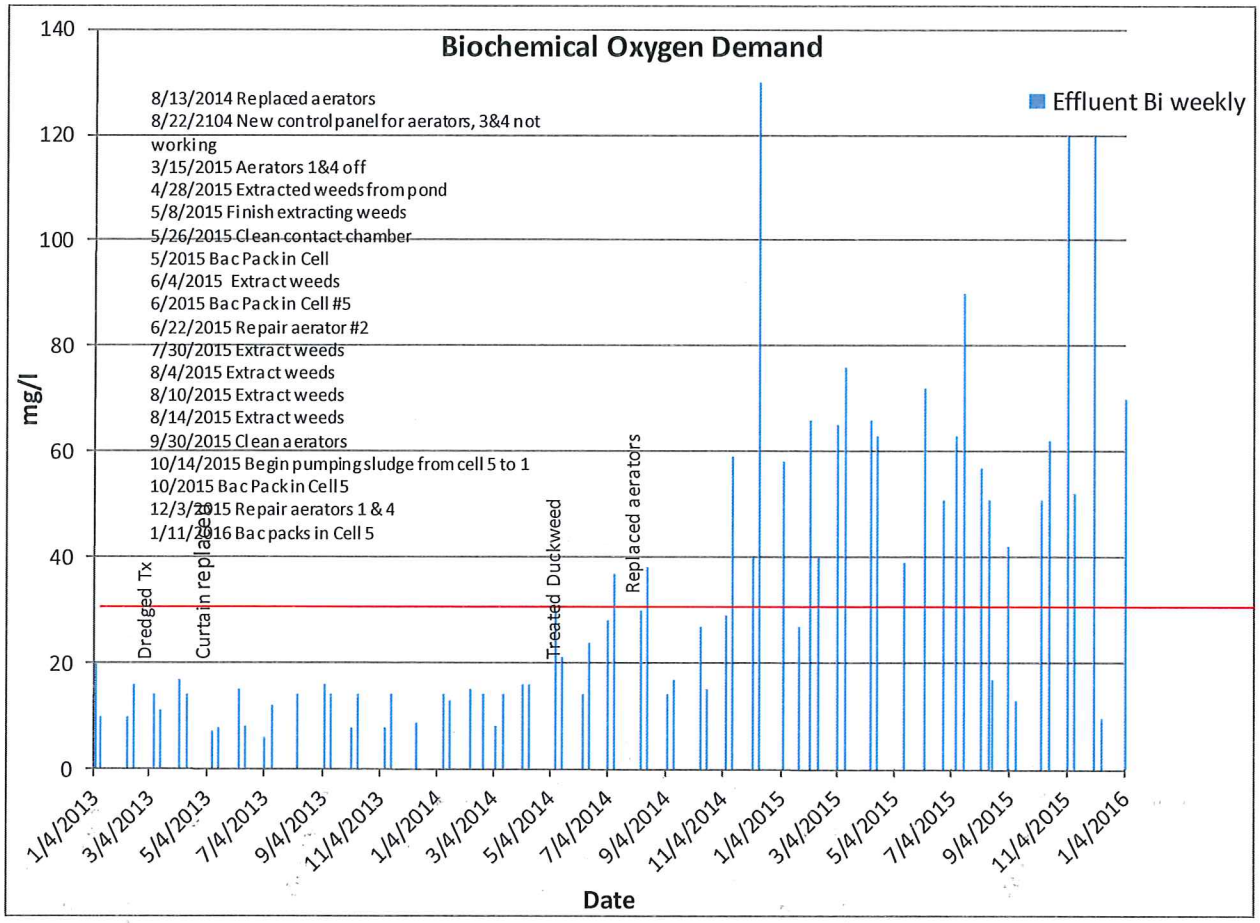

Biochemical Oxygen Demand
Effluent Bi weekly
8/13/2014 Replaced aerators
8/22/2104 New control panel for aerators, 3&4 not working
3/15/2015 Aerators 1&4 off
4/28/2015 Extracted weeds from pond
5/8/2015 Finish extracting weeds
5/26/2015 Clean contact chamber
5/2015 Bac Pack in Cell
6/4/2015 Extract weeds
6/2015 Bac Pack in Cell #5
6/22/2015 Repair aerator #2
7/30/2015 Extract weeds
8/4/2015 Extract weeds
8/10/2015 Extract weeds
8/14/2015 Extract weeds
9/30/2015 Clean aerators
10/14/2015 Begin pumping sludge from cell 5 to 1
10/2015 Bac Pack in Cell 5
12/3/2015 Repair aerators 1 & 4
1/11/2016 Bac packs in Cell 5
Dredged Tx
Curtain replaced
Treated Duckweed
Replaced aerators
mg/l
Date
140
120
100
80
60
40
20
0
1/4/2013
3/4/2013
5/4/2013
7/4/2013
9/4/2013
11/4/2013
1/4/2014
3/4/2014
5/4/2014
7/4/2014
9/4/2014
11/4/2014
1/4/2015
3/4/2015
5/4/2015
7/4/2015
9/4/2015
11/4/2015
1/4/2016

Figure 1.

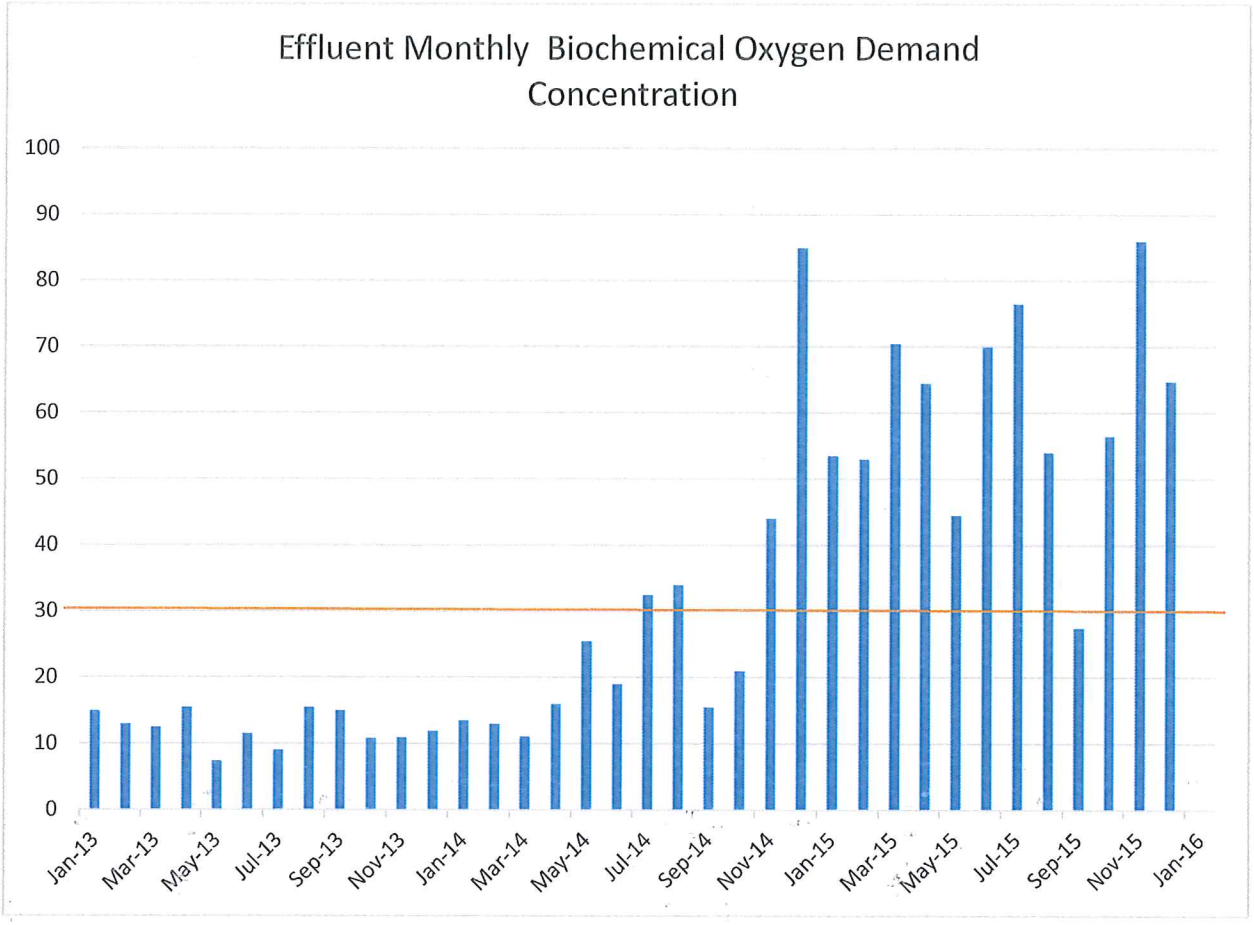


Figure 2.

During this time frame, the Town of Edisto Beach hired American Engineering (AE) to perform the Preliminary Engineering Report (PER) phase on the wastewater lagoon. Because some of the recommendations from On-Line Environmental involve curtain inspection and repair, if necessary and possible lagoon reconfiguration to address short circuiting, the Town felt it would be in its best interest to have the BOD issue addressed by AE, as well. By having one consultant address both issues simultaneously, we could prevent, not only a duplication of effort, but also the need to replace or modify repairs made to address BOD issues that may need to be modified as determined by the PER. American Engineering Consultants were hired in October 8, 2015 under Work Authorization No. 5.

On January 15, 2016, the Town received a request from DHEC to provide a revised corrective action plan. After conferring with American Engineering and On-Line Environmental, the following plan is being submitted for consideration.

American Engineering will, in their evaluation, identify options to address the regulatory compliance problems as well as upgrades for future capacity (Correspondence dated

January 18, 2016). They are recommending additional sampling data over an extended time frame to establish trends in order to determine what is causing the BOD fluctuations the plant has been experiencing. The schedule follows:

1. Weekly influent sampling on BOD, Ammonia, and pH for a minimum of 90 days.
2. Weekly effluent sampling on BOD, Ammonia, Nitrate, Nitrite, TKN, and pH for a minimum of 90 days.
3. One set of DO readings from each cell in the lagoon in multiple locations.
4. A microscopic evaluation in Cell 1 and Cell 4 of the lagoon after the aerators have been fully running and the wastewater is fully mixed. The microscopic evaluation will need to quantify and identify protozoa, rotifers, and other microorganisms that are helpful in indicating plant performance and effluent quality.
5. One set of TSS and TVSS samples in Cell 1 and Cell 4 of the lagoon after the aerators have been fully running and the wastewater is fully mixed.

After the 90-day sampling has been completed, American Engineering should have enough data to develop a definitive recommendation to the Town regarding the BOD. They estimate another 90 days to develop these recommendations. Sampling may have to continue past 90 days into the summer period to look at any impacts from the significant increase in flow experienced from tourists. Once the recommendations have been established, the Town will implement any corrective actions expediently. We are continuing to manage the duckweed. We continue to pump of sludge from Cell 4 to Cell 1 as we feel the major issue faced stems from the duckweed blanket that was herbicided and deposited in the sludge.

Our latest test results indicate sludge in Cells 1 and 2 is decreasing since the aerators are functioning properly. On-Line Environmental has ended the study between BOD and CBOD as they see no advantage in requesting permit modifications.

We appreciate DHEC's patience regarding this issue. We will update DHEC on the progress as data becomes available and if there are any timeline changes. We anticipate that we should be able to submit a final engineering report to DHEC in approximately 6 months.

We can assure DHEC that this issue is not being taken lightly and we have been working diligently with professionals well-versed in this area to assist us in correcting the elevated BOD values violations. If we can provide any further information, please do not hesitate to contact myself or Mr. Doub at 843-869-2505.

Sincerely,

Iris Hill
Town Administrator

cc Town Council
Robert Doub, Utilities Director
Betsy Catchings, American Engineering Consultants, Inc
Jim Matthews, Online Environmental, Inc.

Appendix C

Process Control Sampling

Date	Flow (MGD)	*Influent* BOD (mg/L)	Daily BOD (mg/L)	TSS (mg/L)	*Influent* NO-3/NO-2 Nitrogen (mg/L)	NO-3/NO-2 Nitrogen (mg/L)	*Influent* Ammonia (mg/L)	Ammonia (mg/L)	*Influent* TKN (mg/L)	TKN (mg/L)	cBOD (mg/L)	TOC (mg/L)	COD (mg/L)	*Influent* pH	pH
1/1/2016	130,892														
1/2/2016	103,628														
1/3/2016	69,536														
1/4/2016	41,126														
1/5/2016	31,199														
1/6/2016	35,419														
1/7/2016	42,441														
1/8/2016	46,287														
1/9/2016	50,349														
1/10/2016	43,452														
1/11/2016	30,902														
1/12/2016	30,305														
1/13/2016	31,578		59.00								39.00				
1/14/2016	55,568														
1/15/2016	96,973														
1/16/2016	98,371														
1/17/2016	81,220														
1/18/2016	65,260														
1/19/2016	55,481														
1/20/2016	49,585														
1/21/2016	54,989														
1/22/2016	84,195														
1/23/2016	64,395														
1/24/2016	58,841														
1/25/2016	61,669														
1/26/2016	63,654														
1/27/2016	63,739														
1/28/2016	57,536														
1/29/2016	60,552														
1/30/2016	70,318														
1/31/2016	71,876														

Date	Flow (MGD)	*Influent* BOD (mg/L)	Daily BOD (mg/L)	TSS (mg/L)	*Influent* NO-3/NO-2 Nitrogen (mg/L)	NO-3/NO-2 Nitrogen (mg/L)	*Influent* Ammonia (mg/L)	Ammonia (mg/L)	*Influent* TKN (mg/L)	TKN (mg/L)	cBOD (mg/L)	TOC (mg/L)	COD (mg/L)	*Influent* pH	pH
2/1/2016	60,005														
2/2/2016	59,057		12	12		13.2		2.38		4.84	10	23.2	75.5		
2/3/2016	76,441														
2/4/2016	99,566														
2/5/2016	72,408														
2/6/2016	68,491														
2/7/2016	68,153														
2/8/2016	65,750														
2/9/2016	50,538														
2/10/2016	44,949		9.6	28		11.7		0.538		3.77	10	13	91		
2/11/2016	59,501														
2/12/2016	74,364														
2/13/2016	69,682														
2/14/2016	61,528														
2/15/2016	75,942														
2/16/2016	82,227						4.57							8.02	
2/17/2016	81,969					10.7		3.55		6.36					7.77
2/18/2016	83,340														
2/19/2016	84,710														
2/20/2016	110,287														
2/21/2016	108,841														
2/22/2016	97,071														
2/23/2016	97,220	50					3.81							7.91	
2/24/2016	88,840		2.2			11.4		3.01		6.8					7.81
2/25/2016	68,510														
2/26/2016	72,889														
2/27/2016	88,191														
2/28/2016	98,206														
2/29/2016	86,809													7.98	

Date	Flow (MGD)	*Influent* BOD (mg/L)	Daily BOD (mg/L)	TSS (mg/L)	*Influent* NO-3/NO-2 Nitrogen (mg/L)	NO-3/NO-2 Nitrogen (mg/L)	*Influent* Ammonia (mg/L)	Ammonia (mg/L)	*Influent* TKN (mg/L)	TKN (mg/L)	cBOD (mg/L)	TOC (mg/L)	COD (mg/L)	*Influent* pH	pH
3/1/2016	80,980		9.6								9.8				7.73
3/2/2016	66,170														
3/3/2016	78,642														
3/4/2016	94,330														
3/5/2016	102,078														
3/6/2016	102,933														
3/7/2016	98,861														
3/8/2016	87,688														
3/9/2016	82,391		14								14				
3/10/2016	97,122														
3/11/2016	109,852														
3/12/2016	114,319														
3/13/2016	109,795														
3/14/2016	94,779														
3/15/2016	91,196	65					2.68								
3/16/2016	93,910		12			17.6		1.43		3.95					
3/17/2016	104,761														
3/18/2016	120,158														
3/19/2016	123,493														
3/20/2016	104,454														
3/21/2016	84,490														
3/22/2016	90,326	55					1.86								
3/23/2016	104,522		8.8			17.5		1.61		4.27					
3/24/2016	115,426														
3/25/2016	139,612														
3/26/2016	163,180														
3/27/2016	216,450														
3/28/2016	215,072														
3/29/2016	183,407	52					0.789								
3/30/2016	172,927		12			17.75		0.52		4.95					
3/31/2016	183,009														

Date	Flow (MGD)	*Influent* BOD (mg/L)	Daily BOD (mg/L)	TSS (mg/L)	*Influent* NO-3/NO-2 Nitrogen (mg/L)	NO-3/NO-2 Nitrogen (mg/L)	*Influent* Ammonia (mg/L)	Ammonia (mg/L)	*Influent* TKN (mg/L)	TKN (mg/L)	cBOD (mg/L)	TOC (mg/L)	COD (mg/L)	*Influent* pH	pH
4/1/2016	194,910														
4/2/2016	183,538														
4/3/2016	156,278														
4/4/2016	139,260	120					3.09								
4/5/2016	126,141		19	24		16.8		1.05		6.48	15				
4/6/2016	124,867														
4/7/2016	131,611														
4/8/2016	124,285														
4/9/2016	115,210														
4/10/2016	110,306														
4/11/2016	109,713														
4/12/2016	102,914	58					0.621								
4/13/2016	95,254		24	21		15.8		0.875		4.56	14				
4/14/2016	91,742														
4/15/2016	108,565														
4/16/2016	117,082														
4/17/2016	105,946														
4/18/2016	95,269														
4/19/2016	92,260	68					0.4								
4/20/2016	90,506		16			15.33		0.689		4.06					
4/21/2016	102,300														
4/22/2016	123,166														
4/23/2016	138,912														
4/24/2016	132,838														
4/25/2016	108,132														
4/26/2016	108,090	50			17.25			0.227	7.04						
4/27/2016	109,026		8.6			13.92		0.855		3.89					
4/28/2016	111,993														
4/29/2016	126,539														
4/30/2016	145,641														

Date	Flow (MGD)	*Influent* BOD (mg/L)	Daily BOD (mg/L)	TSS (mg/L)	*Influent* NO-3/NO-2 Nitrogen (mg/L)	NO-3/NO-2 Nitrogen (mg/L)	*Influent* Ammonia (mg/L)	Ammonia (mg/L)	*Influent* TKN (mg/L)	TKN (mg/L)	cBOD (mg/L)	TOC (mg/L)	COD (mg/L)	*Influent* pH	pH
5/1/2016	141,526														
5/2/2016	121,922	50			15.84		0.585		6.68						
5/3/2016	122,987		14	22		14.92		1.37		4.98	9.8				
5/4/2016	106,590														
5/5/2016	96,783														
5/6/2016	120,210														
5/7/2016	153,875														
5/8/2016	161,916														
5/9/2016	139,023														
5/10/2016	137,911	27			18.46		0.318		5.48						
5/11/2016	144,712		12	20		14.1		1.18		3.78	15				
5/12/2016	158,013														
5/13/2016	166,169														
5/14/2016	176,166														
5/15/2016	168,318														
5/16/2016	149,305														
5/17/2016	236,058	25			18.74		4.11		9.4						
5/18/2016	206,249		15			15.8		1.7		3.82					
5/19/2016	179,840														
5/20/2016	181,803														
5/21/2016	182,232														
5/22/2016	169,766														
5/23/2016	148,792														
5/24/2016	148,693	26			18.52		0.16		8.43						
5/25/2016	142,037		11			16		1.12		4.44					
5/26/2016	147,102														
5/27/2016	169,527														
5/28/2016	265,469														
5/29/2016	295,423														
5/30/2016	256,882														
5/31/2016	207,377	56			17.21		0.61		13.7						

Date	Flow (MGD)	*Influent* BOD (mg/L)	Daily BOD (mg/L)	TSS (mg/L)	*Influent* NO-3/NO-2 Nitrogen (mg/L)	NO-3/NO-2 Nitrogen (mg/L)	*Influent* Ammonia (mg/L)	Ammonia (mg/L)	*Influent* TKN (mg/L)	TKN (mg/L)	cBOD (mg/L)	TOC (mg/L)	COD (mg/L)	*Influent* pH	pH
6/1/2016	187,837		7.2			17.1		1.2		5.68					
6/2/2016	185,477														
6/3/2016	162,860														
6/4/2016	137,746														
6/5/2016	128,580														
6/6/2016	164,217	21			14.91		7.94		21.6						
6/7/2016	163,727		6.1	8.9		15.1		1.5		5.6	6.5				
6/8/2016	132,216														
6/9/2016	120,914														
6/10/2016	122,909														
6/11/2016	125,193														
6/12/2016	121,322														
6/13/2016	111,428														
6/14/2016	109,152	20			20.1		0.249		13.8						
6/15/2016	105,722		14	8.8		14.1		1.55		5.15	6				
6/16/2016	110,873														
6/17/2016	121,774														
6/18/2016	121,840														
6/19/2016	120,143														
6/20/2016	114,469														
6/21/2016	110,777														
6/22/2016	114,387														
6/23/2016	113,563														
6/24/2016	118,967														
6/25/2016	123,456														
6/26/2016	119,764														
6/27/2016	114,245														
6/28/2016	115,750	41			18.5		1.83		5.96						
6/29/2016	114,787		31			14.1		2.46		5.24					
6/30/2016	112,938														

Date	Flow (MGD)	*Influent* BOD (mg/L)	Daily BOD (mg/L)	TSS (mg/L)	*Influent* NO-3/NO-2 Nitrogen (mg/L)	NO-3/NO-2 Nitrogen (mg/L)	*Influent* Ammonia (mg/L)	Ammonia (mg/L)	*Influent* TKN (mg/L)	TKN (mg/L)	cBOD (mg/L)	TOC (mg/L)	COD (mg/L)	*Influent* pH	pH
7/1/2016															
7/2/2016															
7/3/2016															
7/4/2016		20			20.6		2.62		5.72						
7/5/2016			11	11		17.6		2.05		3.65	8				
7/6/2016															
7/7/2016															
7/8/2016															
7/9/2016															
7/10/2016															
7/11/2016															
7/12/2016		110			7.9		6.2		14.6						
7/13/2016			16	24		5.8		3.83		6.92	4.8				
7/14/2016															
7/15/2016															
7/16/2016															
7/17/2016															
7/18/2016															
7/19/2016		25			16.2										
7/20/2016			11			12.5									
7/21/2016															
7/22/2016															
7/23/2016															
7/24/2016															
7/25/2016															
7/26/2016		27													
7/27/2016			12												
7/28/2016															
7/29/2016															
7/30/2016															
7/31/2016															
Maximum	**295,423**	**120.00**	**59.00**	**28.00**	**20.60**	**17.75**	**7.94**	**3.83**	**21.60**	**6.92**	**39.00**	**23.20**	**91.00**	**8.02**	**7.81**
Average	**112,281**	**48.30**	**14.68**	**17.97**	**17.02**	**14.49**	**2.36**	**1.58**	**10.22**	**4.91**	**12.45**	**18.10**	**83.25**	**7.97**	**7.77**

Influent pH		
	Date	Value
	2/29/2016	7.98
	2/23/2016	7.91

Effluent pH		
	Date	Value
	3/1/2016	7.73
	2/24/2016	7.81

DO Cell 1	11.7	11.45	11.24
DO Cell 2	10.2	10.51	10.5
DO Cell 3	10.75	10.6	10.4
DO Cell 4	9.8	10.3	9.87
DO Cell 5	9.67	9.43	9.27

*Sampled by Quinn McCollum - Town of Edisto Beach

On Line Environmental, Inc.
200-B Rich Lex Drive
Lexington, SC 29072

OLEinc

Office: 803-939-4983
Fax: 803-939-4984
www.oleinc.com

Microscopic Examination Report

Sample Name: Cell 1 **Sample Date:** 2/17/16

Sample ID#: 151128 **Date Examined:** 2/20/16

Analyst: J. Matthews

	0 None	1 Few	2 Some	3 Common	4 Very Common	5 Abundant	6 Excessive
Filament Abundance:						X	
Filament Effect on Floc:	X little or none		structure enhancement		bridging		open structure
Floc Morphology:	Firm		X Weak		Round, Compact		X Irregular, Diffuse
Floc Diameter (% @ um):			95 <150		5 150-500		0 >500
Free Cells and microfloc in Suspension:	0 None	1 Few	2 Some	X 3 Common	4 Very Common	5 Abundant	6 Excessive
Zoogleal Growth:	X 0 None	1 Few	2 Some	3 Common	4 Very Common	5 Abundant	6 Excessive

Comments:

1. Algae cells commonly observed
2. Biomass volume is very small
3. No protozoans observed
4. Filamentous content unexpectedly high. Most flaments are located outside the floc particles.

On Line Environmental, Inc.
200-B Rich Lex Drive
Lexington, SC 29072

OlEinc

Office: 803-939-4983
Fax: 803-939-4984
www.oleinc.com

Microscopic Examination Report

Sample Name: Cell ~~1~~ 4 **Sample Date:** 2/17/16

Sample ID#: 151130 **Date Examined:** 2/20/16

Analyst: J. Matthews

Filament Abundance:

					X	
0 None	1 Few	2 Some	3 Common	4 Very Common	5 Abundant	6 Excessive

Filament Effect on Floc:

X			
little or none	structure enhancement	bridging	open structure

Floc Morphology:

X			X
Firm	Weak	Round, Compact	Irregular, Diffuse

Floc Diameter (% @ um):

70	30	0
<150	150-500	>500

Free Cells and microfloc in Suspension:

		X				
0 None	1 Few	2 Some	3 Common	4 Very Common	5 Abundant	6 Excessive

Zoogleal Growth:

X						
0 None	1 Few	2 Some	3 Common	4 Very Common	5 Abundant	6 Excessive

Comments:

1. Algae cells commonly observed
2. Biomass volume is very small
3. Ciliated and flagellated protozoa observed
4. Filamentous content unexpectedly high. Most filaments are located outside the floc particles.
5. Biomass appears similar to Cell 1. This sample is expected to contain less suspended biomass due to settling whereas Cell 1

ACCESS
ANALYTICAL, INC.

Comprehensive Environmental Laboratory Services

DATE: 03/01/2016

SCDHEC #32571

CLIENT: Town of Edisto Beach
2414 Murray Street
Edisto Beach SC 29438

PROJECT:

ID#: 151411 Sample Name: CELL 1 Sampled on 02/17/2016 at 1120 Received on 02/18/2016 at 0800

Parameter	Method#	Value	Units	Anal. on/	at/	by
Toxicity, Acute		COMPLETE	Pass/Fail	02/18/2016	1620	#36001

Report Released by: _____
Bryant Boyd, Laboratory Director

2/17/16

SEAUS Swearingen Ecology Associates - United States, Inc.
Specializing in: Toxicity Testing • TRE • Ecological Surveys
7126 Broad River Road • Post Office Box 1663 • Irmo, SC 29063 • (803) 749-0056 • FAX (803) 749-0150

February 25, 2016

OLSSA

15141

Mr. Bryant Boyd
ON LINE ENVIRONMENTAL, INC.
200 Rich Lex Drive
Lexington, SC 29072

Edisto Beach — NPDES# not provided
Acute Definitive Toxicity Test with *Ceriodaphnia dubia*

16021802
02/17/16
1120
CELL 1
467
186
3029
<0.05
2/18/16 @ 1620
2/20/16 @ 1614
JAL
Acute definitive toxicity test resulted in an LC50 of: >100%

Test Mortality Data (#Live / #Dead)										
Replicate	1		2		3		4			%
Conc.	24 hrs.	48 hrs.	24 hrs.	48 hrs.	24 hrs.	48 hrs.	24 hrs.	48 hrs.	Totals	Mortality
Control	5/0	5/0	5/0	5/0	5/0	5/0	5/0	5/0	20/0	0
15	5/0	5/0	5/0	5/0	5/0	5/0	5/0	5/0	20/0	0
25	5/0	5/0	5/0	5/0	5/0	5/0	5/0	5/0	20/0	0
45	5/0	5/0	5/0	5/0	5/0	5/0	5/0	5/0	20/0	0
75	5/0	5/0	5/0	5/0	5/0	5/0	5/0	5/0	20/0	0
100	5/0	5/0	5/0	5/0	5/0	5/0	5/0	5/0	20/0	0

Reported By: Glenda R. Swearingen

Glenda R. Swearingen, Laboratory Director
SCDHEC Laboratory Certification Number: 36001

Codes: *=Lost in Transfer, .=Missing Data, NA=Not Applicable

TEST CONDITIONS

Methods

Methods For Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, 5th Edition, EPA-821-R-02-012 (October 2002), Method 2002.

Alkalinity - SM 2320B-2010 Analyzed 100% Effluent
Hardness - SM 2340C-2011 Analyzed 100% Effluent
Specific Conductance -SM 2510B-2011
Temperature - SM 2550 B-2010 Analyzed Low, Mid, High Concentrations
Dissolved Oxygen -SM 4500 OG-2011
Residual Chlorine - SM 4500CLG-2011
Hydrogen-Ion Concentration (pH) - SM 4500-H B-2011

Test Species: *Ceriodaphnia dubia* Water Type: Moderately Hard Synthetic Fresh

Static Test Temperature = 25+/-1°C
Test Chamber = 30 ml Plastic; Test Volume: 15 mL
No. Chambers = 4, No. Animals/Chamber = 5
Endpoints: Survival
Sample Treatment: None
Animal Source: In-house Culture; I.D. Reference - EPA/600/4/-86/032.
Reference Toxicant: Reagent Grade NaCL Lot # 144827
Current Reference Toxicant Test: Date/Time = 2/6/16 @ 1227; Results: LC50 = 2.30g/l NaCl, Test Valid

Statistical Analysis.

Fishers Exact Test - USEPA Toxicity Data Analysis Software, June 1994

Parameter	Units
Conductivity	µmho/cm @ 25°C
Alkalinity	mg/L CaCO3
Hardness	mg/L CaCO3
Cl2(TRC)	mg/L

Access Analytical - Chain of Custody Record

LAB USE ONLY

Sales Order # ______ PO # ______ Access Quote # ______

Project Work Order # ______
Laboratory ID: SEAUS

ACCESS ANALYTICAL, INC.
7478 Carlisle Street
Irmo, SC 29063
Phone: (803) 781-4243
Fax: 781-4303
www.axs-inc.com

Company Name: OCE
Report To: Bryant Boyd
Address:
City: Lex State: SC Zip:
Phone: Fax:
Email: bryant@axc-inc.com
Project ID: Town of EdistoBeach
Sampled By: Client

Preservative: (*see codes)
Container Type: (*see codes)

↓ REQUESTED LAB ANALYSIS ↓

*Preservative Codes (place corresponding # in block above analysis field): 0 = None, 1 = HCL, 2 = HNO_3, 3 = H_2SO_4, 4 = NaOH, 5 = $Na_2S_2O_3$, 6 = Method 5035 set w/ $NaHSO_4$ & CH_3OH, 7 = NaOH/ZnOAC, 8 = H_3PO_4

*Matrix Codes (place corresponding code in matrix column): GW = ground water, WW = waste water, DW = drinking water, S = soil, SL = sludge, A = air, IW = industrial waste, WO = waste oil, OT = other (specify in comments section)

*Program Area Codes: CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking waters), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Sample ID/Description	Date Collected:	Time Collected:	Type: (grab or composite)	Matrix: (see codes)	Program Area (see codes)	TOTAL # of containers	Toxicity										NOTES / COMMENTS (if sample is a composite please use space below to note start/finish times & dates)
Cell 1	2/17/16	1120	G	WW	CWA	1	1										SEAUS ID# 1602/802

Turnaround Time:
___ Standard
___ RUSH*
*Date Required: ________
(For rush work, results emailed/faxed by end of business day on date required)

Project Location:
✓ SC
___ NC
___ Other
(specify) ______

Relinquished By:	Received By:	Date (mm-dd-yy)	Time (24HR)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C):	
J. Stuck	Glenda Swearingen	2/18/16	1020	✓ Y ___ N	1.2 (°C)	___ (N/A)
				___ Y ___ N	___ (°C)	___ (N/A)
				___ Y ___ N	___ (°C)	___ (N/A)
				___ Y ___ N	___ (°C)	___ (N/A)

See Reverse for Terms and Conditions

Original Copy - Returned w/Report
Yellow Copy - Access File Copy
Pink Copy - Client Copy

Pg ____ of ____

206 Rich Lex Drive
Lexington, SC 29072

Phone: 803-939-4983
Fax: 803-939-4984
oleinc.com

ON LINE ENVIRONMENTAL, INC

Chain of Custody Record

SCDHEC LAB ID# 32571/25003

Client: Town of Edisto Beach
Address: 2414 Murray Street
City, State, Zip: Edisto Beach, SC 29438

Attn: Mr. Bob Doub
Phone: 843-869-2505
Fax: 843-869-3855

Prog. Area	Sample ID# (FOR LAB USE ONLY)	Sample Name	Date/Time of Sample	Sample Type (G or C)	Preservation/Bottle Type	# of bottles	Parameter(s)
WW	15141	Cell 1	2-17-16/1120	G	A/P	1	Toxicity
			/				
			/				
			/				
			/				
			/				
			/				
			/				
			/				

G=grab C=composite

Prog. Area: WW=westewater DW=drinking water MW=monitoring well SS=semi solid SL=soil SD=solid

Samplers signature:

Special Instructions:

Sample Rcd. In Lab @_____deg C

Auto Sampler Data

Date/Time Set On:
by whom:
Date/Time Off:
by whom:

Meter Reading After:
Meter Reading Before:
Difference:
x _____ (factor):

Relinquished by	Date	Time	Received by	Date	Time
	2-17-16	1305	BDouglas	2-17-16	1305
BDouglas	2-17-16	1500	Sample Refrig	2-17-16	1500
Sample Refrig	2-18-16	0600	BDouglas	2-18-16	0600
BDouglas	2-18-16	0806			

Preservation Codes: A=≤6°C, B=H_2SO_4, C=HNO_3, D=HCl, E=NaOH, F=$Na_2S_2O_3$, O=Other (describe) Bottle Type: Glass = G, Plastic = P

Received in lab by: BDouglas Date: 2-18-2016 Time: 0806

Sample Rcd. on Ice: (Yes) No

Attachment 3C

Additional Documentation

Pictures

Temporary Measures Taken

and

Proof of SSOs & Sewer Backups

Council Action

Moratorium

Ordinance No. 2021-13

Adopted April 8, 2021

Ordinance No. 2021-13

TOWN OF EDISTO BEACH

AN ORDINANCE

An Ordinance to Enact and Establish a Temporary Moratorium on the Issuance and Approval of Building Permits and Record Plats for the Town of Edisto Beach for (1) New or Additional Connections for Properties Situated Inside the Municipal Boundaries to the Town Sewer System that flow through Lift Stations A, B and C and (2) Additions to Existing Structures that access the Town Sewer System if additional sewer capacity would be required for the addition that flow through Lift Stations A, B and C.

WHEREAS, The Town of Edisto Beach operates a sanitary sewer system for the benefit of its citizens. The system includes a wastewater treatment plant licensed by the South Carolina Department of Health and Environmental Control (SCDHEC); and

WHEREAS, the sanitary sewer system is seriously deficient in the following particulars: The Town's Sewer Collection System is under evaluation by American Engineering to develop solutions to reoccurring high volume alarms at Lift Stations A, B and C. Lift Stations A, B and C collectively connect to the Wastewater Treatment Plant through a 6-inch force main which is not sufficient to accommodate the volume of flow entering the system causing high volume alarms. This deficiency taxes the system beyond its licensed capacity; and

WHEREAS, these deficiencies may lead to and constitute serious environmental hazards, create public health and safety risks, result in additional stress on the wastewater treatment plant, increase its operating costs, require additional attention of Town personnel, and expose the Town to fines and other enforcement and disciplinary action by SCDHEC and the federal government;

WHEREAS, the Town Staff has made recommendations relating to, and has outlined a plan to address, the deficiencies in the sewer system; and

WHEREAS, the Mayor and Council have determined that the deficiencies in the sanitary sewer system create potential for and may result in serious environmental, health and safety hazards, and that such hazards are a nuisance prejudicial to the health, safety and comfort of the public; and

WHEREAS, the Town of Edisto Beach has experienced increased development and growth in the number of new residential housing units constructed and the number of building permits applied for, and there are currently plans on the part of landowners to construct additional housing units which, if constructed and connected to the Town sewer system will place additional burdens on that system; and

WHEREAS, by restricting and precluding municipal approval of building permits and record plats that would increase demand for and/or the volume of sanitary sewage that flow through lift stations A, B, and C, and by restricting and precluding (1) any further connections to the municipal sewer system for properties by way of Lift Stations A, B and C, and (2) additions to existing structures which flow through lift stations A, B and C if the additions would effect an increase on the sewer capacity and demand of the sewer system, the Town can reduce, to a limited degree, the impact which new additions to the Town sewerage system would otherwise have on the deficiencies which currently characterize that system; and

WHEREAS, in order to give the Town time to address the sewer system deficiencies and make appropriate and needed studies, repairs and improvements to its infrastructure, the Town intends by this Ordinance to establish, for a temporary and limited period of time, a moratorium on the approval of building permits and record plats for (1) new and additional connections to the Town sewer system for properties through tie-in to Lift Station A, B and C, and (2) additions to existing structures utilizing Lift Stations A, B and C if the additions would effect an increase on the sewer capacity and demand of the sewer system.

NOW, THEREFORE, BE IT RESOLVED, ENACTED AND ORDAINED by the Mayor and Council of the Town of Edisto Beach as follows:

SECTION I. There is hereby imposed, on a temporary and interim basis, and for the immediate preservation of the public health and safety, and for the protection of the sanitary sewerage system of the Town of Edisto Beach, a moratorium on any new or additional building permit approvals and any new or additional record plat approvals for (1) new and additional connections to the Town sewer system for properties through tie-in to Lift Station A, B and C, and (2) additions to existing structures utilizing Lift Station A, B and C if the additions would affect an increase on the sewer capacity and demand of the sewer system. Until such moratorium is terminated by the Town, the Town shall not approve any new or additional building permits or record plats and shall not authorize or permit any new or additional connections to the Town sewer system for (1) new and additional connections to the Town sewer system for properties through tie-in to Lift Stations A, B and C, and (2) additions to existing structures utilizing Lift Stations A, B, and C if the additions would affect an increase on the sewer capacity and demand of the sewer system. This moratorium shall not be applicable to any property presently utilizing Town sewer services on the first reading date of this Ordinance, but which subsequently requires a new site building permit after, and as a result of, disruption to its existing service due to damage to or destruction of improvements situated on the property.

SECTION II. The problem is under evaluation and as soon as reasonably practical, the Town shall formulate, establish, adopt and implement a program to repair, improve and correct the deficiencies in the Town sewer system. The Town shall regularly, and at no less than 90-day intervals, review the program and shall make any such revisions to the

program as may be necessary to correct the sewer system deficiencies with all due haste.

SECTION III. This moratorium shall continue for a limited time in order to finalize the current study and to undertake and complete the necessary improvements so as to eliminate those deficiencies.

SECTION IV. This moratorium shall not apply to any building projects which have received a building permit and sewer tie in approval prior to the date of first reading of this ordinance. This moratorium shall not apply to requests for building permits accompanied by those who are in possession of current sewer certificates. This ordinance also shall not apply to the Planned Unit Development zoning district because property owners in that district have previously secured approval from the Town to tie into the sewer system and paid the requisite fees.

SECTION V. The recitals set forth above are herein incorporated as if fully re-written.

This Ordinance shall take effect upon approval by Council.

By: Jane S. Darby
Jane Darby, Mayor

First Reading: 3/11/2021 ATTEST: Angela K. Davis

Adopted: 4/8/2021 Angela Davis, Municipal Clerk

Approved as to form:

Attachment 3D

Residential Customer User Rates

Current Water Rates

(September 2021)

Town of Edisto Beach - Current Water Rates

	0—24,000	24,000 to 48,000	48,000 to 72,000	72,000 plus
Residential	$249.18	$2.78	$3.10	$3.46
Business/docks	$249.18	$5.53	$6.21	$6.93
Outside town limits	$498.40	$9.46	$10.63	$11.82
State park	$1,024.64	$8.33	$9.30	$10.35
Water for irrigation	$249.18	$5.53	$6.21	$6.93

September 2021

Current Sewer Rates

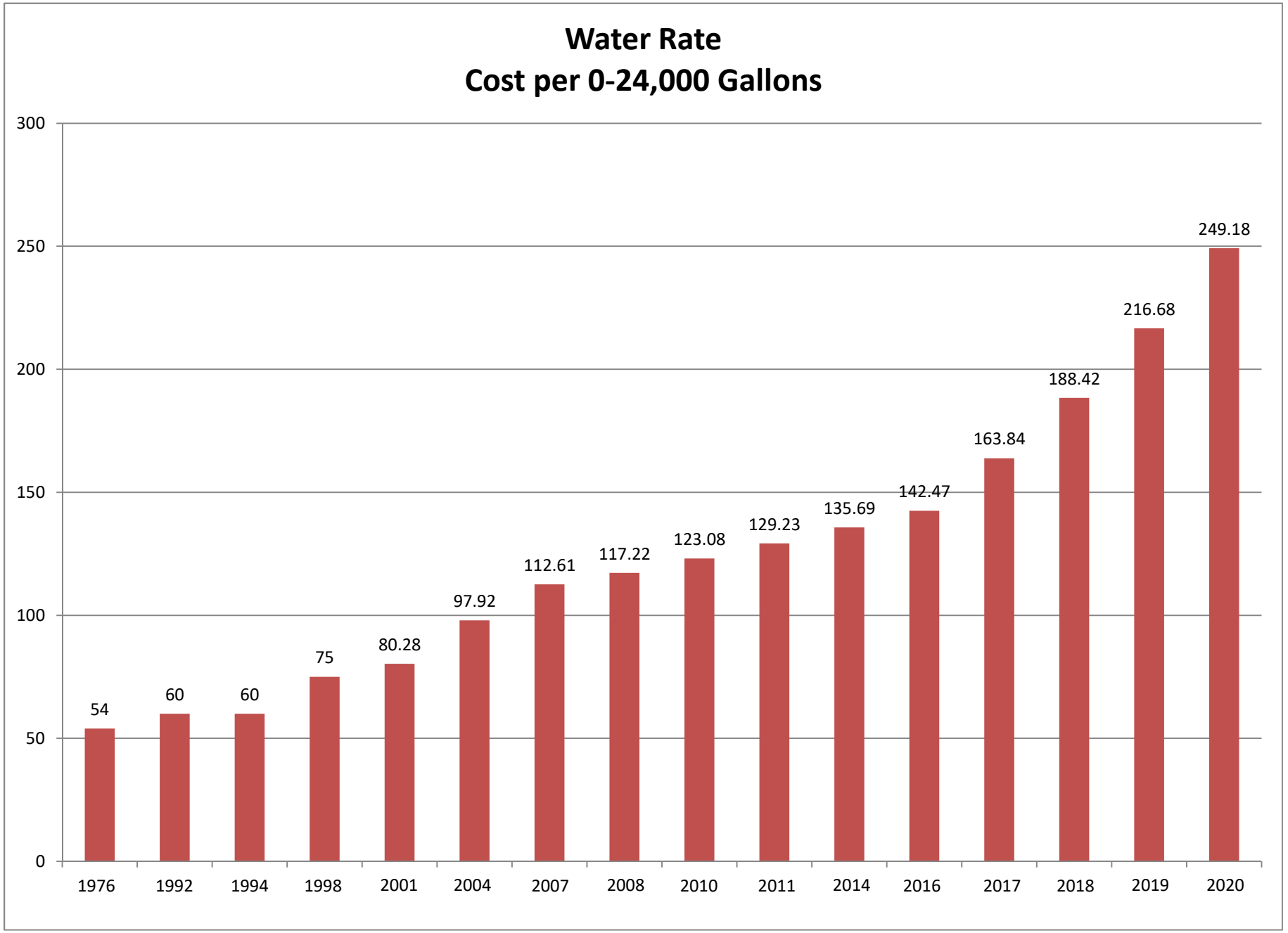
(September 2021)

Town of Edisto Beach - Current Sewer Rates

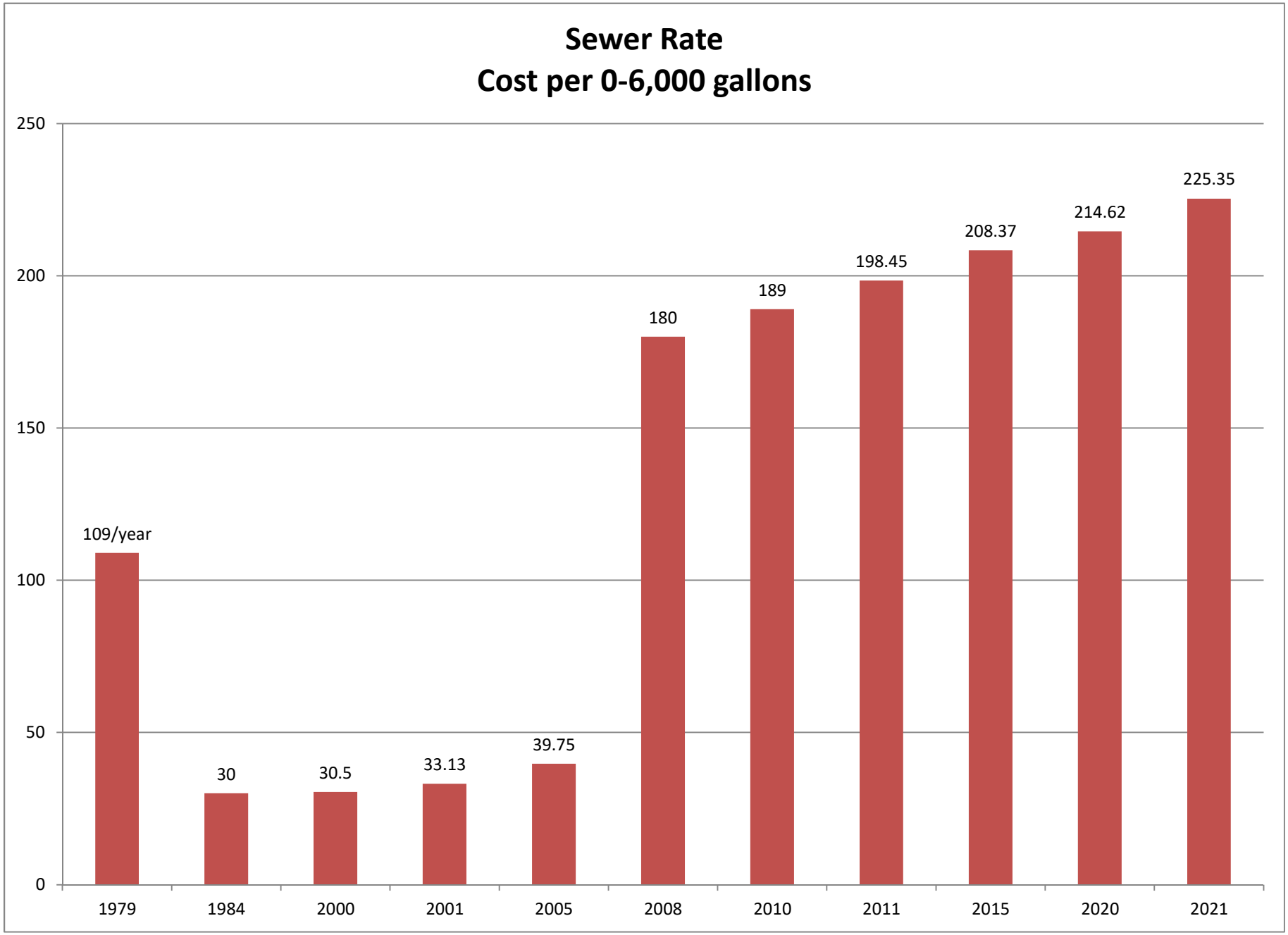
Gallons	Rate per billing cycle
0—6,000, semi-annual, minimum	$225.35
Over 6,000, semi-annual, per 1,000	3.57

September 2021

Water Rate Increase History


Water Rate
Cost per 0-24,000 Gallons
300
250
200
150
100
50
0
54
60
60
75
80.28
97.92
112.61
117.22
123.08
129.23
135.69
142.47
163.84
188.42
216.68
249.18
1976
1992
1994
1998
2001
2004
2007
2008
2010
2011
2014
2016
2017
2018
2019
2020

Sewer Rate Increase History


Sewer Rate
Cost per 0-6,000 gallons
250
200
150
100
50
0
109/year
30
30.5
33.13
39.75
180
189
198.45
208.37
214.62
225.35
1979
1984
2000
2001
2005
2008
2010
2011
2015
2020
2021

Attachment 3E

Operating Budget
(With Actual YTD)

TOWN OF EDISTO BEACH
STATEMENT OF REVENUES - BUDGET VS. ACTUAL
AS OF: AUGUST 31ST, 2021

20 -WATER FUND
FINANCIAL SUMMARY

	ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY REVENUES	YEAR-TO-DATE REVENUES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
REVENUE SUMMARY							
ALL REVENUE	1,501,238	1,836,930	106,655.88	220,446.65	147,327.17	1,616,483.35	88.00
TOTAL REVENUES	1,501,238	1,836,930	106,655.88	220,446.65	147,327.17	1,616,483.35	88.00

	ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY EXPENDITURES	YEAR-TO-DATE EXPENDITURES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
WATER OPERATING	1,138,007	1,285,301	33,926.14	240,229.94	(247,840.66)	1,045,071.06	81.31
WATER DEPT. OTHER	282,717	445,625	36,795.83	73,591.66	0.00	372,033.34	83.49
WATER CONTINGENCY	80,514	106,004	0.00	1,970.45	0.00	104,033.55	98.14
TOTAL EXPENDITURES	1,501,238	1,836,930	70,721.97	315,792.05	247,840.66	1,521,137.95	82.81
REVENUES OVER/(UNDER) EXPENDITURES	0	0	35,933.91	(95,345.40)	(100,513.49)	95,345.40	0.00

STATEMENT OF REVENUES - BUDGET VS. ACTUAL
AS OF: AUGUST 31ST, 2021

20 -WATER FUND

REVENUES		ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY REVENUES	YEAR-TO-DATE REVENUES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
3220	STATE MATCH	0	0.0	0.00	0.00	0.00	0.00	0.00
3222	FEMA REVENUE	0	0.0	0.00	0.00	0.00	0.00	0.00
3300	APPROP. PRIOR YEAR	0	0.0	0.00	0.00	0.00	0.00	0.00
3301	TRANSFER FROM R & R	0	0.0	0.00	0.00	0.00	0.00	0.00
3302	CONSTRUCTION FUND	0	0.0	0.00	0.00	0.00	0.00	0.00
3501	WATER SYSTEM USER FEE	1,426,418	1,805,210.0	100,844.25	201,688.50	(134,988.66)	1,603,521.50	88.83
3502	TAP IN FEE	15,000	15,000.0	6,000.00	9,000.00	(4,500.00)	6,000.00	40.00
3504	RECONNECT FEE	1,000	1,000.0	0.00	0.00	(300.00)	1,000.00	100.00
3505	PENALTY	8,620	8,620.(	188.37)	4,207.41	(5,938.44)	4,412.59	51.19
3507	INSURANCE REIMBURSEMENT	0	0.0	0.00	0.00	0.00	0.00	0.00
3508.100	BONDED INTEREST INCOME	30,000	100.0	0.00	1.58	(4.26)	98.42	98.42
3509	MISCELLANEOUS INCOME	1,000	1,000.0	0.00	5,128.34	0.00 (	4,128.34)	412.83-
3981	INTEREST INCOME	19,200	6,000.0	0.00	420.82	(1,295.81)	5,579.18	92.99
3982	RENTAL INCOME	0	0.0	0.00	0.00	(300.00)	0.00	0.00
TOTAL REVENUES		1,501,238	1,836,930	106,655.88	220,446.65	147,327.17	1,616,483.35	88.00

STATEMENT OF EXPENDITURES - BUDGET vs ACTUAL
AS OF: AUGUST 31ST, 2021

20 -WATER FUND
WATER OPERATING

DEPARTMENTAL EXPENDITURES		ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY EXPENDITURES	YEAR-TO-DATE EXPENDITURES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
5100.1010	SALARIES AND WAGES	236,589	283,122	9,501.35	38,513.12	41,026.17	244,608.88	86.40
5100.2000	MAYOR/COUNCIL	4,080	4,080	0.00	408.00	680.00	3,672.00	90.00
5100.2100	RETIREMENT SYSTEM	37,472	46,500	4,516.43	4,516.43	6,421.19	41,983.57	90.29
5100.2120	PAYROLL TAXES	18,238	28,759	721.21	2,950.69	2,386.49	25,808.31	89.74
5100.2130	DEF COMP EXPENSE	1,011	1,011	72.36	142.36	177.19	868.64	85.92
5100.3000	PRINTING/OFFICE SUPPLIES	1,000	1,000	256.86	256.86	83.42	743.14	74.31
5100.3020	JANITORIAL SERVICE	1,460	1,152	61.92	157.92	40.00	994.08	86.29
5100.3050	POSTAGE	1,000	1,000	48.00	48.00	40.00	952.00	95.20
5100.3100	MEMBERSHIP DUES	700	700	0.00	0.00	382.00	700.00	100.00
5100.3120	MEETINGS & TRAINING	4,000	4,000	0.00	0.00	0.00	4,000.00	100.00
5100.3141	ELECTRICITY	76,000	110,000	10,632.98	21,586.57	21,272.17	88,413.43	80.38
5100.3160	TELEPHONE & INTERNET	7,000	8,000	329.82	443.96	1,110.42	7,556.04	94.45
5100.3220	MAINTENANCE CONTRACTS	2,000	2,900	0.00	0.00	0.00	2,900.00	100.00
5100.3225	VC3	7,412	7,600	1,003.27	1,150.30	1,050.26	6,449.70	84.86
5100.3260	PROF FEES/AUDIT, MISC	2,500	2,500	0.00	0.00	2,571.64	2,500.00	100.00
5100.3280	CUSTODIAN FEES	1,625	2,489	1,185.25	1,185.25	1,185.25	1,303.75	52.38
5100.3360	INSURANCE GENERAL	17,978	47,557	0.00	19,186.59	9,983.88	28,370.41	59.66
5100.3361	INSURANCE STAFF HEALTH	22,571	28,326	0.00	2,081.60	3,581.22	26,244.40	92.65
5100.3362	INSURANCE AUTO	1,221	1,636	0.00	0.00	1,001.28	1,636.00	100.00
5100.3405	2017 BOND COSTS	0	0	0.00	0.00	0.00	0.00	0.00
5100.3410	BANK CHARGES	500	500	20.00	25.00	5.00	475.00	95.00
5100.3420	MISCELLANEOUS EXPENSE	1,000	1,000	0.00	0.00	382.50	1,000.00	100.00
5100.3440	GAS AND OIL	9,000	12,000	629.27	629.27	2,558.21	11,370.73	94.76
5100.3450	VEH. REPAIR & MAINTENANCE	1,750	1,750	32.92	32.92	423.21	1,717.08	98.12
5100.3500	DHEC USER FEE	20,000	20,000	0.00	0.00	13,929.00	20,000.00	100.00
5100.3520	UNIFORMS	750	750	0.00	0.00	0.00	750.00	100.00
5100.4000	MAINT AGREEMENT	19,720	21,889	0.00	20,253.00	0.00	1,636.00	7.47
5100.4010	SYS. REPAIR & MAINTENANCE	35,000	35,000	193.15	1,142.47	5,863.69	33,857.53	96.74
5100.4020	SYS. SUPPLIES & SM. TOOLS	5,000	5,000	0.00	0.00	55.57	5,000.00	100.00
5100.4030	METERS & METER SUPPLIES	15,000	20,000	0.00	0.00	2,287.92	20,000.00	100.00
5100.4050	CHEMICALS	40,000	40,000	3,086.50	4,430.10	6,874.98	35,569.90	88.92
5100.4060	LAB TESTS	8,000	8,000	544.10	701.60	632.10	7,298.40	91.23
5100.4070	EQUIPMENT PURCHASES	1,500	1,500	0.00	0.00	0.00	1,500.00	100.00
5100.4071	EQUIPMENT REPAIR	8,500	8,500	994.31	1,650.28	0.00	6,849.72	80.58
5100.4090	PIPE,HYDRANTS&CONNECTIONS	7,400	7,400	0.00	0.00	844.53	7,400.00	100.00
5100.6202	2012 W/S REV. BOND P & I	91,780	91,780	0.00	0.00	0.00	91,780.00	100.00
5100.6203	2017 W/S REVENUE BOND P &	420,000	420,000	0.00	118,412.50	120,737.50	301,587.50	71.81
5100.9030	OFFICE MACHINES/SOFTWARE	800	850	96.44	200.59	172.12	649.41	76.40
5100.9040	COMPLEX BLDG MAINTENANCE	250	250	0.00	0.00	0.00	250.00	100.00
5100.9080	PAGERS & COMMUNICATION	2,700	1,300	0.00	124.56	0.00	1,175.44	90.42
5100.9202	BLDG. MAINTENANCE	1,500	1,500	0.00	0.00	81.75	1,500.00	100.00
5100.9500	LEGAL FEES	4,000	4,000	0.00	0.00	0.00	4,000.00	100.00
TOTAL WATER OPERATING		1,138,007	1,285,301	33,926.14	240,229.94	247,840.66	1,045,071.06	81.31

STATEMENT OF EXPENDITURES - BUDGET vs ACTUAL
AS OF: AUGUST 31ST, 2021

20 -WATER FUND
WATER DEPT. OTHER

DEPARTMENTAL EXPENDITURES		ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY EXPENDITURES	YEAR-TO-DATE EXPENDITURES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
5110	AMORTIZATION EXPENSE	0	0	0.00	0.00	0.00	0.00	0.00
5110.3600	EQUIP/VEHICLE REPLACEMENT	46,717	34,625	3,462.50	6,925.00	0.00	27,700.00	80.00
5110.5100	DEPRECIATION EXPENSE	0	0	0.00	0.00	0.00	0.00	0.00
5110.5200	RENEWAL/REPLACEMENT	210,000	400,000	33,333.33	66,666.66	0.00	333,333.34	83.33
5110.6310	COMPUTER HARDWARE/SOFTWAR	1,000	1,000	0.00	0.00	0.00	1,000.00	100.00
5110.6360	2017 BOND CONSTRUCTION EX	0	0	0.00	0.00	0.00	0.00	0.00
5110.6500	CIP MISC	25,000	10,000	0.00	0.00	0.00	10,000.00	100.00
TOTAL WATER DEPT.		282,717	445,625	36,795.83	73,591.66	0.00	372,033.34	83.49

STATEMENT OF EXPENDITURES - BUDGET vs ACTUAL
AS OF: AUGUST 31ST, 2021

20 -WATER FUND
WATER CONTINGENCY

DEPARTMENTAL EXPENDITURES	ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY EXPENDITURES	YEAR-TO-DATE EXPENDITURES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
5900.9999 WATER CONTINGENCY	80,514	106,004	0.00	1,970.45	0.00	104,033.55	98.14
TOTAL WATER CONTINGENCY	80,514	106,004	0.00	1,970.45	0.00	104,033.55	98.14
TOTAL EXPENDITURES	1,501,238	1,836,930	70,721.97	315,792.05	247,840.66	1,521,137.95	82.81
REVENUES OVER/(UNDER) EXPENDITURES	0	0	35,933.91	(95,345.40)	(100,513.49)	95,345.40	0.00

STATEMENT OF REVENUES - BUDGET VS. ACTUAL
AS OF: AUGUST 31ST, 2021

20 -WATER FUND
FINANCIAL SUMMARY

	ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY REVENUES	YEAR-TO-DATE REVENUES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
REVENUE SUMMARY							
ALL REVENUE	1,501,238	1,836,930	106,655.88	220,446.65	147,327.17	1,616,483.35	88.00
TOTAL REVENUES	1,501,238	1,836,930	106,655.88	220,446.65	147,327.17	1,616,483.35	88.00

	ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY EXPENDITURES	YEAR-TO-DATE EXPENDITURES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
WATER OPERATING	1,138,007	1,285,301	33,926.14	240,229.94	(247,840.66)	1,045,071.06	81.31
WATER DEPT. OTHER	282,717	445,625	36,795.83	73,591.66	0.00	372,033.34	83.49
WATER CONTINGENCY	80,514	106,004	0.00	1,970.45	0.00	104,033.55	98.14
TOTAL EXPENDITURES	1,501,238	1,836,930	70,721.97	315,792.05	247,840.66	1,521,137.95	82.81
REVENUES OVER/(UNDER) EXPENDITURES	0	0	35,933.91	(95,345.40)	(100,513.49)	95,345.40	0.00

STATEMENT OF REVENUES - BUDGET VS. ACTUAL
AS OF: AUGUST 31ST, 2021

20 -WATER FUND

REVENUES		ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY REVENUES	YEAR-TO-DATE REVENUES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
3220	STATE MATCH	0	0.0	0.00	0.00	0.00	0.00	0.00
3222	FEMA REVENUE	0	0.0	0.00	0.00	0.00	0.00	0.00
3300	APPROP. PRIOR YEAR	0	0.0	0.00	0.00	0.00	0.00	0.00
3301	TRANSFER FROM R & R	0	0.0	0.00	0.00	0.00	0.00	0.00
3302	CONSTRUCTION FUND	0	0.0	0.00	0.00	0.00	0.00	0.00
3501	WATER SYSTEM USER FEE	1,426,418	1,805,210.0	100,844.25	201,688.50	(134,988.66)	1,603,521.50	88.83
3502	TAP IN FEE	15,000	15,000.0	6,000.00	9,000.00	(4,500.00)	6,000.00	40.00
3504	RECONNECT FEE	1,000	1,000.0	0.00	0.00	(300.00)	1,000.00	100.00
3505	PENALTY	8,620	8,620.(	188.37)	4,207.41	(5,938.44)	4,412.59	51.19
3507	INSURANCE REIMBURSEMENT	0	0.0	0.00	0.00	0.00	0.00	0.00
3508.100	BONDED INTEREST INCOME	30,000	100.0	0.00	1.58	(4.26)	98.42	98.42
3509	MISCELLANEOUS INCOME	1,000	1,000.0	0.00	5,128.34	0.00 (	4,128.34)	412.83-
3981	INTEREST INCOME	19,200	6,000.0	0.00	420.82	(1,295.81)	5,579.18	92.99
3982	RENTAL INCOME	0	0.0	0.00	0.00	(300.00)	0.00	0.00
TOTAL REVENUES		1,501,238	1,836,930	106,655.88	220,446.65	147,327.17	1,616,483.35	88.00

STATEMENT OF EXPENDITURES - BUDGET vs ACTUAL
AS OF: AUGUST 31ST, 2021

20 -WATER FUND
WATER OPERATING

DEPARTMENTAL EXPENDITURES		ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY EXPENDITURES	YEAR-TO-DATE EXPENDITURES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
5100.1010	SALARIES AND WAGES	236,589	283,122	9,501.35	38,513.12	41,026.17	244,608.88	86.40
5100.2000	MAYOR/COUNCIL	4,080	4,080	0.00	408.00	680.00	3,672.00	90.00
5100.2100	RETIREMENT SYSTEM	37,472	46,500	4,516.43	4,516.43	6,421.19	41,983.57	90.29
5100.2120	PAYROLL TAXES	18,238	28,759	721.21	2,950.69	2,386.49	25,808.31	89.74
5100.2130	DEF COMP EXPENSE	1,011	1,011	72.36	142.36	177.19	868.64	85.92
5100.3000	PRINTING/OFFICE SUPPLIES	1,000	1,000	256.86	256.86	83.42	743.14	74.31
5100.3020	JANITORIAL SERVICE	1,460	1,152	61.92	157.92	40.00	994.08	86.29
5100.3050	POSTAGE	1,000	1,000	48.00	48.00	40.00	952.00	95.20
5100.3100	MEMBERSHIP DUES	700	700	0.00	0.00	382.00	700.00	100.00
5100.3120	MEETINGS & TRAINING	4,000	4,000	0.00	0.00	0.00	4,000.00	100.00
5100.3141	ELECTRICITY	76,000	110,000	10,632.98	21,586.57	21,272.17	88,413.43	80.38
5100.3160	TELEPHONE & INTERNET	7,000	8,000	329.82	443.96	1,110.42	7,556.04	94.45
5100.3220	MAINTENANCE CONTRACTS	2,000	2,900	0.00	0.00	0.00	2,900.00	100.00
5100.3225	VC3	7,412	7,600	1,003.27	1,150.30	1,050.26	6,449.70	84.86
5100.3260	PROF FEES/AUDIT, MISC	2,500	2,500	0.00	0.00	2,571.64	2,500.00	100.00
5100.3280	CUSTODIAN FEES	1,625	2,489	1,185.25	1,185.25	1,185.25	1,303.75	52.38
5100.3360	INSURANCE GENERAL	17,978	47,557	0.00	19,186.59	9,983.88	28,370.41	59.66
5100.3361	INSURANCE STAFF HEALTH	22,571	28,326	0.00	2,081.60	3,581.22	26,244.40	92.65
5100.3362	INSURANCE AUTO	1,221	1,636	0.00	0.00	1,001.28	1,636.00	100.00
5100.3405	2017 BOND COSTS	0	0	0.00	0.00	0.00	0.00	0.00
5100.3410	BANK CHARGES	500	500	20.00	25.00	5.00	475.00	95.00
5100.3420	MISCELLANEOUS EXPENSE	1,000	1,000	0.00	0.00	382.50	1,000.00	100.00
5100.3440	GAS AND OIL	9,000	12,000	629.27	629.27	2,558.21	11,370.73	94.76
5100.3450	VEH. REPAIR & MAINTENANCE	1,750	1,750	32.92	32.92	423.21	1,717.08	98.12
5100.3500	DHEC USER FEE	20,000	20,000	0.00	0.00	13,929.00	20,000.00	100.00
5100.3520	UNIFORMS	750	750	0.00	0.00	0.00	750.00	100.00
5100.4000	MAINT AGREEMENT	19,720	21,889	0.00	20,253.00	0.00	1,636.00	7.47
5100.4010	SYS. REPAIR & MAINTENANCE	35,000	35,000	193.15	1,142.47	5,863.69	33,857.53	96.74
5100.4020	SYS. SUPPLIES & SM. TOOLS	5,000	5,000	0.00	0.00	55.57	5,000.00	100.00
5100.4030	METERS & METER SUPPLIES	15,000	20,000	0.00	0.00	2,287.92	20,000.00	100.00
5100.4050	CHEMICALS	40,000	40,000	3,086.50	4,430.10	6,874.98	35,569.90	88.92
5100.4060	LAB TESTS	8,000	8,000	544.10	701.60	632.10	7,298.40	91.23
5100.4070	EQUIPMENT PURCHASES	1,500	1,500	0.00	0.00	0.00	1,500.00	100.00
5100.4071	EQUIPMENT REPAIR	8,500	8,500	994.31	1,650.28	0.00	6,849.72	80.58
5100.4090	PIPE,HYDRANTS&CONNECTIONS	7,400	7,400	0.00	0.00	844.53	7,400.00	100.00
5100.6202	2012 W/S REV. BOND P & I	91,780	91,780	0.00	0.00	0.00	91,780.00	100.00
5100.6203	2017 W/S REVENUE BOND P &	420,000	420,000	0.00	118,412.50	120,737.50	301,587.50	71.81
5100.9030	OFFICE MACHINES/SOFTWARE	800	850	96.44	200.59	172.12	649.41	76.40
5100.9040	COMPLEX BLDG MAINTENANCE	250	250	0.00	0.00	0.00	250.00	100.00
5100.9080	PAGERS & COMMUNICATION	2,700	1,300	0.00	124.56	0.00	1,175.44	90.42
5100.9202	BLDG. MAINTENANCE	1,500	1,500	0.00	0.00	81.75	1,500.00	100.00
5100.9500	LEGAL FEES	4,000	4,000	0.00	0.00	0.00	4,000.00	100.00
TOTAL WATER OPERATING		1,138,007	1,285,301	33,926.14	240,229.94	247,840.66	1,045,071.06	81.31

STATEMENT OF EXPENDITURES - BUDGET vs ACTUAL
AS OF: AUGUST 31ST, 2021

20 -WATER FUND
WATER DEPT. OTHER

DEPARTMENTAL EXPENDITURES		ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY EXPENDITURES	YEAR-TO-DATE EXPENDITURES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
5110	AMORTIZATION EXPENSE	0	0	0.00	0.00	0.00	0.00	0.00
5110.3600	EQUIP/VEHICLE REPLACEMENT	46,717	34,625	3,462.50	6,925.00	0.00	27,700.00	80.00
5110.5100	DEPRECIATION EXPENSE	0	0	0.00	0.00	0.00	0.00	0.00
5110.5200	RENEWAL/REPLACEMENT	210,000	400,000	33,333.33	66,666.66	0.00	333,333.34	83.33
5110.6310	COMPUTER HARDWARE/SOFTWAR	1,000	1,000	0.00	0.00	0.00	1,000.00	100.00
5110.6360	2017 BOND CONSTRUCTION EX	0	0	0.00	0.00	0.00	0.00	0.00
5110.6500	CIP MISC	25,000	10,000	0.00	0.00	0.00	10,000.00	100.00
TOTAL WATER DEPT.		282,717	445,625	36,795.83	73,591.66	0.00	372,033.34	83.49

20 -WATER FUND
WATER CONTINGENCY

DEPARTMENTAL EXPENDITURES	ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY EXPENDITURES	YEAR-TO-DATE EXPENDITURES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
5900.9999 WATER CONTINGENCY	80,514	106,004	0.00	1,970.45	0.00	104,033.55	98.14
TOTAL WATER CONTINGENCY	80,514	106,004	0.00	1,970.45	0.00	104,033.55	98.14
TOTAL EXPENDITURES	1,501,238	1,836,930	70,721.97	315,792.05	247,840.66	1,521,137.95	82.81
REVENUES OVER/(UNDER) EXPENDITURES	0	0	35,933.91	(95,345.40)	(100,513.49)	95,345.40	0.00

STATEMENT OF REVENUES - BUDGET VS. ACTUAL
AS OF: AUGUST 31ST, 2021

22 -WATER R & R
FINANCIAL SUMMARY

	ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY REVENUES	YEAR-TO-DATE REVENUES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
REVENUE SUMMARY							
ALL REVENUE	0	0	0.00	103.74	355.40	(103.74)	0.00
TOTAL REVENUES	0	0	0.00	103.74	355.40	(103.74)	0.00

	ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY EXPENDITURES	YEAR-TO-DATE EXPENDITURES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
WATER R & R	0	0	0.00	0.00	0.00	0.00	0.00
TOTAL EXPENDITURES	0	0	0.00	0.00	0.00	0.00	0.00
REVENUES OVER/(UNDER) EXPENDITURES	0	0	0.00	103.74	355.40	(103.74)	0.00

22 -WATER R & R

REVENUES		ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY REVENUES	YEAR-TO-DATE REVENUES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
3440	WATER REV TRANSFER IN	0	0.0	0.00	0.00	0.00	0.00	0.00
3980	MISCELLANEOUS INCOME	0	0.0	0.00	0.00	0.00	0.00	0.00
3981	INTEREST INCOME	0	0.0	0.00	103.74	(355.40)	(103.74)	0.00
TOTAL REVENUES		0	0	0.00	103.74	355.40	(103.74)	0.00

STATEMENT OF EXPENDITURES - BUDGET vs ACTUAL
AS OF: AUGUST 31ST, 2021

22 -WATER R & R
WATER R & R

DEPARTMENTAL EXPENDITURES		ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY EXPENDITURES	YEAR-TO-DATE EXPENDITURES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
5200.3410	BANK CHARGES	0	0	0.00	0.00	0.00	0.00	0.00
5200.6200	DEPRECIATION EXPENSE	0	0	0.00	0.00	0.00	0.00	0.00
5200.6202	SPECIAL PROJECTS	0	0	0.00	0.00	0.00	0.00	0.00
5200.6204	WATER DISTRIBUTION PROJEC	0	0	0.00	0.00	0.00	0.00	0.00
5200.6206	RO DISPENSING STATION	0	0	0.00	0.00	0.00	0.00	0.00
5200.6207	UPGRADE WELL LIONS CLUB/B	0	0	0.00	0.00	0.00	0.00	0.00
5200.6208	UPGRADE WELL #1	0	0	0.00	0.00	0.00	0.00	0.00
5200.7020	TRANSFER TO OPERATING	0	0	0.00	0.00	0.00	0.00	0.00
TOTAL WATER R & R		0	0	0.00	0.00	0.00	0.00	0.00
TOTAL EXPENDITURES		0	0	0.00	0.00	0.00	0.00	0.00
REVENUES OVER/(UNDER) EXPENDITURES		0	0	0.00	103.74	355.40	(103.74)	0.00

30 -SEWER
FINANCIAL SUMMARY

	ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY REVENUES	YEAR-TO-DATE REVENUES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
REVENUE SUMMARY							
ALL REVENUE	629,260	648,383	42,443.40	83,871.35	50,926.92	564,511.65	87.06
TOTAL REVENUES	629,260	648,383	42,443.40	83,871.35	50,926.92	564,511.65	87.06

	ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY EXPENDITURES	YEAR-TO-DATE EXPENDITURES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
SEWER OPERATING	518,020	506,751	18,046.56	58,943.11	(86,338.15)	447,807.89	88.37
SEWER DEPT. OTHER	92,716	80,625	6,558.33	13,116.66	0.00	67,508.34	83.73
SEWER CONTINGENCY	18,524	61,007	0.00	1,313.63	0.00	59,693.37	97.85
TOTAL EXPENDITURES	629,260	648,383	24,604.89	73,373.40	86,338.15	575,009.60	88.68
REVENUES OVER/(UNDER) EXPENDITURES	0	0	17,838.51	10,497.95	(35,411.23)	(10,497.95)	0.00

STATEMENT OF REVENUES - BUDGET VS. ACTUAL
AS OF: AUGUST 31ST, 2021

30 -SEWER

REVENUES		ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY REVENUES	YEAR-TO-DATE REVENUES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
3300	APPROP. PRIOR YEAR	0	0.0	0.00	0.00	0.00	0.00	0.00
3301	TRANSFER FROM R & R	0	0.0	0.00	0.00	0.00	0.00	0.00
3501	SEWER SYSTEM USER FEE	602,460	632,583.0	39,994.93	79,989.86	(45,149.20)	552,593.14	87.36
3501.01	GREASE TRAP FEE	2,000	2,000.0	0.00	0.00	(233.08)	2,000.00	100.00
3502	TAP IN FEE	12,500	10,000.0	2,500.00	2,500.00	(2,500.00)	7,500.00	75.00
3504	RECONNECT FEE	300	300.0	0.00	0.00	(100.00)	300.00	100.00
3505	PENALTY	3,000	3,000.(	51.53)	1,313.69	(2,127.06)	1,686.31	56.21
3509	MISCELLANEOUS INCOME	0	0.0	0.00	0.00	0.00	0.00	0.00
3981	INTEREST INCOME	9,000	500.0	0.00	67.80	(517.58)	432.20	86.44
3982	RENTAL INCOME	0	0.0	0.00	0.00	(300.00)	0.00	0.00
TOTAL REVENUES		629,260	648,383	42,443.40	83,871.35	50,926.92	564,511.65	87.06

STATEMENT OF EXPENDITURES - BUDGET vs ACTUAL
AS OF: AUGUST 31ST, 2021

30 -SEWER
SEWER OPERATING

DEPARTMENTAL EXPENDITURES		ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY EXPENDITURES	YEAR-TO-DATE EXPENDITURES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
6100.1010	SALARIES AND WAGES	236,589	212,753	7,204.50	28,494.69	41,026.23	184,258.31	86.61
6100.2000	MAYOR/COUNCIL	4,080	4,080	0.00	272.00	680.00	3,808.00	93.33
6100.2100	RETIREMENT SYSTEM	37,472	35,204	3,307.45	3,307.45	6,420.87	31,896.55	90.60
6100.2120	PAYROLL TAXES	18,238	16,587	546.79	2,177.98	2,386.36	14,409.02	86.87
6100.2130	DEF COMP EXPENSE	1,010	1,011	54.64	111.64	177.19	899.36	88.96
6100.3000	PRINTING/OFFICE SUPPLIES	1,000	1,000	168.26	168.26	83.43	831.74	83.17
6100.3020	JANITORIAL SERVICE	420	1,152	41.28	137.28	40.00	1,014.72	88.08
6100.3050	POSTAGE	1,000	1,000	32.00	32.00	40.00	968.00	96.80
6100.3100	MEMBERSHIP DUES	700	700	0.00	0.00	0.00	700.00	100.00
6100.3120	MEETINGS & TRAINING	4,000	4,000	0.00	0.00	0.00	4,000.00	100.00
6100.3141	ELECTRICITY	52,000	52,000	3,880.69	7,975.06	7,936.77	44,024.94	84.66
6100.3160	TELEPHONE & INTERNET	2,500	2,500	0.00	24.06	473.17	2,475.94	99.04
6100.3220	MAINTENANCE CONTRACTS	2,000	2,900	0.00	0.00	0.00	2,900.00	100.00
6100.3225	VC3	7,412	7,600	668.85	766.88	1,050.23	6,833.12	89.91
6100.3260	PROF FEES/AUDIT, MISC	2,500	2,500	0.00	0.00	2,571.65	2,500.00	100.00
6100.3360	INSURANCE GENERAL	17,978	27,102	0.00	10,934.14	9,858.83	16,167.86	59.66
6100.3361	INSURANCE STAFF HEALTH	22,571	28,326	0.00	1,561.20	3,581.17	26,764.80	94.49
6100.3362	INSURANCE AUTO	1,400	1,636	0.00	0.00	1,001.28	1,636.00	100.00
6100.3410	BANK CHARGES	100	100	0.00	0.00	0.00	100.00	100.00
6100.3420	MISCELLANEOUS EXPENSE	500	500	0.00	0.00	0.00	500.00	100.00
6100.3440	GAS AND OIL	8,000	12,000	419.51	419.51	1,079.45	11,580.49	96.50
6100.3450	VEH. REPAIR & MAINTENANCE	1,750	1,750	0.00	0.00	423.21	1,750.00	100.00
6100.3500	DHEC USER FEE	1,200	1,200	0.00	0.00	125.00	1,200.00	100.00
6100.3520	UNIFORMS	750	750	0.00	0.00	0.00	750.00	100.00
6100.4010	SYS. REPAIR & MAINTENANCE	35,000	35,000	1,557.69	1,557.69	781.43	33,442.31	95.55
6100.4020	SYS. SUPPLIES & SM. TOOLS	5,000	5,000	0.00	0.00	55.57	5,000.00	100.00
6100.4050	CHEMICALS	20,000	20,000	0.00	63.42	5,008.91	19,936.58	99.68
6100.4060	LAB TESTS	14,000	8,000	95.35	282.25	522.90	7,717.75	96.47
6100.4070	EQUIPMENT PURCHASES	3,000	1,500	0.00	0.00	0.00	1,500.00	100.00
6100.4071	EQUIPMENT REPAIR	5,000	8,500	6.86	444.18	0.00	8,055.82	94.77
6100.9030	OFFICE MACHINES/SOFTWARE	800	850	62.69	130.38	172.10	719.62	84.66
6100.9040	COMPLEX BLDG. MAINTENANCE	250	250	0.00	0.00	0.00	250.00	100.00
6100.9080	PAGERS & COMMUNICATION	1,800	1,300	0.00	83.04	0.00	1,216.96	93.61
6100.9202	BLDG. MAINTENANCE	4,000	4,000	0.00	0.00	842.40	4,000.00	100.00
6100.9500	LEGAL FEES	4,000	4,000	0.00	0.00	0.00	4,000.00	100.00
TOTAL SEWER OPERATING		518,020	506,751	18,046.56	58,943.11	86,338.15	447,807.89	88.37

STATEMENT OF EXPENDITURES - BUDGET vs ACTUAL
AS OF: AUGUST 31ST, 2021

30 -SEWER
SEWER DEPT. OTHER

DEPARTMENTAL EXPENDITURES		ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY EXPENDITURES	YEAR-TO-DATE EXPENDITURES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
6110.3600	EQUIP/VEHICLE REPLACEMENT	46,716	34,625	2,808.33	5,616.66	0.00	29,008.34	83.78
6110.5100	DEPRECIATION EXPENSE	0	0	0.00	0.00	0.00	0.00	0.00
6110.5200	RENEWAL/REPLACEMENT	45,000	45,000	3,750.00	7,500.00	0.00	37,500.00	83.33
6110.5300	OPERATING TRANSFERS	0	0	0.00	0.00	0.00	0.00	0.00
6110.6310	COMPUTER HARDWARE/SOFTWAR	1,000	1,000	0.00	0.00	0.00	1,000.00	100.00
6110.6320	BUILDING CONSTRUCTION	0	0	0.00	0.00	0.00	0.00	0.00
6110.6350	CONSTRUCTION FUND EXPENSE	0	0	0.00	0.00	0.00	0.00	0.00
6110.6500	CIP MISC	0	0	0.00	0.00	0.00	0.00	0.00
TOTAL SEWER DEPT. OTHER		92,716	80,625	6,558.33	13,116.66	0.00	67,508.34	83.73

STATEMENT OF REVENUES - BUDGET VS. ACTUAL
AS OF: AUGUST 31ST, 2021

32 -SEWER R & R
FINANCIAL SUMMARY

	ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY REVENUES	YEAR-TO-DATE REVENUES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
REVENUE SUMMARY							
ALL REVENUE	0	0	0.00	18.24	122.67	(18.24)	0.00
TOTAL REVENUES	0	0	0.00	18.24	122.67	(18.24)	0.00

	ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY EXPENDITURES	YEAR-TO-DATE EXPENDITURES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
SEWER R & R	0	0	0.00	0.00	(3,072.00)	0.00	0.00
TOTAL EXPENDITURES	0	0	0.00	0.00	3,072.00	0.00	0.00
REVENUES OVER/(UNDER) EXPENDITURES	0	0	0.00	18.24	(2,949.33)	(18.24)	0.00

STATEMENT OF EXPENDITURES - BUDGET vs ACTUAL
AS OF: AUGUST 31ST, 2021

30 -SEWER
SEWER CONTINGENCY

DEPARTMENTAL EXPENDITURES	ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY EXPENDITURES	YEAR-TO-DATE EXPENDITURES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
6900.9999 SEWER CONTINGENCY	18,524	61,007	0.00	1,313.63	0.00	59,693.37	97.85
TOTAL SEWER CONTINGENCY	18,524	61,007	0.00	1,313.63	0.00	59,693.37	97.85
TOTAL EXPENDITURES	629,260	648,383	24,604.89	73,373.40	86,338.15	575,009.60	88.68
REVENUES OVER/(UNDER) EXPENDITURES	0	0	17,838.51	10,497.95	(35,411.23)	(10,497.95)	0.00

32 -SEWER R & R

REVENUES		ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY REVENUES	YEAR-TO-DATE REVENUES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
3440	SEWER REVENUE TRANSFER IN	0	0.0	0.00	0.00	0.00	0.00	0.00
3980	MISCELLANEOUS INCOME	0	0.0	0.00	0.00	0.00	0.00	0.00
3981	INTEREST INCOME	0	0.0	0.00	18.24	(122.67)	(18.24)	0.00
TOTAL REVENUES		0	0	0.00	18.24	122.67	(18.24)	0.00

TOWN OF EDISTO BEACH
STATEMENT OF EXPENDITURES - BUDGET vs ACTUAL
AS OF: AUGUST 31ST, 2021

32 -SEWER R & R
SEWER R & R

DEPARTMENTAL EXPENDITURES		ORIGINAL BUDGET	CURRENT BUDGET	MONTHLY EXPENDITURES	YEAR-TO-DATE EXPENDITURES	PRIOR YEAR YEAR-TO-DATE	BUDGET REMAINING	% BUDGET REMAINING
6200.3410	BANK CHARGES	0	0	0.00	0.00	0.00	0.00	0.00
6200.6200	DEPRECIATION EXPENSE	0	0	0.00	0.00	0.00	0.00	0.00
6200.6202	SPECIAL PROJECTS	0	0	0.00	0.00	3,072.00	0.00	0.00
6200.7020	TRANSFER TO OPERATING	0	0	0.00	0.00	0.00	0.00	0.00
TOTAL SEWER R & R		0	0	0.00	0.00	3,072.00	0.00	0.00
TOTAL EXPENDITURES		0	0	0.00	0.00	3,072.00	0.00	0.00
REVENUES OVER/(UNDER) EXPENDITURES		0	0	0.00	18.24	(2,949.33)	(18.24)	0.00

Attachment 3F

Cash Reserves

(Water & Sewer)

CASH BALANCES - AUGUST 31ST, 2021

GENERAL FUND		
ENTERPRISE CKG/TOWN ACCT.	199,716.90	
LGIP GENERAL FUND	5,794,820.23	
TOTAL 10 -GENERAL FUND		5,994,537.13
WATER FUND		
O & M CKG. ENTERPRISE	(516,518.98)	
REVENUE FUND	471,048.56	
LGIP WATER REVENUE FUNDS	2,318,475.63	
US BANK DEBT SERV RESERV 2012	92,700.46	
US BANK DEBT SERV PRINCIP 2012	30,083.55	
US BANK DEBT SERV INT 2012	12,532.85	
2017 BOND CONSTRUCTION FUND	38,772.80	
2017 UTILITY BOND PRINCIPAL	93,508.87	
2017 UTILITY BOND INTEREST	19,770.02	
TOTAL 20 -WATER FUND		2,560,373.76
WATER R&R FUND		
LGIP WATER RENEWAL/REPLACE	391,534.48	
WATER RENEWAL/REPLACE CKG.	337,303.94	
TOTAL 22 -WATER R & R		728,838.42
SEWER		
ENTERPRISE CKG. SEWER	577,767.38	
LGIP SEWER DEPARTMENT	722,848.25	
TOTAL 30 -SEWER		1,300,615.63
SEWER R&R FUND		
SEWER RENEWAL/REPLACE CKG.	84,380.05	
LGIP SEWER RENEWAL/REPLACE	157,180.12	
TOTAL 32 -SEWER R & R		241,560.17
ATAX 65%		
ATAX 65% CHECKING	143,588.99	
LGIP ATAX 65% FUNDS	319,204.70	
TOTAL 40 -ATAX 65%		462,793.69
CIVIC CENTER		
CIVIC CENTER CHECKING	167,785.85	
TOTAL 45 -CIVIC CENTER		167,785.85
ALCOHOL PERMIT FUND		
ALCOHOL PERMIT CHECKING	23,743.07	
TOTAL 50 -ALCOHOL PERMIT FUND		23,743.07
HOSPITALITY FEE FUND		
HOSPITALITY FEE CHECKING	225,973.92	
LGIP HOSPITALITY FEE	214,586.12	
TOTAL 60 -HOSPITALITY FEE FUND		440,560.04
LOCAL ACCOMMODATIONS FUND		
LOCAL ACCOMMODATIONS CKG	245,166.97	
LGIP LOCAL ACCOMMODATIONS	158,636.31	
LGIP BEACH PRESERVATION	2,008,458.12	
TOTAL 70 -LOCAL ACCOMMODATIONS FUND		2,412,261.40
BEACH NOURISHMENT		
BEACH NOURISHMENT	0.00	
BEACH NOURISHMENT LOCAL FUND	50,107.01	
TOTAL 75 -BEACH NOURISHMENT		50,107.01
GENERAL EQUIP/VEHICLE		
GENERAL EQUIP/VEH REPL CKG	112,237.59	
LGIP GENERAL EQUIP/VEH REPL	893,452.64	
TOTAL 80 -GENERAL EQUIP/VEHICLE FUN		1,005,690.23
UTILITIES EQUIP/VEHICLE		
UTILITIES EQUIP/VEH REPL CKG	119,754.33	
LGIP UTILITIES EQUIP/VEH REPL	572,212.49	
TOTAL 90 -UTILITIES EQUIP/VEHICLE		691,966.82

Attachment 3G

Draft Capital Improvements Plan

Town of Edisto Beach - 5 YR Wastewater Capital Improvements Plan

Project Description	Budget Year	Project Budget	Funding Source
Upgrades to Pump Stations A and B	2022	$860,000.00	Local Funds / Grant Funds
Upgrades / Force Main Modifications for Cheehaw, Pompano, and Waterfront Pump Stations	2023	$300,000.00	
Upgrades / Force Main Modifications to Summerwinds, Bay Point, and Bay Creek Pump Stations	2023	$250,000.00	
Construction of Parallel Force Main from Connection Point of Pump Stations A, B & C to WWTP	2024	$300,000.00	
Installation of SCADA System	2024	$400,000.00	
WWTP Refurbishment	2025	$1,600,000.00	
Total		**$3,710,000.00**	

Attachment 4

Funding and Other Commitments

Attachment 4A

Letter of Commitment

Town of Edisto Beach

Town of Edisto Beach

September 10, 2021

Jackie Calvi Mack
Senior Program Manager
South Carolina Rural Infrastructure Authority
1201 Main Street, Suite 1600
Columbia, SC 29201

Re: Funding for Upgrades to Pump Station A and Pump Station B
Town of Edisto Beach

Dear Ms. Mack:

The Town of Edisto Beach is requesting grant funds to assist in upgrading Pump Station A and Pump Station B. The funding for engineering related costs has been secured through Colleton County. The Town hereby commits to provide all project related funding in excess of the RIA grant award amount and the funds from Colleton County. It is understood that the total project cost will be greater than the RIA and Colleton County funding, and the Town of Edisto Beach has sufficient reserve funds to cover any excess construction and non-construction costs.

Please let us know if you have any questions.

Sincerely,

Iris Hill
Town Administrator

Phone 843-869-2505 | Fax 843-869-3855
2414 Murray Street, Edisto Beach, S.C. 29438

Attachment 4B

Letter of Commitment

Colleton County

COLLETON COUNTY
SOUTH CAROLINA

MEMORANDUM

DATE: 08-27-2021

TO: Iris Hill, Town Administrator – Town of Edisto Beach

FROM: Kevin Griffin, County Administrator

RE: Funding for Edisto Beach Sewer

Mrs. Hill,

I am pleased to inform you that the Colleton County Council appropriated $112,000 in the 2021-2022 Colleton County Budget for sewer design for the Town of Edisto Beach. You can contact our Finance Director, Jon Carpenter, for transfer of these funds when needed.

Regards,

Attachment 4C

Certification for Right-of-Way, Property Acquisition & Easements

Town of Edisto Beach

September 10, 2021

Jackie Calvi Mack
Senior Program Manager
South Carolina Rural Infrastructure Authority
1201 Main Street, Suite 1600
Columbia, SC 29201

Re: Town of Edisto Beach – Upgrades to Pump Station A and Pump Station B

Dear Ms. Mack:

The Town of Edisto Beach appreciates the opportunity to apply for RIA grant funds for the Upgrades to Pump Station A and Pump Station B Project. The proposed upgrades will take place entirely within the Town's existing pump station buildings. There is no need for private easements, Right-of-Way encroachments, or property acquisition.

Please let us know if you have any questions.

Sincerely,

Iris Hill
Town Administrator

Phone 843-869-2505 | Fax 843-869-3855
2414 Murray Street, Edisto Beach, S.C. 29438