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Chair Rodriguez called the meeting to order and Ms. Cascio read the roll call of HRSD Commissioners.

Name	Title	Present for Item Nos.
Rodriguez, Stephen C.	Commission Chair	1-27
Elofson, Frederick N.	Commission Vice-Chair	1-27
Glenn, Michael E.	Commissioner	1-27
Lakdawala, Vishnu K.	Commissioner	1-27
Levenston, Jr., Willie	Commissioner	1-27
Stern, Nancy J.	Commissioner	1-27
Taraski, Elizabeth	Commissioner	1-27
Templeman, Ann	Commissioner	1-27

1. Awards And Recognition

Action: No action required.

Brief:

a. Service Award

Chair Rodriguez presented a service award to Ms. Jennifer Cascio, Commission Secretary, for 30 years of dedicated service. One of the many things that makes Jennifer so effective in her current role is her experience in many areas of our organization. Jennifer began her HRSD career in January of 1992 as a part-time Collections Clerk in Customer Service, and was hired full-time on July 8, as a Water Quality Clerk in what was then known as the Industrial Waste Division. Jennifer's talents were recognized, and she was promoted to Secretary in the Engineering Department in October of 1997, and again to Engineering Administrative Coordinator in November 2000. Jennifer was named to her current position of Commission Secretary on June 28, 2005. She received a Bachelor of Arts degree in Human Resources Administration that same year, in August.

Jennifer's role expanded to also provide administrative support to the newly formed Communications Department in 2017. She has been a valued contributor to that department, using her planning and coordination skills to help with HRSD events and assisting with graphic design coordination and review for annual HRSD publications. Jennifer has edited countless publications used by all departments and coordinated numerous special events. She has also provided her organizational skills to many volunteer efforts throughout her 30-year career, including coordinating the HRSD Pink Plungers in the "Making Strides Against Breast Cancer" walk.



b. Promotion Announcement

(1) Director of Operations

Mr. Bernas introduced Mr. Eddie Abisaab, who was recently promoted to Director of Operations. Eddie joined HRSD in 2008 and currently serves as the Chief of Design and Construction on the North Shore. Prior to HRSD, he worked as an engineer and project manager for both the private and public sectors. Eddie holds a Bachelor of Science in Civil Engineering from West Virginia University, and a Master of Science in Engineering Management from Marshall University. He is a licensed Professional Engineer, Project Management Professional, and an Envision Sustainability Professional.

Eddie served for 4 years on the Board of Directors of the Virginia Water Environment Association (VWEA) and as President in 2016-2017. He is also currently serving as the Secretary / Treasurer of VWEA. Eddie is a decorated military veteran and is still an active reservist as a Lieutenant Colonel. He has been HRSD's champion for the Wounded Warrior 5k Bronze Philanthropy Event and is passionate about service. He is also a Quality Facilitator and helped to developed HRSD's LAMA (Leadership And Management Academy) program.

(2) Chief of Treatment

Mr. Bernas introduced Matt Poe, who was recently promoted to Chief of Treatment for the Army Base-Chesapeake-Elizabeth-Virginia Initiative Plant (ACV) group. Matt was hired in 2011 as an Interceptor Engineer, then served as a Project Manager in the Engineering Department until his recent promotion. Matt holds a bachelor's in Civil Engineering and a Masters in Environmental Engineering from Old Dominion University. He is also a licensed Professional Engineer in Virginia, and an active participant in the Virginia Water Environment Association (VWEA) and the Water Environment Federation (WEF).

Attachment: None



2. Consent Agenda

Action: Approve the items listed in the Consent Agenda.

Moved: Vishnu Lakdawala Seconded: Michael Glenn

Roll call vote: Ayes: 8 Nays: 0

Brief:

a. Approval of minutes from previous meeting.

b. Contract Awards

1.	Employee Wellness Program Services	\$1,287,440
2.	Oracle E-Business Suite (EBS) Managed Services	\$960,000
3.	Work Safety Shoes	\$391,873

c. Task Order

1.	Army Base 24-inch and 20-inch Transmission Main	\$406,125
	Replacements	

2. <u>Atlantic Treatment Plant Master Plan</u> \$445,933

3. <u>Foxridge, Woodland Road, Fox Hill Road Gravity Sewer</u> \$277,967 Rehabilitation

4. King William Treatment Plant Improvements Phase II \$1,859,168

5. <u>SWIFT Program Management (Program Management Services</u> \$7,883,604 for FY-2023)

Item(s) Removed for Discussion: None

Attachment: #1



3. Town of Chincoteague Briefing

Action: No action required.

<u>CIP Projects</u>: ES010400 & ES010500

Regulatory Requirement: None

<u>Project Descriptions</u>: The Northern Accomack Wastewater Conveyance, Treatment, and Disposal Study (ES010400) will evaluate strategies to address both short-term and long-term wastewater conveyance, treatment, and disposal needs for northern Accomack County. The studies will consider wastewater treatment demand, conveyance constraints, capacity constraints at existing facilities, disposal alternatives for treated effluent, environmental impacts, and permitting. The attached <u>map</u> depicts the project location.

The Eastern Shore Infrastructure Improvements – Interim Plant Improvements project (ES010000) project will provide for treatment plant improvements to existing facilities on the Eastern Shore. Currently, there is need for improvements to the Onancock Treatment Plant Solid Handlings and the packaged plants located in the Town of Chincoteague.

The Chincoteague Treatment Plant project (ES010500) provides for the design and construction of a new treatment plant, outfall and appurtenances along with demolition of existing packaged treatment plants and site restoration. The treatment facility will be enclosed and include architectural treatment to conform with the character of Main Street. The project includes consolidation of permitted outfalls and increased treatment capacity for the Town of Chincoteague.

<u>Project Justifications</u>: Accomack and Northampton Counties were added to the HRSD service territory in October 2020. A regional initiative to provide centralized wastewater treatment to southern Accomack County and Northern Northampton County is underway. Accomack County and the Town of Chincoteague have requested HRSD investigate wastewater solutions for Northern Accomack County.

The existing Chincoteague packaged treatment plants owned by Sunset Bay Utilities and the Coast Guard are at the end of useful life. They are unable to meet aspects of Virginia Pollutant Discharge Elimination System (VPDES) permits. The interim treatment plant improvements will address these issues until a new treatment plant can be designed and constructed.

Permitted outfalls for Chincoteague are located in multiple locations and under private buildings and property. The Chincoteague permitted capacity should be consolidated to a single accessible outfall. Consolidation of the adjacent United States Coast Guard treatment facility is also being evaluated. This work is in accordance with the Capacity Assurance and



Connection, the Service Area Expansion, and the Regional Sewage Flow Projection Data Commission Adopted Policies.

The Town of Chincoteague is in the process of acquiring the Sunset Bay treatment plant through eminent domain and then convey it to HRSD. Before the legal actions begin, staff provided a <u>briefing</u> to the Commission on the proposed agreement.

Schedule: ES010500

PER January 2023 Design September 2023

Bid June 2024
Construction October 2024
Project Completion January 2027

<u>Discussion Summary</u>: HRSD was created to protect public health and the waterways of Hampton Roads. Managing wastewater systems in small communities and addressing failing septic tanks in small communities is difficult. Siting force mains and or treatment plants must be done strategically. Considerations include economics, feasibility of on-site systems, ability to obtain discharge permits, among others. There are often not enough customers in small communities to support the cost of the needed infrastructure. Adding infrastructure requires careful consideration of many common criteria and the consideration of the unique circumstances on a case-by-case basis. A feasibility study is underway to evaluate wastewater service in Northern Accomack County including the Town of Chincoteague and will include consideration of the impact of sea level rise.

The Town of Chincoteague is proceeding with the acquisition of two small treatment plants and the associated real property through eminent domain. The purpose is to establish some public wastewater treatment on Chincoteague Island, the Town will then convey the treatment plants and property to HRSD.

Chair Rodriguez asked staff to develop guidelines, rules and criteria to be used for future wastewater service area expansions.

Attachment: #2



4. Atlantic Treatment Plant Reliability & Odor Capital Improvement Program (ATP-ROCI): ATP Liquid Side Odor Evaluation and Improvements

ATP Gravity Belt Thickener and Pre-Dewatering Polymer Improvements

ATP Odor and Solids Improvements 2023

ATP Solids Curing Facility and Pad Improvements

Reduction in Scope and Appropriation, New CIP, and Initial Appropriation

Actions:

- a. Reduce scope and appropriation of the existing projects:
 - (1) ATP Solids Storage Pad Improvements (AT015100) to \$0
 - (2) ATP Gravity Belt Thickener Expansion (AT014900) to \$0
 - (3) ATP Polymer System Replacement (AT015000) to \$0
- b. Remove from the CIP:
 - (1) ATP Solids Handling Improvements and Odor Control Upgrades Phase I (AT015600) \$31,225,000
 - (2) ATP Solids Handling Improvements Waste Gas Flare Replacement (AT015700) to \$8,065,000
- c. Approve four new CIP projects:
 - (1) ATP Liquid Side Odor Evaluation and Improvements (AT015800)
 - (2) ATP Gravity Belt Thickener and Pre-Dewatering Polymer Improvements (AT015900)
 - (3) ATP Odor and Solids Improvements 2023 (AT016000)
 - (4) ATP Solids Curing Facility and Pad Improvements (AT016100)
- d. Appropriate total project funding in the amount of \$75,244,000 as detailed below.
 - (1) ATP Liquid Side Odor Evaluation and Improvements in the amount of \$2.016.000
 - (2) ATP Gravity Belt Thickener and Pre-Dewatering Polymer Improvements in the amount of \$6,395,000
 - (3) ATP Odor and Solids Improvements 2023 in the amount of \$55,103,000
 - (4) ATP Solids Curing Facility and Pad Improvements in the amount of \$11,730,000

Moved: Willie Levenston
Seconded: Frederick Elofson

Roll call vote: Ayes: 8 Nays: 0



<u>CIP Project</u>: AT015100, AT014900, AT015000, AT015600, AT015700, AT015800, AT015900, AT016000, AT016100

Regulatory Requirement: None

<u>Project Description:</u> These projects will provide for treatment plant improvements to Atlantic Treatment Plant. These improvements will increase treatment reliability and minimize offsite odors for the surrounding community.

<u>Project Justification</u>: There has been an increase in odor complaints around the Atlantic Treatment Plant in calendar year 2022 since the implementation of the new solids handling process and the diversion of all Chesapeake-Elizabeth Treatment Plant flow. These projects include design and construction to perform needed solids handling and odor control upgrades at the Atlantic Treatment Plant. Four CIP projects included in this effort are:

ATP Liquid Side Odor Evaluation and Improvements (AT015800):

 Evaluate and address any potential odors not captured as part of the ATP Odor and Solids Improvements 2023 CIP, to include Odor Control Stations B and D and the areas they serve from the headworks, through the primary clarifiers, and the covered portions of the aeration tanks.

ATP Gravity Belt Thickener and Pre-Dewatering Polymer Improvements (AT015900):

- Since the diversion of the Chesapeake-Elizabeth Flows to the Atlantic Treatment Plant, at peak solids loadings, the plant requires a fourth gravity belt thickener to maintain redundancy.
- The pre-dewatering polymer systems at Atlantic Treatment Plant does not meet expected performance and is often the root cause of failures in the pre-dewatering system. Upgrading the system will minimize such failures. Upgrades to the thickening polymer system that is adjacent to the pre-dewatering polymer system will allow for standardization, operating cost minimization, and additional operational flexibility.

ATP Odor and Solids Improvements 2023 (AT016000):

- Demolish the old high-purity oxygen tanks and construct two gravity thickeners in their place. This will allow for thickening of primary solids outside of the rectangular primary clarifiers which will protect the chain and flight mechanisms and allow for effective operation of the primary clarifiers.
- Replace the outdated Odor Control Stations (OCS) A & C with a new odor control station that has the capacity to serve areas currently treated by OCS A & C as well as the gravity thickeners, scrubbed digester annular space and Dystor cover vents, and the primary fermenter.
- Assess the overall digester gas system and upgrade as necessary. This will include replacing the current flares with enclosed flares to reduce offsite odors and eliminate a visible flame as well as covering and scrubbing both the annular space around the



floating covers on Digesters 1 through 4 and the vents from the Dystor covers on Digesters 5 and 6.

- Install an additional Cambi B6 skid, screw loadout from the existing pre-dewatering hopper, and a third FOG tank to improve reliability, increase capacity, and provide more operational flexibility.
- Retrofit the existing Digested Solids Storage Tank to allow for post-digestion struvite precipitation to protect downstream equipment.

ATP Solids Curing Facility and Pad Improvements (AT016100):

- Enclose and scrub a portion of the South Biosolids Pad to allow for curing of biosolids without producing offsite odors. Once the solids are cured, they can then be moved to open areas on the biosolids pads with less potential for producing offsite odors.
- Increase wall height around the remaining, uncovered portion of the South Biosolids Pad to allow for higher stacking of cured biosolids.
- Construct a conveyor that runs from the newly constructed curing area to the North Biosolids Pad.
- Repair degraded support columns on both the North and South Biosolids Pads.

<u>Funding Description</u>: Several existing and future projects will be incorporated into four proposed projects as follows:

			Spent to					New CIP	Total based on
CIP Number	Project Name			Status	C	urrent CIP	Α	ppropriation	Increase or
		Ŧ	Date	T		▼		Needed *	(Reduction)
AT015100	ATP Solids Storage Pad Improvements	\$	20,568	Halt	\$	1,000,550	\$	-	\$ (1,000,550)
AT014900	ATP Gravity Belt Thickener Expansion	\$	489,483	Halt	\$	6,709,050	\$	-	\$ (6,709,050)
AT015000	ATP Polymer System Replacement	\$	219,750	Halt	\$	3,032,660	\$		\$ (3,032,660)
	ATP Solids Handling Improvements and								
AT015600	Odor Control Upgrades Phase I	\$	-	Remove	\$	31,225,000	\$	-	\$ (31,225,000)
	ATP Solids Handling Improvements								
AT015700	Waste Gas Flare Replacement	\$	- 4	Remove	\$	8,065,000	\$	4	\$ (8,065,000)
	ATP Liquid Side Odor Evaluation and								
AT015800	Improvements	\$	-	New	\$	-	\$	2,016,000	\$ 2,016,000
	ATP Gravity Belt Thickener and Pre-								
AT015900	Dewatering Polymer Improvements	\$		New	\$	+	\$	6,395,000	\$ 6,395,000
	ATP Odor and Solids Improvements								
AT016000	2023	\$	-	New	\$	-	\$	55,103,000	\$ 55,103,000
	ATP Solids Curing Facility and Pad								
AT016100	Improvements	\$		New	\$	+	\$	11,730,000	\$ 11,730,000
	Tot	al \$	729,801		\$!	50,032,260	\$	75,244,000	\$ 25,211,740

Staff provided a <u>briefing</u> during the meeting.



Schedule: PER December 2022

Design June 2023
Bid February 2024
Construction May 2024
Project Completion May 2026

<u>Discussion Summary</u>: Staff explained the difference between Class A and Class B biosolids. They also stated the entire CIP program is being reviewed to determine priorities and to make sure each project is completed at an appropriate time.

Attachment: #3



5. Atlantic Treatment Plant Secondary Clarifier Effluent Weir Replacement Initial Appropriation

Action: Appropriate total project funding in the amount of \$2,645,000.

Moved: Michael Glenn
Seconded: Vishnu Lakdawala

Roll call vote: Ayes: 8 Nays: 0

CIP Project: AT015500

<u>Project Description</u>: This project will replace secondary clarifier effluent weirs, launders, and add new covers to the weirs for Secondary Clarifiers 1 through 4.

<u>Project Justification</u>: The effluent weirs are failing in all four of the secondary clarifiers due to age and sun exposure. This project will replace all weirs, to include the launders, and will include the purchase and installation of covers to prevent UV degradation on the fiberglass weirs.

<u>Funding Description</u>: The total project cost estimate of \$2,645,000 includes \$2,325,170 for construction and \$319,830 of project contingency.

Schedule: Construction November 2022

Project Completion June 2023

Attachment: None



6. Bloxoms Corner Force Main Replacement Additional Appropriation, Contract Award (>\$200,000) and Task Order

Actions:

- a. Appropriate additional funding in the amount of \$2,542,755.
- b. Award a contract to Bridgeman Civil, Inc. in the amount of \$4,880,975.
- c. Approve a task order with Kimley-Horn and Associates, Inc. (Kimley) in the amount of \$503,354.

Moved: Vishnu Lakdawala Seconded: Willie Levenston

Roll call vote: Ayes: 8 Nays: 0

CIP Project: BH015900

Regulatory Requirement: Rehab Action Plan Phase 2 (2025 Completion)

Budget	\$3,495,808
Previous Expenditures and Encumbrances	(\$409,234)
Available Balance	\$3,086,574
Proposed Task Order to Kimley	(\$503,354)
Proposed Contract to Contractor	(\$4,880,975)
Proposed Contingency	(\$245,000)
Project Shortage/Requested Additional Funding	(\$2,542,755)
Revised Total Project Authorized Funding	\$6,038,563

Contract Status with Task Orders:	Amount
Original Contract with Kimley	\$81,500
Total Value of Previous Task Orders	\$321,500
Requested Task Order	\$503,354
Total Value of All Task Orders	\$824,854
Revised Contract Value	\$906,354
Engineering Services as % of Construction	18.6%

Type of Procurement: Competitive Bid

In accordance with HRSD's competitive sealed bidding procedures, the Engineering Department advertised and solicited bids directly from potential bidders. The project was advertised on May 23, 2022, and three bids were received on June 22, 2022. The bids received are listed below:



Bidder	Bid Amount
Bridgeman Civil, Inc.	\$4,880,975
Henry S. Branscome, LLC	\$7,358,535
Gaston Brothers Utilities, LLC	\$10,987,654

Engineer Estimate:

\$6,285,680

The design engineer, Kimley evaluated the bids based upon the requirements in the invitation for bid and recommends award to the lowest responsive and responsible bidder Bridgeman Civil, Inc. in the amount of \$4,880,975.

<u>Project Description</u>: This project includes the replacement of approximately 5,900 linear feet of 8-inch cast iron HRSD force main with 12-inch HDPE force main along Old Buckroe Road and Buckroe Avenue between Fox Hill Road and Seabord Avenue. The project also includes replacement of approximately 450 linear feet of existing 20-inch asbestos concrete HRSD force main along Foxhill Road with 20-inch and 12-inch ductile iron force main, replacement of approximately 300 linear feet of existing City of Hampton 8-inch cast iron force main with 8-inch ductile iron force main along Colonial Acres Drive, and the installation of a polymer concrete manhole connecting to the Seaboard Avenue Gravity Sewer Interceptor within Seaboard Avenue. The attached <u>map</u> depicts the project location.

<u>Contract Description</u>: This contract is for construction phase services with Bridgeman Civil, Inc. in the amount of \$4,880,955.

<u>Task Order Description</u>: This task order will provide construction administration and construction inspection services for the subject project. HRSD and the design engineer, Kimley-Horn and Associates, negotiated a fee in the amount of \$503,354. The fee proposal is comparable to other projects of similar size and complexity.

<u>Funding Description</u>: The original CIP project estimate did not foresee the current market conditions as they relate to inflation, labor shortages and long lead times for materials. This request includes a 5.0 % contingency to accommodate any unforeseen conditions. Additional appropriation is being requested for construction contract award and construction phase services. The amount for this work exceeds the balance available for this CIP project by \$2,542,755.

Analysis of Cost: Three bids were received and evaluated based upon the requirements of the Invitation for Bid. Bridgeman Civil, Inc. is the apparent low bidder with a bid amount of \$4,880,975. The Engineer's estimate was in line with two of the three bids submitted, while the high bid amount is approximately 75% higher than the engineer's estimate. The low bid amount by Bridgeman Civil is within - 22.4% of the Engineer's Opinion of Probable Construction Costs (OPCC). The second low bid amount by Henry S. Branscome, LLC is within 17.1% of the Engineer's OPCC.



The primary drivers for the cost differential between the Bridgeman Civil bid and the Engineer's OPCC was the pipeline bid items (12" HDPE pipe and 24" DI). It is likely Bridgeman's familiarity with pipe installation is resulting in a higher production rate and ultimately lower per foot cost installation. Additionally, based on past experience working with Bridgeman Civil they own a significant amount of the equipment necessary to self-perform the work. This likely contributed to the cost differential between the Bridgeman Civil bid and the Engineer's OPCC as Bridgeman does not incur some of the same subconsultant markup or supplier rental costs and are reflected in the mobilization and maintenance of traffic bid items. The information herein supports the award of this construction contract to Bridgeman Civil, Inc. as the lowest responsive bidder in the amount of \$4,880,975.

Schedule: Construction September 2022

Project Completion November 2023

Attachment: #4



7. Bowers Hill Interceptor Force Main Section I Emergency Replacement New CIP and Initial Appropriation

Actions:

- a. Approve a new CIP project.
- b. Appropriate total project funding in the amount of \$3,500,000.

Moved: Michael Glenn
Seconded: Vishnu Lakdawala

Roll call vote: Ayes: 8 Nays: 0

CIP Project: NP015210

Regulatory Requirement: None

Budget	\$3,500,000
Previous Expenditures and Encumbrances	(0)
Available Balance	\$3,500,000

<u>Project Description</u>: This emergency replacement of the Bowers Hill Interceptor Force Main Section I is under construction after declaration of emergency on July 15, 2022. On April 23, a force main failed near <u>3025 Gum Court in Chesapeake</u>. Bridgeman Civil, Inc. (BC) immediately mobilized on-site and repaired the failure. BC subsequently worked with Hazen and Sawyer (Hazen) to provide condition assessment on the pipeline near the failure and found severe corrosion near where the pipeline goes under Interstate-664. A previous emergency declaration was pronounced on May 3, 2022 that authorized BC to repair the failure and complete the condition assessment.

Staff will utilize the Prompt Repair On-Call Services contractor, BC, to rehabilitate and/or replace the 36-inch ductile iron (DI) force main and restore the area impacted by the construction. BC has the resources required to accomplish this work and also install a linestop and bypass to keep the force main in use during the rehabilitation and/or replacement efforts. HRSD benefits from having BC engaged in this effort under the On-Call Services contract which will result in cost and time savings. Staff will also utilize the On-Call General Engineering consultant, Hazen, to provide construction administration and inspection while BC completes the rehabilitation and/or replacement.

<u>Funding Description</u>: The total cost for this project is estimated at \$3,500,000 based on a Class 5 cost estimate and a 10 percent contingency included in the requested appropriation. The scope of this cost estimate includes costs for the force main rehabilitation and/or replacement, restoration, and construction administration and inspection. These estimates have been reviewed by staff and are considered reasonable.



<u>Analysis of Cost</u>: The cost for this emergency project is based on engineer review and negotiated cost and is in agreement with other similar efforts from firms.

Schedule: Emergency Declaration July 2022

Construction July 2022

Project Completion November 2022

Attachment: #5



8. Fleet Management Fiscal Year 2023 Initial Appropriation

Action: Appropriate total project funding in the amount of \$2,867,920.

Moved: Ann Templeman Seconded: Michael Glenn

Roll call vote: Ayes: 8 Nays: 0

CIP Project: GN018500

<u>Project Description</u>: This project will provide for replacement of aging fleet vehicles and the purchase of additional vehicles to meet the needs of the organization for Fiscal Year 2023.

Funding Description: The initial appropriation for the project is based on cost estimates from vehicle manufacturers and state contracts. Funding for the additional fiscal years in the CIP will be requested each year. The amount provided in the CIP for the following is significantly higher due to vehicle price increases, electric vehicle infrastructure, and sewer flusher equipment. Planned replacements for FY-2023 are included in the table below. Actual replacements may change within the total appropriation based on final purchase price, delivery schedule or other emerging needs. Vehicle replacement for gasoline driven engines is evaluated for replacement when mileage meets or exceeds 100,000 miles and diesel driven engines are evaluated at 200,000. Vehicles are then compared to high maintenance cost and down time.

Funding includes a 10% contingency for inflation and supply chain issues.



Vehicle No.	Department	New Vehicle to be Purchased	Vehicle Replacement Cost
14	Small Communities Division	Crew Cab 4X4 Utility Body Diesel	\$60,000
350	South Shore Interceptors	Sewer Flusher	\$650,000
82	South Shore Interceptors	Pickup with Utility Body	\$70,000
189	North Shore Engineering	4x2 SUV	\$37,000
261	Electrical and Instrumentation	Cargo Van	\$43,750
307	Electrical and Instrumentation	Pickup with Utility Body	\$70,000
69	North Shore Interceptors	Cargo Van	\$43,750
383	Electrical and Instrumentation	Cargo Van	\$43,750
90	South Shore Interceptors	M2 Crew Truck with Crane	\$270,000
442	South Shore Interceptors	Mid-size Pickup with Extended Cab	\$46,250
455	South Shore Interceptors	Mid-size Pickup with Extended Cab	\$46,250
101	Pretreatment and Pollution Prevention	Pickup Truck	\$40,000
142	Pretreatment and Pollution Prevention	Pickup Truck	\$40,000
106	Electrical and Instrumentation	Cargo Van	\$43,750
362	Electrical and Instrumentation	Cargo Van	\$43,750
429	Electrical and Instrumentation	Cargo Van	\$43,750
136	Water Quality	4x4 SUV	\$40,850
288	North Shore Interceptors	4x4 SUV	\$40,850
209	South Shore Interceptors	M2 Crew Truck	\$234,000
234	South Shore Interceptors	Pickup with Utility Body	\$70,000
414	North Shore Interceptors	Pickup with Utility Body	\$70,000
New	Central Environmental Lab	Extended Wheelbase Cargo Van	\$52,000
New	Support Systems	Live Bottom Ash Trailer	\$170,000
New	Onancock Treatment Plant	4X4 Extended Cab Pickup with Utility Body and Crane	\$87,500
New	Electrical and Instrumentation	Electric Vehicle Infrastructure	\$250,000
		Estimated Cost	\$2,607,200
		Contingency (10%)	\$260,720
		Total	\$2,867,920

Attachment: None



9. King William Main Pump Station Improvements Initial Appropriation

Action: Appropriate total project funding in the amount of \$1,655,500.

Moved: Vishnu Lakdawala Seconded: Willie Levenston

Roll call vote: Ayes: 8 Nays: 0

CIP Project: MP015800

Regulatory Requirement: None

Project Description: This project will provide improvements and/or replacement of the existing King William Main Pump Station (KWMPS) to include hydraulic capacity upgrades, a new metering vault and discharge monitoring, pre-cast power and controls building, replacement of the permanently mounted standby pump or installation of a new generator, and new property acquisition and expansion of the existing site and parking area. The attached <a href="mailto:mail

Project Justification: The KWMPS pumps all flow generated by King William County to the existing treatment plant. This pump station will be upgraded to meet these new hydraulic requirements to facilitate the capacity upgrades currently underway at the treatment plant. The antiquated and outdoor existing timber structure, electrical controls and power rack, and other ancillary equipment will be replaced so that the design life of the pump station matches that of the new treatment plant. Additionally, the existing permanently mounted standby pump does not meet the capacity requirements and will either need to be upgraded or replaced with an emergency power supply in cases of outages for the station. This project will correct these deficiencies and bring this facility to current HRSD standards.

Analysis of Cost: The total project cost estimate of \$1,655,500 includes approximately \$86,700 in PER phase services, \$108,400 in design phase services, \$4,000 in pre-construction services, \$1,235,600 in construction phase services, \$4,000 in closeout phase services. This project also has a contingency budget of \$216,800 which is approximately 15 percent of the project cost. The cost estimate is based on a Class 5 CIP-prioritization level cost estimate prepared by HRSD. Engineering services will be completed by Gannett Fleming, LLP under the General Services annual services contract and the cost for the initial design task order is below the \$200,000 Commission approval threshold.

Schedule: PER August 2022

Design July 2023
Bid March 2024
Construction June 2024
Project Completion April 2025

Attachment: None #6



10. Nansemond Treatment Plant Solids Handling Transformer Replacement New CIP, Initial Appropriation and Task Order (>\$200,000)

Actions:

- a. Approve a new CIP project (NP015300) for the Nansemond Treatment Plant Solids Handling Transformer Replacement.
- b. Appropriate total project funding in the amount of \$303,330.
- c. Approve a task order with REW Corporation in the amount of \$252,775.

Moved: Michael Glenn
Seconded: Ann Templeman

Roll call vote: Ayes: 8 Nays: 0

CIP Project: NP015300

Regulatory Requirement: None

Budget	\$303,330
Previous Expenditures and Encumbrances	(\$0)
Available Balance	\$303,330

Contract Status:	Amount
Original Contract with REW Corporation	\$0
Total Value of Previous Task Orders	\$2,354,643
Requested Task Order	\$252,775
Total Value of All Task Orders	\$2,607,418
Revised Contract Value	\$2,607,418

<u>Project Description</u>: This project will replace a failed 3500 kVA medium voltage <u>transformer</u> at the Nansemond Treatment Plant. The transformer feeds various critical processes such as but not limited to: Preliminary Treatment, Dewatering, Methanol, Centrifuge, Centrate, and Gravity Belt Thickening.

<u>Task Order Description</u>: This task order will provide for the installation of a transformer, concrete pad, medium voltage 5kV cables, electrical duct bank, visual inspection of bus duct, ensuring that conduits clear and free, and site restoration. In addition, this project will include startup, testing, and commissioning of the transformer.

<u>Analysis of Cost</u>: The cost for this task order is based on previously negotiated annual services contract rates for labor plus the cost of materials.



This work is in accordance with the Procurement Commission Adopted Policy.

Schedule: Construction August 2022

Project Completion October 2022

Attachment: #7



11. Solids System Improvements for Army Base Treatment Plant Multiple Hearth Incinerator (MHI) Offline
Additional Appropriation, Contract Award (>\$200,000) and Task Order (>\$200,000)

Actions:

- a. Appropriate additional funding in the amount of \$1,412,494.
- b. Award a contract to MEB General Contractors, Inc. in the amount of \$4,273,000.
- c. Approve a task order with HDR Engineering, Inc. in the amount of \$675,013.

Moved: Vishnu Lakdawala Seconded: Elizabeth Taraski

Roll call vote: Ayes: 8 Nays: 0

CIP Project: GN017900

Regulatory Requirement: None

Budget	\$4,400,000
Previous Expenditures and Encumbrances	(\$650,831)
Available Balance	\$3,749,169
Proposed Contract to MEB	(\$4,273,000)
Proposed Task Order to HDR	(\$675,013)
Proposed Contingency	(\$213,650)
Project Shortage/Requested Additional Funding	(\$1,412,494)
Revised Total Project Authorized Funding	\$5,812,494

Contract Status with Task Orders:	Amount
Original Contract with Engineer	\$0
Total Value of Previous Task Orders	\$650,830
Requested Task Order	\$675,013
Total Value of All Task Orders	\$1,325,843
Revised Contract Value	\$1,325,843
Engineering Services as % of Construction	14.8%

Type of Procurement: Competitive Bid

In accordance with HRSD's competitive sealed bidding procedures, the Engineering Department advertised and solicited bids directly from potential bidders. The project was advertised on May 23, 2022, and three bids were received on June 23, 2022. The bids received are listed below:



Bidder	Bid Amount
MEB General Contractors, Inc.	\$4,273,000
Crowder Construction Company	\$5,611,000
Bridgeman Civil, Inc.	\$6,100,000

Engineer Estimate:

\$7,852,000

The design engineer, HDR Engineering, Inc., evaluated the bids based upon the requirements in the invitation for bid and recommends award to the lowest responsive and responsible bidder, MEB General Contractors, Inc., in the amount of \$4,273,000.

<u>Project Description:</u> This project will install thickened liquid solids load out facilities at Army Base Treatment Plant (ABTP) and thickened liquid solids load in facilities at Atlantic Treatment Plant (ATP) and Virginia Initiative Plant (VIP). Completed facilities will leverage existing solids handling capacity at receiving plants to remove solids handling facilities at ABTP from operation including dewatering and multiple hearth incinerator (MHI) operations. The attached <u>map</u> depicts the project location.

<u>Project Justification</u>: The project is projected to reduce net annual operating expenses for ABTP solids management by approximately \$100,000 per year. Removing ABTP solids handling systems from operation will reduce baseline operational staffing requirements at ABTP by four Plant Operators, one Maintenance Operator, and one Maintenance Operator Assistant; reduce electrical energy requirements at ABTP by 27 percent; and reduce net carbon emissions associated with ABTP solids management (inclusive of contract hauling of thickened liquid sludge) by 2,880 tons CO2e/year (35% of current ABTP net annual emissions). Removing ABTP MHI from operation mitigates regulatory risk of CAA129 MACT standards non-compliance.

<u>Contract Description</u>: This construction contract will provide all labor, material and equipment for the installation of two new liquid solids loading facilities at ABTP, one new liquid solids unloading facility at VIP and one new liquid solids unloading facility at ATP, all ancillary equipment and components, and modifications to existing facilities.

<u>Task Order Description</u>: This task order will provide contract administration and construction inspection (CACI) during the construction of this project. The contract administration services include shop drawing approval, review of monthly invoices, and assurance that materials used by the contractor meet the requirements for the DEQ VCWRLF. The construction inspection services are for the construction at the Army Base, VIP and Atlantic Treatment Plants.



Analysis of Cost: The task order for HDR has been reviewed and is reasonable. It is based on proposed hours and hourly rates negotiated in the General Engineering Services annual services contract. The fee for contract administration is 8.9% of construction cost. Contract administration is typically around 6% of construction cost; however, this project is funded by the Virginia Clean Water Revolving Loan Fund which requires extra administration to track American Iron and Steel requirements, De Minimis, Davis Bacon rates and MBE/WBE. Construction inspection is 5.9% of construction cost which aligns with other similar efforts of firms. The construction bid amount and the fee for construction related engineering services exceed the current balance available for the CIP project. The additional funding request includes a 5% contingency for any unforeseen conditions.

Schedule: Design October 2020

Bid May 2022 Construction August 2022 Project Completion February 2024

Attachment: #8



12. Jefferson Avenue Interceptor Force Main Replacement Phase III
Easement Acquisition
12120, 12150 and 12132 Jefferson Avenue, Newport News, Virginia, 23602

<u>Action</u>: Approve the purchase of three permanent easements from three parcels each owned by Lea Company, LLC as follows: 5,327 square feet from Tax Map 151-00-05-08; 190 square feet from Tax Map 151-00-05-05; and 5,716 square feet from Tax Map 151-000-05-03 for a total of \$158,300 and authorize the General Manager to execute same and related acquisition documents in accordance with those terms and conditions substantially as presented, together with such changes, modifications and deletions as the General Manager may deem necessary and as approved by counsel.

<u>Moved</u>: Vishnu Lakdawala **Seconded**: Michael Glenn

Roll call vote: Ayes: 8 Nays: 0

CIP Project: JR011730

Regulatory Requirement: None

Budget	\$11,039,588
Previous Expenditures and Encumbrances	(\$1,714,732)
Available Balance	\$9,324,856

<u>Project Description</u>: This project will replace approximately 9,000 linear feet (LF) of 12-inch, 14-inch, and 16-inch HRSD force main (FM) from the intersection of Route 171 (Oyster Point Road) and Jefferson Avenue to the proposed Patrick Henry jumper. A preliminary hydraulic and capacity analysis revealed that pressures in the HRSD force main are hindering the City of Newport News' pump stations from entering the HRSD system during high flow conditions. Future development is planned for the service area, which will exacerbate the current problem. Construction of this project will also provide additional capacity and system flexibility when combined with other proposed improvements.

As part of the project, HRSD will require 15 temporary and permanent easements. The subject easement acquisition cost is above the \$25,000 threshold as defined in HRSD's Policy Guidelines and will require Commission approval.

The <u>Purchase Agreement</u> is attached and upon approval, the conveyance Deed will be forthcoming. The final Deed will be reviewed by HRSD staff and legal counsel before execution. The attached plat and map depict the project and easement location.



<u>Analysis of Cost</u>: The cost for the easement is based upon an appraisal by Dove Valuations, Inc. as well as a negotiated settlement with the property owner, which includes estimated impact to Landowner and costs for lender releases on the property.

Attachment: #9



13. Middlesex Interceptor System Program Phase II – Transmission Force Main Acquisition of Real Property 8210 Waverly Lane, Gloucester, Virginia (Tax Map 26-109)

Action: Approve the fee simple purchase of property identified as Tax Map 26-109 (+/-2.0 Acres), located at 8210 Waverley Lane, Gloucester, Virginia, for \$70,000 in accordance with the terms and conditions of the Purchase and Sale Agreement with Timmy Martin Cash, owner of subject property (Seller) and authorize the General Manager to execute same and related acquisition documents in accordance with those terms and conditions substantially as presented, together with such changes, modifications and deletions as the General Manager may deem necessary and as approved by counsel.

Moved: Michael Glenn
Seconded: Willie Levenston

Roll call vote: Ayes: 8 Nays: 0

CIP Project: MP013730

Regulatory Requirement: None

Budget \$33,027,000
Previous Expenditures and Encumbrances (\$3,762,657)
Available Balance \$29,264,343

<u>Project Description</u>: The overall purpose of this project is to develop sewer service areas in Middlesex County and includes the construction of a 3.2-mile force main from Urbanna to Cook's Corner in addition to a 13-mile force main along Route 33 in Middlesex County from Cook's Corner to the Mathews Force Main (FM). This interceptor system will convey wastewater from Middlesex County to the York River Treatment Plant (YRTP) and be able to decommission both the Urbanna Treatment Plant and Central Middlesex Treatment Plant permanently. The system consists of pump stations, potential storage, and an interceptor force main. Acquisition of the subject site will facilitate this effort and was determined to be the most feasible site upon which to build.

The <u>Purchase Agreement</u> is attached and upon approval, the conveyance Deed will be forthcoming. The final Deed will be reviewed by HRSD staff and legal counsel before execution. The attached <u>map</u> depicts the project and easement location.

<u>Analysis of Cost</u>: The acquisition cost of \$70,000 is based upon a negotiated settlement with the landowner.

Attachment: #10



14. Ethics Policy Commission Adopted Policy

Action: Approve revised policy.

Moved: Vishnu Lakdawala Seconded: Ann Templeman

Roll call vote: Ayes: 8 Nays: 0

Brief: The Ethics Policy is one of several policies specifically identified as requiring annual review by the Operations and Nominations (O&N) Committee in the Commission Governance Guidelines. The Commission approved the original Ethics Policy in October 2015 in response to the Ethics Reform Bill passed during the 2015 session. An argument could be made (and has in the past) that Chapter 31 of Title 2.2, the State and Local Government Conflict of Interests Act does not apply to HRSD as we fall somewhere between a state agency and a local government. Despite this ambiguity, given the political climate at the time and HRSD's desire to continue to operate as a model governmental entity, staff proposed the policy and the Commission adopted it.

There were no changes related to the Virginia Public Procurement Act this year. The one change proposed to this <u>policy</u> resolves inconsistent language related to the amount of time and disclosure allowed under Procurement type transactions versus all other transactions. The proposed change prohibits Commissioners and Employees at the Chief level or above from engaging in transactions for compensation with HRSD for 12 months postemployment. All other employees would provide a written notification of any HRSD engagement, which is consistent with existing language in the Virginia Public Procurement Act, specifically § 2.2-3104 Prohibited conduct for certain officers and employees of state government, where the 12-month prohibition is for higher level employees.

The existing language is unnecessarily strict for many employees that retire from HRSD with decades of dedicated service. The probability that these employees have engaged in unethical behavior is very low. By modifying our ethics policy to be more in-line with existing code, we can create a true win-win; HRSD can leverage their knowledge and expertise, particularly in this tough job market, and the former employee can continue to provide for their families.

Changes to this policy will be incorporated into the biannual training for employees, as required by the policy, which is due this year. The Commission General Counsel, Ms. Robyn Hansen, of Sands Anderson will provide an overview of ethics and conflict of interest for the Commission in August, which will meet the periodic training requirement per the policy for Commission members.

Attachment: #11



15. Commission Governance Guidelines

Action: Approve changes to the HRSD Commission Governance Guidelines.

Moved: Vishnu Lakdawala Seconded: Willie Levenston

Roll call vote: Ayes: 8 Nays: 0

<u>Brief</u>: The Commission Governance Guidelines is one of several policies specifically identified as requiring periodic review by the Operations & Nominations (O&N) Committee. Acting upon a suggestion by a Commissioner to streamline Commission meetings, staff proposed several changes to the Commission Governance Guidelines to change the threshold for items to be included on the Consent Agenda. Those changes along with several "housekeeping measures" were reviewed by the O&N Committee and are presented for Commission approval in the attached revised <u>Commission Governance</u> Guidelines.

Summary of Key Changes:

Section 1

Updates to ensure consistency with the Enabling Act

Section 2

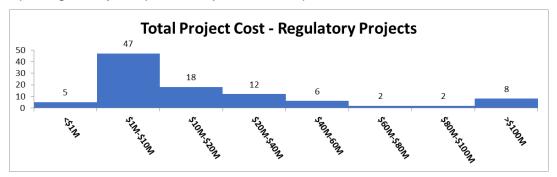
New Signatory Authorization section

Section 3

Defines Regulatory Required Projects

Section 4

- Full Agenda Items
 - More than 5% of original appropriation and more than \$200,000
 - Except Regulatory Required Projects and Capitalizable Labor below \$10 million



Proposal Compensation for alternative delivery contracts



- Consent Agenda Items
 - Equal to or less than 5% of original appropriation and less than \$200,000
 - Regulatory Required Projects and Capitalizable Labor below \$10 million

Section 5

Updated frequency

Section 7

• Deleted, repeats Section 1, B, 2.

Attachment: #12



16. **DEPUTY GENERAL MANAGER SIGNATORY AUTHORITY**

Action: Adopt resolution.

Moved: Michael Glenn Seconded: Elizabeth Taraski

Roll call vote: Ayes: 8 Nays: 0

<u>Brief</u>: As of July 1, 2022, HRSD created a new Deputy General Manager (DGM) position to oversee the general administrative functions of the organization and to provide redundancy for the General Manager. As such, staff are recommending that the DGM have the same signatory authority as the General Manager, which will only be exercised if the General Manager is not available. This will ensure the organization can continue to function efficiently in the General Manager's absence. The attached <u>resolution</u> was prepared by HRSD legal counsel.

Attachment: #13



17. Appointment of Treasurer

<u>Action</u>: Appoint Mr. Steven G. de Mik, Deputy General Manager and Chief Financial Officer, as Treasurer of the Commission, effective July 26, 2022.

Moved: Ann Templeman Seconded: Michael Glenn

Roll call vote: Ayes: 8 Nays: 0

Brief: In accordance with the Enabling Act, the Commission must appoint a Treasurer:

"The Commission shall appoint a secretary, who may or may not be a member of the Commission, and a treasurer, who shall not be a member of the Commission. The compensation of the secretary and of the treasurer shall be fixed by the Commission. The secretary and the treasurer shall serve at the pleasure of the Commission."

The Enabling Act also authorizes the Commission "to employ, in its discretion,...such other officers, employees and agents as may be necessary in its judgment..."

The Enabling Act does not enumerate any specific duties for the Treasurer, a role that customarily has been filled by HRSD's Director of Finance.

Steve de Mik joined HRSD in 2008 and was named Deputy General Manager and Chief Financial Officer, effective July 1, 2022. Steve served as HRSD's Director of Operations from 2015 to 2022 and as the Director of Finance and Chief Financial Officer from 2008 to 2015. Before joining HRSD, Steve served for seven years as the Director of Finance and Business Services for the City of Norfolk. A certified public accountant, he holds an MBA from the College of William and Mary and has completed the Kenan-Flagler Water and Wastewater Leadership Program, the Virginia Natural Resources Leadership Program and CIVIC Leadership Institute. He received a bachelor's degree in accounting and business administration from Southwest Baptist University in Bolivar, Missouri. Steve also serves as a board chair and treasurer for Heart for Orphans, a nonprofit organization based in the City of Williamsburg, Virginia.

Staff recommend the Commission appoint Mr. de Mik who previously served in this role from June of 2008 to May of 2015.

HRSD legal and bond counsel have reviewed this recommendation.

Attachment: None



18. Appointment of Assistant Secretary to the Commission

<u>Action</u>: Appoint Ms. Elizabeth "Libby" Scott as the Assistant Secretary to the Commission, effective July 26, 2022.

Moved: Michael Glenn
Seconded: Vishnu Lakdawala

Roll call vote: Ayes: 8 Nays: 0

<u>Brief</u>: The Enabling Act requires the Commission to appoint a secretary. In 2008, the Commission recognized the duties for the Secretary as specified in the Enabling Act (see excerpt below) can be time sensitive, depending on the requested information.

Excerpt from the Enabling Act:

"The Commission shall appoint a secretary, who may or may not be a member of the Commission, and a treasurer, who shall not be a member of the Commission. The compensation of the secretary and of the treasurer shall be fixed by the Commission. The secretary and the treasurer shall serve at the pleasure of the Commission.

The secretary shall keep a record of the proceedings of the Commission and shall be custodian of all books, documents and papers filed with the Commission and of the minute book or journal of the Commission and of its official seal. He shall have authority to cause copies to be made of all minutes and other records and documents of the Commission and to give certificates under the official seal of the Commission to the effect that such copies are true copies, and all persons dealing with the Commission may rely upon such certificates."

The Enabling Act also authorizes the Commission "to employ, in its discretion,...such other officers, employees and agents as may be necessary in its judgment..."

The Commission previously appointed Ms. Diane Wishart in September of 2021 as the Assistant Secretary to perform the duties of the Secretary when the Secretary is unavailable. Ms. Wishart left the company shortly thereafter and the position has remained vacant until this time.

Ms. Libby Scott, Operations Department Administrative Coordinator, has the skills and is available to perform the duties of the Secretary when warranted. Libby began her career at HRSD in March 2014 as the Administrative Assistant at the Nansemond Treatment Plant. She was promoted to Administrative Coordinator in the Operations Department in June 2021, a position she holds today. Libby serves on the Water Environment Federation (WEF) Operations Challenge Committee and is the Day of Events Coordinator for the Operations Challenge event at WEFTEC. She also volunteers at other Operations Challenge events, WaterJAM, and the HRSD Red Cross Blood Drive.



Staff recommends the Commission appoint Ms. Elizabeth "Libby" Scott as the Assistant Secretary with the specific duty of fulfilling, from time to time, the role of Secretary to the Commission when the Secretary is unavailable to perform such role, including, but not limited to, the execution of documents or certifications, whether or not under seal, in connection with the authorized issuance of bonds by the HRSD. This is a collateral duty, and Libby will also continue her duties as Operations Department Administrative Coordinator.

HRSD legal and bond counsel have reviewed this recommendation.

Attachment: None



19. Finance Committee Appointment for Fiscal Year 2023

<u>Action</u>: The Chair appointed Frederick Elofson (Committee Chair) and Willie Levenston to the Finance Committee for Fiscal Year 2023.

Brief: In accordance with the HRSD Commission Governance Guidelines (adopted October 2013), the Commission maintains two standing committees: (1) Finance and (2) Operations and Nominations. These committees report as needed to the full Commission.

The Finance Committee meets periodically to review HRSD's financing activities, budgets, and annual audits. Two members of the Commission are appointed each year by the Chair to serve on the Finance Committee for a one-year term beginning July 1.

The Finance Committee will meet as follows for FY-2023:

•	Comprehensive Annual Financial Report (CAFR) review	September-October 2022
•	Commissioner budget work session (after regular meeting)	January 24, 2023
•	First CIP review and prioritization meeting	TBD March 2023
•	Commissioner budget work session (after regular meeting)	March 28, 2023
•	Preliminary annual operating budget review	March/April 2023
•	Other financial issues	As needed

All meetings of the Finance Committee are public meetings subject to the Virginia Freedom of Information Act (FOIA) requirements. Committee members serve at the pleasure of the Chair without limitation as to the number of one-year terms. Committee members continue serving until a replacement is appointed by the Chair.

Attachment: None

Public Comment: None



20. Capital Improvement Program (CIP) Quarterly Update

Action: No action required.

Brief: Implementing the CIP continues to be a significant challenge as we address numerous regulatory requirements, SWIFT Program implementation, and the need to replace aging infrastructure. Staff provided a briefing describing the status of the CIP including expenditures for FY-2022, performance metrics, and staffing; consent decree and sewer rehabilitation plan project status; firms used for engineering and construction efforts; and projects of significance including the number of pump station projects currently underway.

<u>Discussion Summary</u>: Staff discussed workload projections, increased number of CIP projects, and various reasons for CIP project delays. Staff resources continue to be evaluated. Currently each project manager has approximately 10 projects to manage, which is more than the typical average of seven. Some projects are being managed by consultants for special expertise where there is a short-term need. However, as we continue to grow the CIP program for a long period of time, more internal resources will be needed versus outsourcing.

Some firms and consultants do utilize SWAM contractors. This information will be included in a report to be provided to the Commission in October.

In response to a Commissioner's, question, staff will evaluate the ruling in the West Virginia vs. EPA case to determine if there is any impact to HRSD.

Attachment: #14

Public Comment: None



21. COVID-19 Wastewater Surveillance Study Update

Action: No action required.

Staff presented the latest data and status of the COVID-19 surveillance work including aggregate viral load for HRSD treatment facilities, hospitalizations and deaths; regional variant data; and <u>Journal of Water and Health article</u> on *Modeling Infections from SARS-CoV-2* wastewater concentrations.

Attachment: #15

Public Comment: None

- 22. Unfinished Business None
- 23. **New Business** None
- 24. Commissioner Comments

Chair Rodriguez said the groundbreaking for the first full-scale SWIFT facility at the James River Treatment Plant was a nice event. He thanked staff for the well-organized program.

- 25. Public Comments Not Related to Agenda None
- 26. Informational Items

Action: No action required.

Brief: The items listed below were presented for information.

- a. Management Reports
- b. Strategic Planning Metrics Summary
- c. <u>Emergency Declaration Bowers Hill Interceptor Force Main Section I Emergency Replacement</u>

Attachment: #16

Public Comment: None



27. Announcements

- The Water Environment Federation (WEF) Technical Exhibition and Conference will be held October 10-12, 2022 in New Orleans.
- A tentative date of August 11 has been set for the ribbon cutting ceremony for the United Way House in Williamsburg. More details to follow.

<u>Next Commission Meeting Date</u>: August 23, 2022 at the HRSD South Shore Operations Complex, 1434 Air Rail Avenue, Virginia Beach, VA 23455

Meeting Adjourned: 12:58 pm

SUBMITTED:

Jennifer L. Cascio

Secretary

APPROVED

Stephen C. Rodriguez

Chair

HRSD Commission Meeting Minutes July 26, 2022

Attachment #1

Item 2. Consent Agenda

a. Approval of Minutes

The draft minutes of the previous Commission Meeting were distributed electronically prior to the meeting.

b. Contract Awards

	1.	Employee Wellness Program Services	\$1,287,440
	2.	Oracle E-Business Suite (EBS) Managed Services	\$960,000
	3.	Work Safety Shoes	\$391,873
c.	Tas	k Orders	
	1.	Army Base 24-inch and 20-inch Transmission Main Replacements	\$406,125
	2.	Atlantic Treatment Plant Master Plan	\$445,933
	3.	Foxridge, Woodland Road, Fox Hill Road Gravity Sewer Rehabilitation	\$277,967
	4.	King William Treatment Plant Improvements Phase II	\$1,859,168
	5.	SWIFT Program Management (Program Management Services for FY-2023)	\$7,883,604

Resource: Dorissa Pitts-Paige

CONSENT AGENDA ITEM 2.b.1. – July 26, 2022

Subject: Employee Wellness Program Services

Contract Award (>\$200,000)

Recommended Action: Award a contract for Employee Wellness Program service to WellSpark Health Inc. in the estimated amount of \$257,488 for year one with four annual renewal options and an estimated cumulative value in the amount of \$1,287,440.

Type of Procurement: Competitive Negotiation

A Public Notice was issued on March 31, 2022. Three firms submitted proposals on May 2, 2022, and all firms were determined to be responsive and deemed fully qualified, responsible, and suitable to the Services Selection Committee (Committee), and to the requirements in the Request for Proposals. Three firms were short-listed, interviewed, and technically ranked as listed below:

Proposers	Technical Points	Recommended Selection Ranking
WellSpark Health Inc.	81	1
Sentara Health Plans Inc.	78	2
The Well Workplace LLC	69	3

The Committee recommends award to WellSpark Health Inc., whose professional qualifications and proposed services best serve the interest of HRSD.

HRSD employees have been engaged in our Wellness Program administered by Sentara for 9 years. There have been notable decreases in biometric targets (waist measurements and tobacco use). Overall, there has been positive trends in participation, outcomes, and incentives year after year.

WellSpark Health Inc. offers new and fresh ideas and can manage the program on a more personal level and engage our employees "where they are at". They take a holistic approach to Wellness and look at three factors, biological, social, and psychological. They indicated they can create programs that will align with HRSD's Diversity, Equity, and Inclusion strategy and initiatives.

<u>Contract Description and Analysis of Cost</u>: This contract is an agreement for employee wellness program services. Services include wellness program administration, onsite certified nurse, individual coaching, program incentives, and events. The cost for this service is based on the pricing proposed and negotiated during the RFP process and is in agreement with other offers and previous contracts.

This work is in accordance with the Procurement Commission Adopted Policy.

Resource: Steve de Mik

CONSENT AGENDA ITEM 2.b.2. – July 26, 2022

Subject: Oracle E-Business Suite (EBS) Managed Services

Contract Award (>\$200,000)

Recommended Action: Award a blanket purchase contract for Oracle EBS Managed Services to Emtec Inc. in the estimated amount of \$192,000 for year one with four annual renewal options and an estimated cumulative value in the amount of \$960,000.

Regulatory Requirement: None

Type of Procurement: Competitive Negotiation

A Public Notice was issued on April 13, 2022. Six firms submitted proposals on May 11, 2022, and all firms were determined to be responsive and deemed fully qualified, responsible, and suitable to the Selection Committee (Committee) and to the requirements in the Request for Proposals. Three firms were short-listed, interviewed, and technically ranked as listed below:

	Technical	Recommended
Proposers	Points	Selection Ranking
Emtec Inc.	92	1
AST Corporation	86	2
CherryRoad Technologies Inc.	73	3

The Committee recommends award to Emtec Inc., whose professional qualifications and proposed services best serve the interest of HRSD.

Contract Description and Analysis of Cost: This contract is an agreement for functional and technical managed support services for all modules of HRSD's Oracle EBS system. Based on HRSD business needs, staff will have the flexibility to manage the use of support hours by priority and task type. Use of support hours also includes report development, customizations for new functionality and business processes, and training. This agreement includes contract monitoring and analysis of support hours used to provide HRSD the ability to increase or decrease number of support hours for the most cost effective use. Negotiations resulted in a reduced blended hourly rate and is comparable to rates used by other firms' similar efforts.

This work is in accordance with the Procurement Commission Adopted Policy.

Resource: Dorissa Pitts-Paige

CONSENT AGENDA ITEM 2.b.3. – July 26, 2022

Subject: Work Safety Shoes

Contract Award (>\$200,000)

Recommended Action: Award multiple contracts for Work Safety Shoes to Saf-Gard Safety Shoes, Inc., Red Wing Brands of America DBA Red Wing Shoe Store, Tidewater Safety Shoe, and Shoes for Crews, LLC in the total estimated amount of \$130,624 for year one with two annual renewal options and an estimated cumulative value in the amount of \$391,873.

Type of Procurement: Competitive Bid

In accordance with HRSD's competitive sealed bidding procedures, the Procurement Department advertised and solicited bids directly from potential bidders. The project was advertised on May 12, 2022, and four bids were received on May 27, 2022. The bids received are listed below:

Bidder	List Price Discounts
Saf-Gard Safety Shoes, Inc.	23.6%
Red Wing Brands of America DBA Red Wing Shoe Store	15%
Tidewater Safety Shoe	10%
Shoes for Crews, LLC	10% - 15%

HRSD Estimate: \$130,624

<u>Contract Description</u>: Each contract will be an agreement for the supplier to furnish and deliver work safety shoes to all HRSD facilities. Multiple supplier contracts will be awarded to provide employees with a range of shoe selections within HRSD's safety shoe classifications. Ordering options include onsite mobile trucks, online ordering, and walk-in service locations.

<u>Analysis of Cost</u>: HRSD employees are provided with an annual allowance for purchase of safety shoes as identified and approved by the Safety Division. The allowance is calculated based on the discounted average shoe cost.

Resource: Bruce Husselbee

CONSENT AGENDA ITEM 2.c.1. – July 26, 2022

Subject: Army Base 24-inch and 20-inch Transmission Main Replacements

Task Order (>\$200,000)

Recommended Action: Approve a task order with Tidewater Utility Construction, Inc. in the amount

of \$406,125.

CIP Project: AB010000

Regulatory Requirement: None

Budget	\$27,343,000
Previous Expenditures and Encumbrances	(\$2,025,789)
Available Balance	\$25,317,211

Contract Status:	Amount
Original Contract with Tidewater Utility Construction, Inc.	\$0
Total Value of Previous Task Orders	\$0
Requested Task Order	\$406,125
Total Value of All Task Orders	\$406,125
Revised Contract Value	\$406,125

<u>Project Description</u>: This project is to study, design and construct a replacement interceptor force main for 24-inch and 20-inch cast iron pipe and 20-inch reinforced concrete pipe from Baker Street to Newport Avenue in Norfolk, approximately 4,650 linear feet (LF). The original scope of the CIP included an additional 13,000 LF of pipeline replacement from Newport Avenue to Simons Drive. At this time, condition assessment of this additional pipe is only planned in an effort to prioritize funds on the highest risk assets. This project also includes abandoning a portion of the pipeline at the intersection of Baker Street and Hampton Boulevard that is not in service and is deteriorating.

The attached map depicts the project location.

<u>Project Justification</u>: This project will address specific sections of pipeline that was designed and built in 1956 according to the plans inherited from the City of Norfolk. The same plans show an existing 20-inch concrete line that was turned over to HRSD in 1956. Both lines have multiple repairs installed by HRSD and repair history prior to HRSD ownership is unknown. Multiple branch valves along this alignment are 1948 or 1956 valves that are difficult to repair or get replacement parts. The valve guide for the area has several valves indicated as inoperable and an abandoned dead-end section of pipe. These lines are the main interceptors conveying wastewater from the City of Norfolk to the Army Base Treatment Plant. This project also includes abandoning a gravity line. Flow is currently bypassing this section of pipe and the pipe is in poor condition from tuberculation and infiltration.

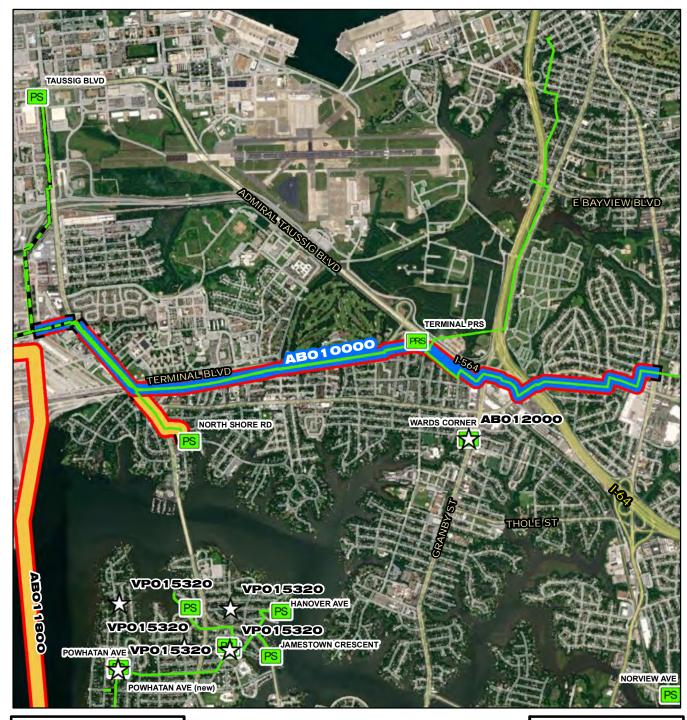
<u>Task Order Description</u>: The task order for Tidewater Utility Construction will be to perform work under the Sewer Repair and Condition Assessment annual services contract. Specific tasks include providing traffic control, labor and equipment to perform exploratory excavation and pipeline inspections in nine locations; preparation of excavation, safe access, and visual inspection or condition assessment technology inspection; inspection and installation of new air release valves; and restoration of site to preconstruction conditions.

<u>Analysis of Cost</u>: The cost for this condition assessment task order is based on a proposal from Tidewater Utility Construction, Inc. and is in agreement with similar efforts from other firms.

Schedule: Design May 2021

Condition Assessment Work August 2022
Bid March 2023
Construction June 2023

Project Completion December 2024





Project Interceptor Line

Project Interceptor Point

Project Pump Station Point

Project Area

Legend

★ CIP Interceptor Point

☆ CIP Pump Station Point

CIP Interceptor Line

CIP Abandonment

CIP Project Area

HRSD Interceptor Force Main

HRSD Interceptor Gravity Main

WTP HRSD Treatment Plant

RSD Pressure Reducing Station

PS HRSD Pump Station

0 1,000 2,000 4,000 6,000 8,000

ABO10000

Army Base 24-Inch and 20-Inch Transmission Main Replacements







Resource: Bruce Husselbee

CONSENT AGENDA ITEM 2.c.2. – July 26, 2022

Subject: Atlantic Treatment Plant Master Plan

Task Order (>\$200,000)

Recommended Action: Approve a task order with Tetra Tech, Inc. in the amount of \$445,933.

Regulatory Requirement: None

Contract Status:	Amount
Original Contract with Tetra Tech	\$0
Total Value of Previous Task Orders	\$145,442
Requested Task Order	\$445,933
Total Value of All Task Orders	\$591,375
Revised Contract Value	\$591,375

Task Order Description: This task order will provide a Master Plan for the Atlantic Treatment Plant site and Progress Farm considering current and future needs for the property and the potential for future hydraulic expansion of the plant. The main objective of the project is to develop a master plan for the open lands at the Atlantic Treatment Plant site, which includes assessing HRSD needs; understanding development constraints; ensuring innovative ideas as a part of the planning process; ensuring that the property is protected from the effects of storms, flooding, and sea level rise; and engaging internal and external stakeholders. Tetra Tech performed initial data collection, environmental review, GIS database development and preliminary stormwater management assessment under a previous task order. This will be a continuation of services authorized against the Environmental Services annual services contract to perform preliminary planning and engagement, development of site project options and alternative plans, and a final report documenting the preferred plan.

<u>Analysis of Cost</u>: The cost for this task order is based on proposed hours required to complete the work and the hourly rates negotiated in the Environmental Services annual services contract and is in agreement with other similar efforts. The work will be charged against the Engineering Department Operating Budget.

<u>Schedule</u>: Project Initiation December 2021

Study August 2022 Project Completion July 2023

Resource: Bruce Husselbee

CONSENT AGENDA ITEM 2.c.3. – July 26, 2022

Subject: Foxridge, Woodland Road, Fox Hill Road Gravity Sewer Rehabilitation

Task Order (>200,000)

Recommended Action: Approve a task order with RK&K, LLP in the amount of \$277,967.

CIP Project: YR010300

Regulatory Requirement: Rehab Action Plan Phase 2 (2025 Completion)

Budget \$3,962,504
Previous Expenditures and Encumbrances (\$96,368)
Available Balance \$3,866,136

Contract Status with Task Orders:	Amount
Original Contract with Engineer	\$96,368
Total Value of Previous Task Orders	\$0
Requested Task Order	\$277,967
Total Value of All Task Orders	\$277,967
Revised Contract Value	\$374,335
Engineering Services as % of Construction	11.4%

<u>Project Description</u>: This project will rehabilitate or replace approximately 7,600 linear feet (LF) of small diameter gravity sewer and associated laterals and manholes within the Foxridge, Bloxom's Corner and Woodland/Fox Hill services areas. The work includes approximately 440 LF of gravity sewer replacement, 7,100 LF of gravity sewer rehabilitation, rehabilitation of 61 service laterals, two point repairs, one manhole replacement and 356 vertical feet of manhole rehabilitation.

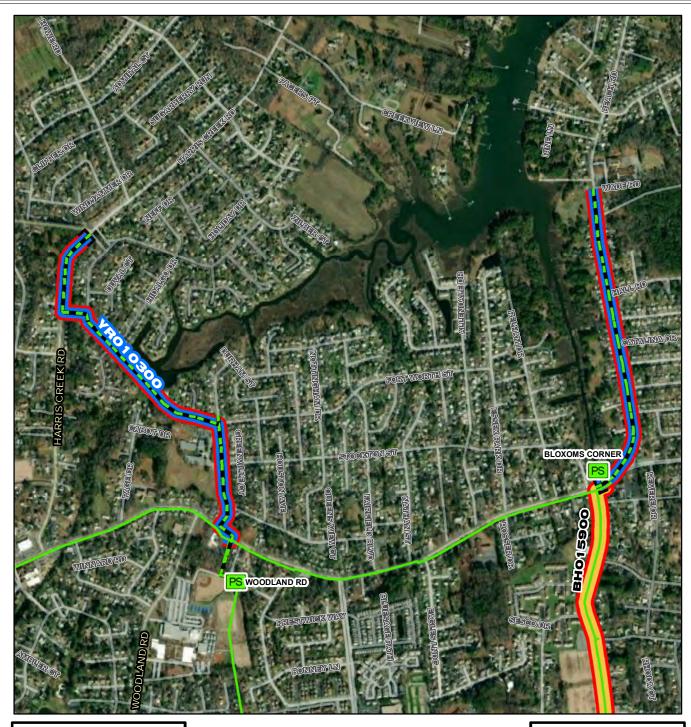
<u>Project Justification</u>: The Foxridge, Bloxom's Corner and Woodland/Fox Hill Road gravity systems are primarily collection systems that require rehabilitation/replacement. Upon completion of the rehabilitation/replacement, these systems should be transferred to the City of Hampton. Approximately 1935 LF of existing 10-inch vitrified clay pipe was replaced along Beach Road with new 10-inch PVC pipe as part of the Prompt Repair program. This portion of new gravity pipe will also be transferred over to the City of Hampton for operation and maintenance. The attached <u>map</u> depicts the project location.

<u>Task Order Description</u>: This task order will provide the design services for the subject project. A fee of \$277,967 was negotiated with RK&K, LLP, and is 8.5 % of the construction cost. The fee proposal is comparable to other projects of similar size and complexity.

<u>Analysis of Cost</u>: The cost for this task order is based on a negotiated cost and is in agreement with other similar efforts.

Schedule: Design July 2022

Preconstruction June 2023
Construction August 2023
Project Completion September 2024





- Project Interceptor Line
- Project Interceptor Point
- Project Pump Station Point
- Project Area

Legend

- ★ CIP Interceptor Point
- ☆ CIP Pump Station Point
- CIP Interceptor Line
- CIP Abandonment
- CIP Project Area
 - HRSD Interceptor Force Main
- HRSD Interceptor Gravity Main
- WTP HRSD Treatment Plant
- HRSD Pressure Reducing Station
- PS HRSD Pump Station

Feet 0 400 800 1,600 2,400 3,200

YR010300

Foxridge Sanitary Sewer System Sections 1, 4 & 5 Gravity and Woodland Road Fox Hill Road Gravity Sewer Rehabilitation





Hampton

Resource: Bruce Husselbee

CONSENT AGENDA ITEM 2.c.4. – July 26, 2022

Subject: King William Treatment Plant Improvements Phase II

Task Order (>\$200,000)

Recommended Action: Approve a task order with AH Environmental Consultants, Inc. in the

amount of \$1,859,168.

CIP Project: MP013300

Regulatory Requirement: None

Budget	\$16,923,311
Previous Expenditures and Encumbrances	(\$476,489)
Available Balance	\$16,446,822

Contract Status:	Amount
Original Contract with AH Environmental Consultants, Inc.	\$277,961
Total Value of Previous Task Orders	\$198,528
Requested Task Order	\$1,859,168
Total Value of All Task Orders	\$2,057,696
Revised Contract Value	\$2,335,657
Engineering Services as % of Construction	9.4%

Project Description: This project is intended to increase capacity for the King William Treatment Plant from 100,000 gallons per day (GPD) Average Daily Flow (ADF) to a firm capacity of 200,000 GPD ADF. The improvements will be planned to facilitate a Phase III expansion to 300,000 GPD ADF of capacity in the future. The attached <u>map</u> depicts the project location.

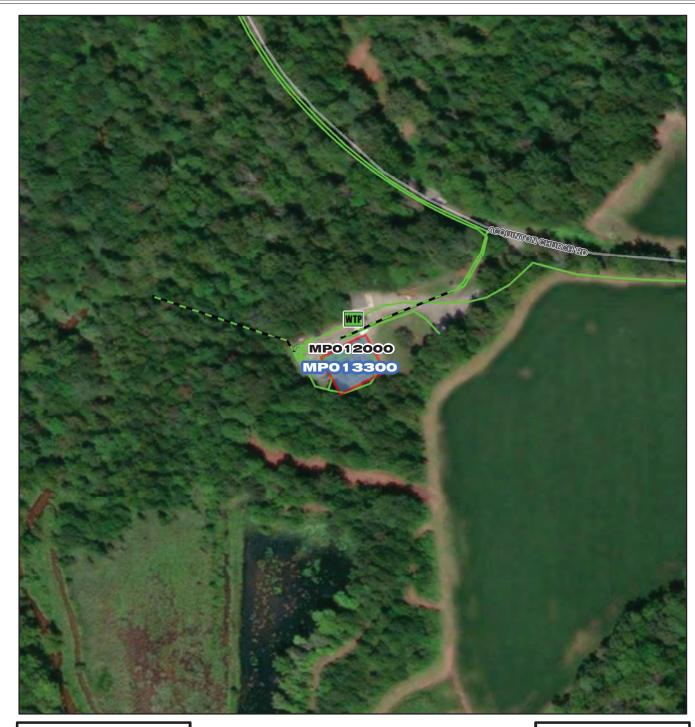
Project Justification: King William Treatment Plant can currently treat 100,000 GPD ADF. Development in King William County has been accelerating in recent years. New subdivisions are planned, and construction has ramped up in existing subdivisions with projected flows exceeding 150,000 GPD in additional to current flow. Buildout of approved subdivisions will require an expansion of capacity beyond 100,000 GPD ADF.

Task Order Description: This task order will provide design phase services.

<u>Analysis of Cost</u>: The cost for this task order for \$1,859,169 was negotiated with AH Environmental Consultants, Inc. The fee is 7.5% of the construction cost estimate which is comparable to other projects of similar size and complexity.

Schedule: Design August 2022

Bid October 2023
Construction February 2024
Project Completion August 2025





- Project Interceptor Line
- Project Interceptor Point
- Project Pump Station Point
- Project Area

Legend

- ★ CIP Interceptor Point
- ☆ CIP Pump Station Point
- CIP Interceptor Line
- CIP Abandonment
- CIP Project Area
- HRSD Interceptor Force Main
- HRSD Interceptor Gravity Main
- WTP HRSD Treatment Plant
- HRSD Pressure Reducing Station
- PS HRSD Pump Station



MP013300

King William Treatment Plant Improvements Phase II





CIP Location



Resource: Bruce Husselbee

CONSENT AGENDA ITEM 2.c.5. – July 26, 2022

Subject: SWIFT Program Management (Program Management Services for FY-2023)

Task Order (>\$200,000)

Recommended Action: Approve a task order with AECOM in the amount of \$7,883,604.

CIP Project: GN016320

Regulatory Requirement: Integrated Plan – SWIFT

Budget	\$80,000,000
Previous Expenditures and Encumbrances	(\$36,426,782)
Available Balance	\$43,573,218

Contract Status:	Amount
Original Contract with Name of Engineer/Contractor	\$5,264,440
Total Value of Previous Task Orders	\$30,884,949
Requested Task Order	\$7,883,604
Total Value of All Task Orders	\$38,768,553
Revised Contract Value	\$44,032,993

<u>Project Description</u>: The SWIFT Full-Scale Implementation Program (FSIP) Management team is managing the delivery of the advance water treatment facilities to take HRSD's already highly treated wastewater and produce SWIFT water. The Program Management team is also delivering conveyance, wastewater treatment plant improvements, and other such projects to support full-scale SWIFT implementation. The Program Management team will implement the processes, procedures, and systems needed to design, procure, construct, permit, manage, and integrate the new SWIFT related assets.

Task Order Description: This task order will provide professional engineering services during FY-2023 for multiple tasks associated with the program management of the SWIFT FSIP. These services will provide program administration, staff augmentation (approximately five full time staff), program management (approximately three full time staff), federal and state agency funding compliance support, program sustainability monitoring, program document controls and information management, public outreach, HRSD's community commitment plan support, annual industry outreach event support, risk identification and tracking, schedule and budget management, quality assurance reviews of deliverables, support of HRSD capital improvement program planning related to the SWIFT FSIP, and technical support of projects on an as needed basis.

Analysis of Cost: The professional engineering services task order includes the scope and fee for the fifth year of the program (FY-2023). It is intended that subsequent program management services scopes and fees will be negotiated annually. The proposed activities and number of hours associated with each task are a reasonable estimate of the effort required. The labor rates for each staff category in the proposed fee are in accordance with the Professional Services Agreement with AECOM, as approved for FY-2023. The program management rate schedule is comparable with the typical rate schedule of HRSD's General Engineering Services providers. The proposed scope, rate schedule, and budget fee are reasonable and appropriate for the fifth year of the program. Compensation for program management services will be on a time and materials basis.

Schedule: Services for FY-2023 July 2022

HRSD Commission Meeting Minutes July 26, 2022

Attachment #2

Item 3. Town of Chincoteague Briefing



Town of Chincoteague

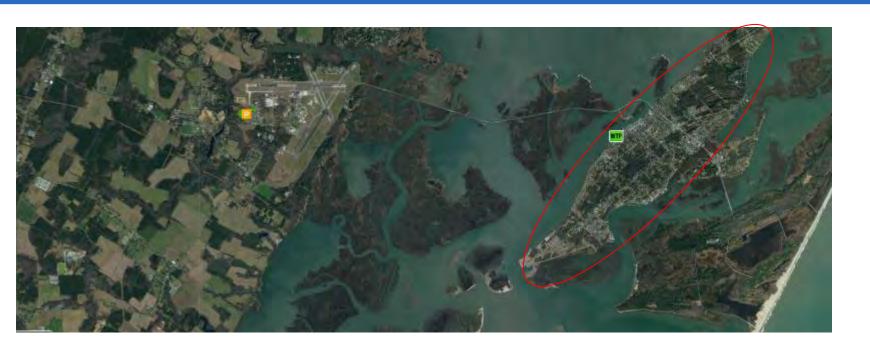
July 26, 2022

Accomack County & Town of Chincoteague





Chincoteague





Chronology (pre 2020)

- 1988 "Proposed Sewer System for Town of Chincoteague" Preliminary Engineering Study; Bradbury & Drening
- 2007 "Alternatives for the Disposal of Treated Wastewater" White Paper; Waste Water Management, Inc
- 2011 "Conceptual Regional Sewer Plan for Northern Accomack County" Clark Nexsen/Hatch McDonald
- 2013 "Draft Wastewater Management Plan for the Town of Chincoteague"; Wastewater Advisory Committee



Current Issues

- Sunset Bay treatment plants (2) are near the end of their useful lives
- Chincoteague Sunsets L.L.C. (developer) has sold wastewater treatment capacity to customers that are not currently connected
- United States Coast Guard Treatment Plant is at the end of its useful life
- Town of Chincoteague is interested in providing service to commercial customers along Main Street and Maddox Boulevard
 - failing septic tanks and cesspools



Sunset Bay/US Coast Guard Aerial





Chronology (post 2020)

- October 2020: Accomack and Northampton added to HRSD
- October 8, 2021: HRSD GM met with Town of Chincoteague regarding HRSD taking over Sunset Bay WWTPs with intent of providing public wastewater treatment on Chincoteague
- Oct 26, 2021: Commission approved Northern Accomack Sewer Service Study
- February 23, 2022: HRSD letter to USCG to explore possibility of service
- February 24, 2022: Letter of Intent (MOA) HRSD, Town of Chincoteague, Chincoteague Sunsets L.L.C March 2022: HRSD contracted with JMT for surveying and title/deed research
- July 8, 2022: Town of Chincoteague, Sunset Bay South HOA, HRSD: virtual meeting
- July 26, 2022: brief HRSD Commission



Letter of Intent

- February 24, 2022
- Submitted as "memorandum of understanding" re: ownership of wastewater treatment plant"
- Chincoteague Sunsets L.L.C. (developer), Town of Chincoteague, HRSD
- Tax deductible gift
- Town pay for needed improvements
- HRSD upgrade to include addition unused capacity to honor previously purchased capacity
- Town identify limited sewer system
- Town construct collection system
- HRSD provide sewage treatment for existing customers, purchased capacity customers, and Town expansion up to capacity of permits



Virtual Meeting

- July 8, 2022
- Sunset Bay South HOA, Town of Chincoteague, HRSD
- Property transfer to facilitate Town/HRSD ownership
- "friendly" eminent domain take by Town
- Town would transfer all properties to HRSD
- Uninterrupted treatment service
- Town pay up to \$250,000 for needed WWTP improvements
- HRSD will construct new WWTP on Main Street lot
- HRSD will demolish/remove existing WWTP
- Sunset Bay South will permit easements and right of entry to HRSD
- Developer will release claim to waterfront parcel

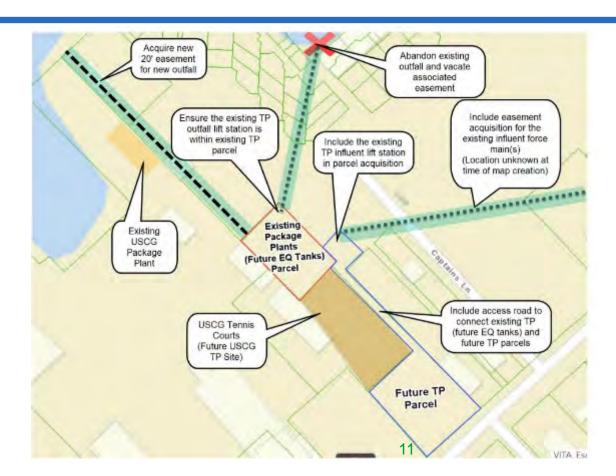


Sunset Bay/US Coast Guard Aerial



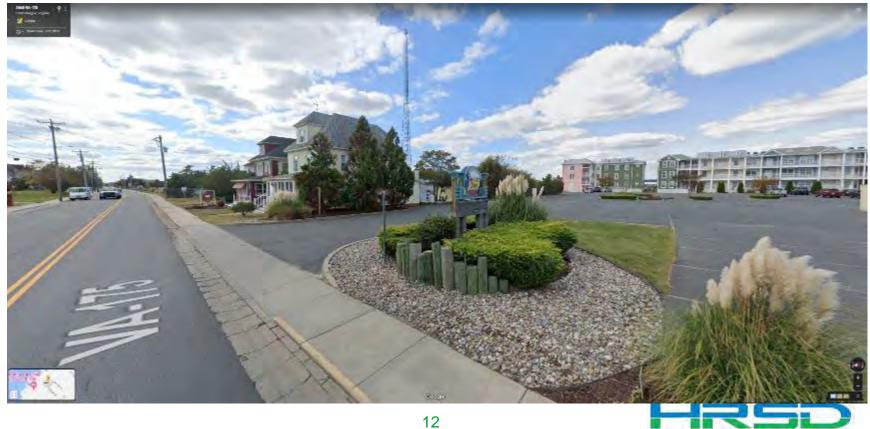


Site Schematic





Main Street View of Sunset Bay Condos



Main Street View of Site





Sunset Bay Treatment Plants





Stakeholders

- Town of Chincoteague
- Treatment Plant Owner (Developer)
- Sunset Bay Home Owners Association
- HRSD
- United States Coast Guard
- DEQ
- VDH
- Accomack County



Consolidation of Outfall Capacity

Table 2: Existing Discharge Permits on Chincoteague

Permit No.	Permittee	Discharge (gpd)	Notes
VA0091049 (Outfall 1)	Sunset Bay Utilities	25,000	Currently unused.
VA0091049 (Outfall 2)	Sunset Bay Utilities	12,000	Currently unused. Exact location unknown.
VA0054003	Sunset Bay Utilities	39,500	Outfall for existing package plants.
VA0087327	US Coast Guard	6,000	HRSD to accept USCG flows in exchange.
	Total Outfall Capacity (gpd)	82,500	HRSD is interested in obtaining more capacity, if possible.



HRSD Chincoteague CIPs

• ES01000

Eastern Shore Infrastructure Improvements – Interim
 Plant Improvements

• ES010400

Northern Accomack Wastewater Conveyance,
 Treatment, and Disposal Study

• ES010500

Chincoteague Treatment Plant



- The Northern Accomack Wastewater
 Conveyance, Treatment, and Disposal Study
 - Project will evaluate strategies to address both shortterm and long-term wastewater conveyance, treatment, and disposal needs for northern Accomack County.
 - consider wastewater treatment demand, conveyance constraints, capacity constraints at existing facilities, disposal alternatives for treated effluent, environmental impacts, and permitting



- Eastern Shore Infrastructure Improvements –
 Interim Plant Improvements
 - Project will provide for treatment plant improvements to existing facilities on the Eastern Shore. Currently, there is need for improvements to the Onancock Treatment Plant Solid Handlings and the packaged plants located in the Town of Chincoteague.



Chincoteague Treatment Plant

- Project provides for the design and construction of a new treatment plant, outfall and appurtenances along with demolition of existing packaged treatment plants and site restoration.
 - The project includes consolidation of permitted outfalls and increased treatment capacity for the Town of Chincoteague.



Next Steps

- Commission support
- Surveying (plats and titles for property transfer)
- Town of Chincoteague Sewer Service Agreement
- WWTP and property transfer
- USCG resolution
- Alternatives Analysis as required by state law to understand outfall consolidation and permittable outfall capacity
- HDR Northern Accomack Study completion
- Interim Plant Improvements
- New Chincoteague WWTP



Conceptual Schedule

- October 2022: Town close on WWTP and property; transfer assets to HSRD, Sewer Service Agreement
- Winter 2022/2023: Interim plant improvements
- Spring/Summer 2023: Provide treatment capacity for purchased capacity customers
- January 2023: RFP for new WWTP design services
- October 2024: Begin construction
- January 2027: Complete construction



HRSD Commission Meeting Minutes July 26, 2022

Attachment #3

Item 4. Atlantic Treatment Plant Reliability & Odor Capital Improvement Program Presentation



Atlantic Treatment Plant Reliability & Odor Capital Improvement Program (ATP-ROCI)

July 26, 2022

Agenda

- Biosolids overview and future planning
- Review of what has been achieved with AT THP Project
- Lessons Learned THP Project
- Sources of odor and other reliability issues
- Interim measures for odor mitigation
- New CIP proposed (incorporates several other projects already in the CIP)



Atlantic Treatment Plant (54 MGD) – Rerating Study (~72 MGD)



ATP North Pad East Side – 28 Feb 2013



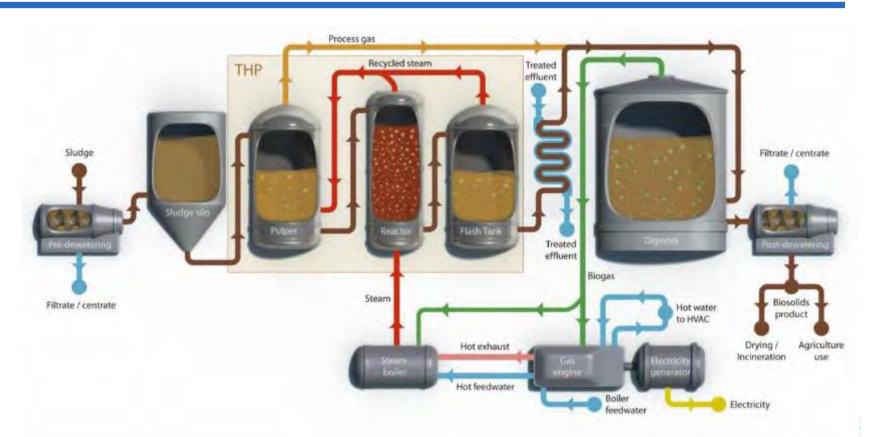


ATP South Pad Southeast Corner – 28 Feb 2013





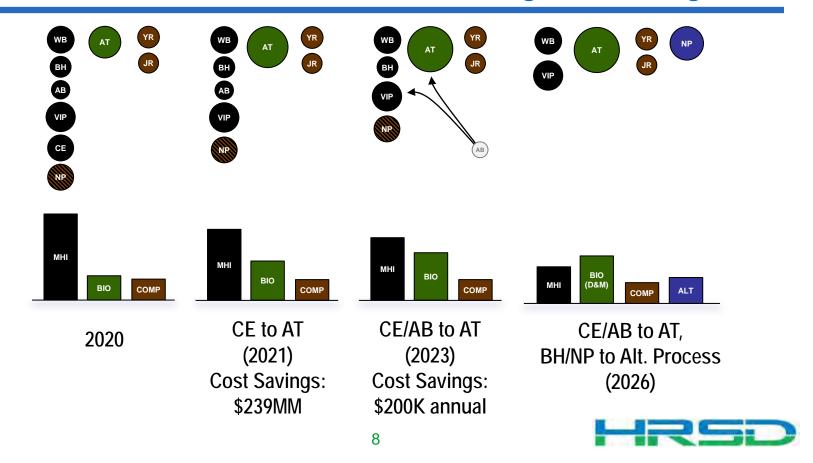
CAMBI Thermal Hydrolysis Process (THP)



Atlantic THP Project Drivers

- THP provides Class A quality with certainty
 - Minimal concern for regrowth, reactivation, public health, etc.
- Class A product opens up more and closer land application sites— as well as other D&M options
- Requires much less storage capacity at plant, decreases land application costs
 - Cake solids from 15-19% to 28-32%
 - ~7% less dry solids to manage (~10% increase in VSR)
 - Better stacking, without higher sidewalls
 - Field storage is possible
 - More frequent application possible
- Approximately energy neutral
- FOG makes this more energy positive, and THP allows for effective FOG management
- Higher digester loading increases digester capacity, allowing receipt of raw cake from other plants (significant capacity)

HRSD Solids Management through 2026



Current Progress at Atlantic Treatment Plant (ATP)

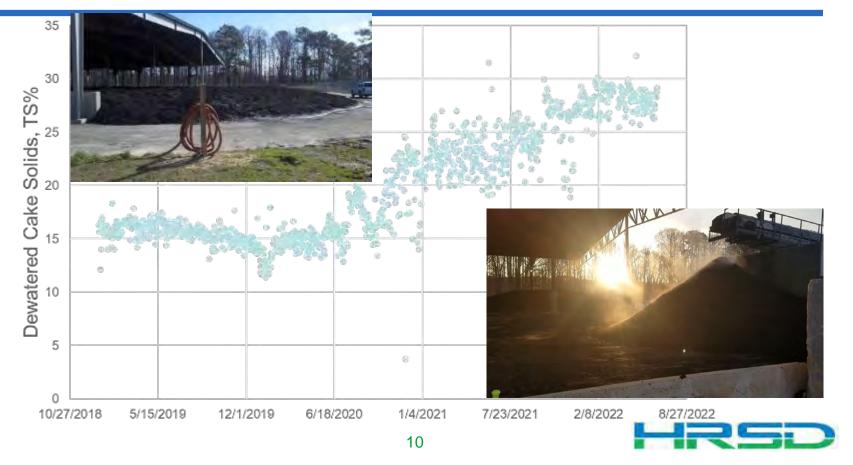
- Nearly all equipment working as intended (exception is hopper)
- Digester loading increase by 2-~3X (large CIP avoided)
- THP allows for effective FOG management at ATP
- Approximately doubled cake solids
 - Stacking for storage pad capacity
 - Land app cost decrease (~\$2M/yr)
 - Very close to a marketable product (revenue generating)







Atlantic Cake Solids Past to Present

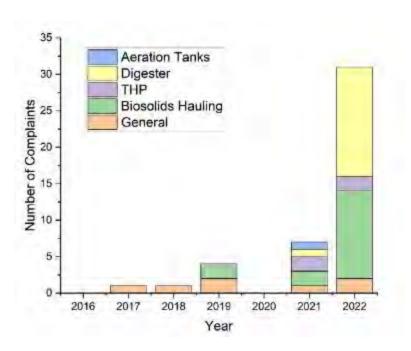


THP Project Lessons Learned

- Underestimated COD load into ATP with CE flow
- Dewatering after P-release in summer is not good – need fermenter (odor)
- Emergency storage not feasible or large enough – need 2nd CAMBI train
- Floating cover annular space cover and scrub and potentially move to fixed covers in future
- Aging of digester gas system over D&C timeframe



Increased Odor Complaints from ATP Neighbors



- Loadout of raw cake
- THP needs to stay buttoned up (no leaks)
- Fermenter
- Digester PRVs need gas system redo and careful attention to gas pressure and maintenance
- Digester annular space & Dystor vent
- Odor C insufficient for current needs
- Odor A should have been replaced
- Odor B and D optimization for additional flow from CE



ATP Access Road

- Eliminate truck traffic (odor, noise, etc.) through neighborhood
- Land acquisition in the National Defense Authorization Act via Congresswoman Luria, expected approval end of CY2022
- Needs to proceed forward as quickly as possible (already included in CIP)





Long Term Planning: ATP and Progress Farm Master Plan

- Develop a Master Plan for open lands on the ATP site
- Consider:
 - Future and current needs
 - Development constraints
 - Innovative projects & uses
- Ensure the property is protected from the effects of storms, flooding, and sea level rise
- Engage internal and external stakeholders





Interim Odor Remediation

Community Outreach

- Letter, fliers, dedicated website page
- Plant tours
- Stakeholder Roundtable Group

Monitoring

- Rapid response by TSD to identify sources of odors
- Proactive monitoring

Onsite Work

- Addition of ferric chloride
- Odor Control Station B and D optimization
- Biosolids curing pilots
- No fresh cake hauling (only Jan Dec 2022 hauled in spring 2023) made possible by higher cake TS on pads
- Immediate repairs for digester gas system and Dystor covers
- Interim covers for digester annular space
- Minimize odors from land application trucks (covers, wheel washers, inspections before leaving plant, night hauling)











ATP Reliability & Odor Capital Improvement Program (ATP-ROCI)

 Suite of CIP projects (some already in CIP budget) that will address most of the odor and reliability issues at ATP

Project Name	Budget Required (\$MM)	Budget already included in CIP (\$MM)		
ATP Gravity Belt Thickener and Pre-Dewatering Polymer Improvements	\$6.4	\$10.7		
ATP Liquid Side Odor Evaluation and Improvements	\$2	-		
ATP Odor & Solids Improvements 2023	\$55.1	\$39.3		
ATP Solids Curing Facility and Pad Improvements	\$11.7	\$1 (walls only)		
TOTAL	\$75.2	\$51.8		

Items not included here.

- AB solids diversion
- ATP private access road
- Evaluate digester cover alternatives and potential replacement schedule
- Long-term digester gas beneficial reuse currently being evaluated as separate project

ATP Gravity Belt Thickener and Pre-Dewatering Polymer

- \$6.4 MM already appropriated to these CIP projects
- Halting at 90% design to allow these projects to be cohesively designed and constructed with the ROCI program



New GBT needed for capacity



New Polymer skid to provide greater reliability

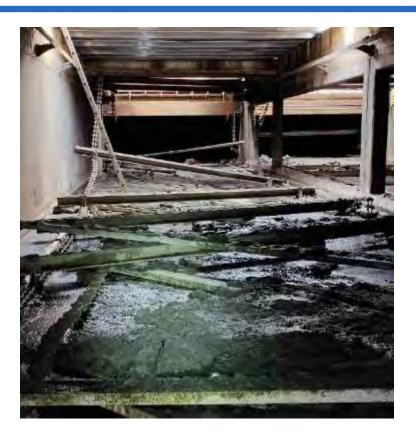
ATP Liquid Side Odor Evaluation and Improvements

 Evaluate and address any potential odors not captured in larger ATP Odor & Solids Improvements 2023 Project (\$2 MM)





ATP Odor & Solids Improvements 2023: Gravity Thickeners



- Strategy of thickening primary solids within rectangular primary clarifiers was common across HRSD (AT is the last plant needing to be fixed)
- Often results in complete failure of primaries requiring rebuilds



ATP Odor & Solids Improvements 2023: Gravity Thickeners

- Optimal strategy is to thicken solids in gravity thickeners outside of the primary clarifiers (allows unconstrained primary solids pumping)
- Demo old high purity oxygen tanks and replace with two gravity thickeners (\$15.7 MM)



ATP Odor & Solids Improvements 2023: Replace OCS A & C



- OCS A is at end of expected life and performs poorly
- OCS C not effective
- Replace with new system that is sized for existing (purple) + additional locations requiring additional odor control (orange) --\$11.3 MM



ATP Odor & Solids Improvements 2023: Digester Gas System









- Enclosed flares (\$6.9 MM)
 - Reduce odors from incomplete combustion
 - No more visible flame
- Digester Gas System
 Evaluation, Upgrades, Scrub
 Digester Annular Space and
 Dystor vents(\$5.8 MM)
 - Holistic evaluation of system
 - Cover and scrub annular space to prevent offsite odors



ATP Odor & Solids Improvements 2023: Cambi

- New B6 skid, screw assisted hopper diversion, third FOG receiving tank (\$12.5 MM)
- Reduced time for loadout of raw cake, increased capacity, and more operational flexibility





ATP Odor & Solids Improvements 2023: Struvite



- Long run between DSST and final dewatering
- DSST aeration with Mg addition for struvite precipitation to protect downstream processes (\$2.9 MM)





ATP Solids Curing Facility and Pad Improvements





- Cured cake will provide
 - Less odorous product for storing and hauling
 - Potential for additional revenue stream (more marketable product)
 - DC Water product (Bloom) sells for \$3.50/yd³ fresh and \$10/yd³ when cured



ATP Solids Curing Facility and Pad Improvements



- Need to enclose and scrub odors from curing area (north end of south pad)
- Increase push wall height on south side of south pad to allow for higher stacking
- \$11.7 MM



ATP Reliability & Odor Capital Improvement Program (ATP-ROCI)

CIP Number	Project Name	9	Spent to Date	Status	Current CIP	A	New CIP opropriation	Total based on Increase or
Y		Y		· · ·	<u> </u>		Needed <u></u>	(Reduction)
AT015100	ATP Solids Storage Pad Improvements	\$	20,568	Halt	\$ 1,000,550	\$	-	\$ (1,000,550)
AT014900	ATP Gravity Belt Thickener Expansion	\$	489,483	Halt	\$ 6,709,050	\$	-	\$ (6,709,050)
AT015000	ATP Polymer System Replacement	\$	219,750	Halt	\$ 3,032,660	\$	-	\$ (3,032,660)
	ATP Solids Handling Improvements and							
AT015600	Odor Control Upgrades Phase I	\$	-	Remove	\$ 31,225,000	\$	-	\$ (31,225,000)
	ATP Solids Handling Improvements							
AT015700	Waste Gas Flare Replacement	\$	-	Remove	\$ 8,065,000	\$	-	\$ (8,065,000)
	ATP Liquid Side Odor Evaluation and							
AT015800	Improvements	\$	-	New	\$ -	\$	2,016,000	\$ 2,016,000
	ATP Gravity Belt Thickener and Pre-							
AT015900	Dewatering Polymer Improvements	\$	-	New	\$ -	\$	6,395,000	\$ 6,395,000
	ATP Odor and Solids Improvements							
AT016000	2023	\$	-	New	\$ -	\$	55,103,000	\$ 55,103,000
	ATP Solids Curing Facility and Pad							
AT016100	Improvements	\$	-	New	\$ -	\$	11,730,000	\$ 11,730,000
	Tot	al \$	729,801		\$ 50,032,260	\$	75,244,000	\$ 25,211,740

Note:

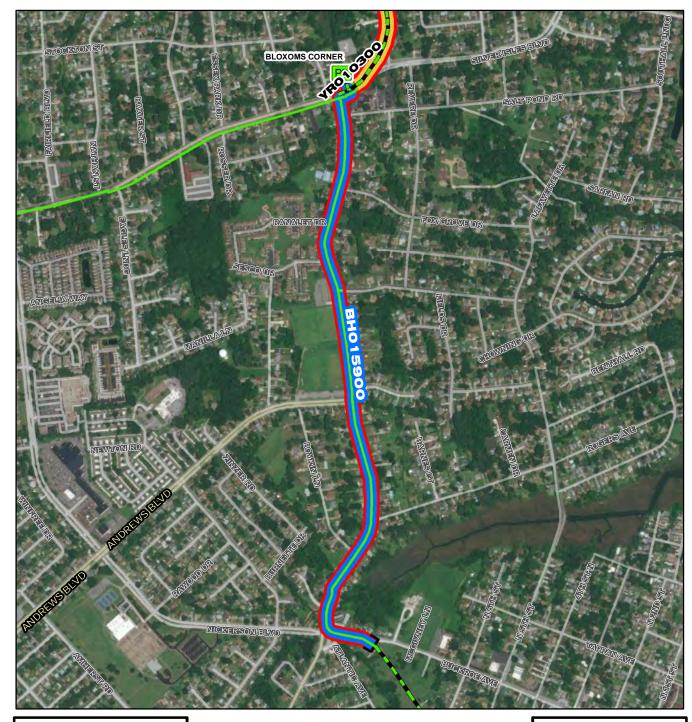
- · AB solids diversion still moves forward as separate CIP
- Need to move the road ahead as fast as we can- also not on chart
- Need to evaluate digester cover alternatives for 1-4 and assess potential schedule



HRSD Commission Meeting Minutes July 26, 2022

Attachment #4

Item 6. Bloxoms Corner Force Main Replacement Additional Appropriation, Contract Award (>\$200,000) and Task Order

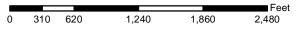




- Project Interceptor Line
- Project Interceptor Point
- Project Pump Station Point
- Project Area

Legend

- ★ CIP Interceptor Point
- ☆ CIP Pump Station Point
- CIP Interceptor Line
- CIP Abandonment
- CIP Project Area
 - HRSD Interceptor Force Main
- HRSD Interceptor Gravity Main
- WTP HRSD Treatment Plant
- PRS HRSD Pressure Reducing Station
- PS HRSD Pump Station



BH015900

Bloxoms Corner Force Main Replacement





CIP Location



HRSD Commission Meeting Minutes July 26, 2022

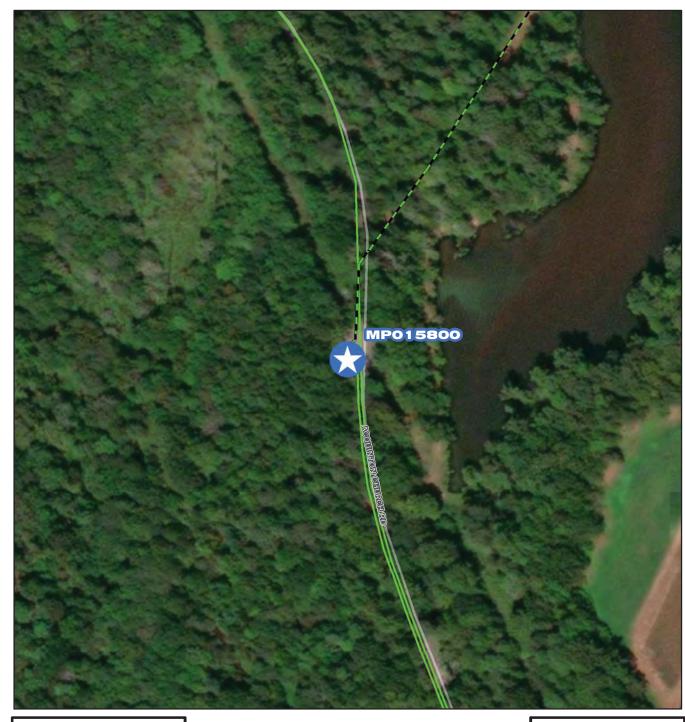
Attachment #5

Item 7. Bowers Hill Interceptor Force Main Section I Emergency Replacement New CIP and Initial Appropriation



Attachment #6

Item 9. King William Main Pump Station Improvements Initial Appropriation





- Project Interceptor Line
- Project Interceptor Point
- Project Pump Station Point
- Project Area

Legend

- ★ CIP Interceptor Point
- ☆ CIP Pump Station Point
- CIP Interceptor Line
- CIP Abandonment
- CIP Project Area
 - HRSD Interceptor Force Main
- HRSD Interceptor Gravity Main
- WTP HRSD Treatment Plant
- HRSD Pressure Reducing Station
- PS HRSD Pump Station



MP015800

King William Main Pump Station Improvements





CIP Location



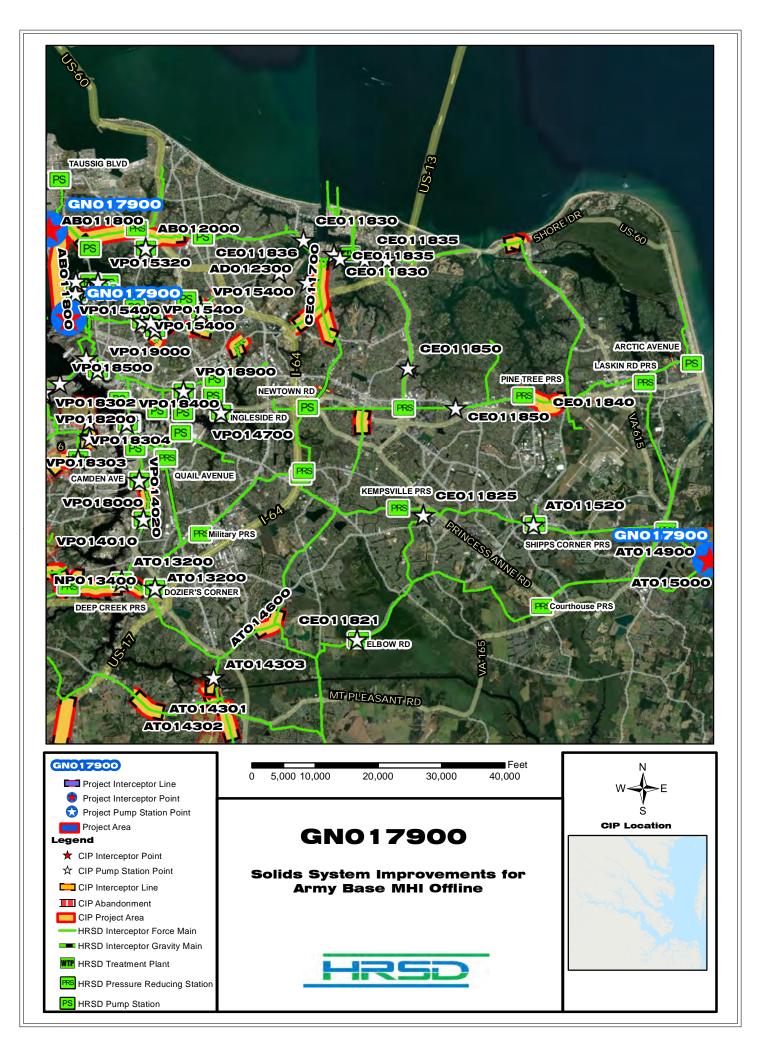
Attachment #7

Item 10. Nansemond Treatment Plant Solids Handling Transformer Replacement New CIP, Initial Appropriation and Task Order (>\$200,000)



Attachment #8

Item 11. Solids System Improvements for Army Base Treatment Plant Multiple Hearth Incinerator (MHI) Offline Additional Appropriation, Contract Award (>\$200,000) and Task Order (>\$200,000)



Attachment #9

Item 12. Jefferson Avenue Interceptor Force Main Replacement Phase III
Easement Acquisition
12120, 12150 and 12132 Jefferson Avenue, Newport News, Virginia, 23602

AGREEMENT

THIS AGREEMENT, made this day of May 2022, by and between LEA COMPANY, L.L.C., a Virginia limited liability company, who acquired title as LEA COMPANY, a Virginia general partnership, and whose mailing address is 397 Little Neck Road, Suite 200, Building 3400, Virginia Beach, Virginia 23452 ("Landowner"), and HAMPTON ROADS SANITATION DISTRICT ("HRSD"), a political subdivision of the Commonwealth of Virginia, located at 1434 Air Rail Avenue, Virginia Beach, Virginia 23455 (the "Grantee"), and Collectively, Landowner and HRSD shall be referred to as the "Parties."

WITNESSETH: That for and in consideration of one dollar and other valuable consideration, receipt of which is hereby acknowledged, Landowner agrees to convey to HRSD a Permanent Utility Easement over, across and through the following described property of the Landowner, by Deed of Easement (attached hereto as Exhibit A), properly executed, acknowledged, and delivered.

The land and improvements subject to the Permanent Utility Easement (hereinafter referred to as the "Easement") is described as follows:

All that certain Permanent Utility Easement shown and designated as a "30' SANITARY SEWER EASEMENT HEREBY DEDICATED 5,327 S.F. OR 0.12229 AC.", as shown on the attached plat prepared by Paul W. Michael, Jr., Surveyor, Michael Surveying & Mapping, P.C., 41 Old Oyster Point Road, Suite B, Newport News, Virginia 23602 entitled, "EASEMENT PLAT FROM: LEA CO TO: HAMPTON ROADS SANITATION DISTRICT", and dated APRIL 21, 2020; and being part of the same property containing 0.9262 acres, identified as "PARCEL 5" as shown on Plat entitled "Subdivision Plat of Parcel "E" as shown on Plat of the property of Yoder Development Company in (D.B 77, PG. 130) and a portion of part of the property of H.E. and C.P. Yoder Parcels "A", "B", "C" Newport News, Virginia" dated July 14, 1995, made by Engineering Services, Inc., and recorded in Deed Book 1408, Page 379.

Together with all and singular the buildings and improvements, tenements, hereditaments, rights, privileges and appurtenances thereunto belonging or in anywise appertaining (the "Easement"), a copy of which plat is attached hereto and made a part hereof.

The total consideration for the conveyance provided for herein is as follows:

CONSIDERATION: <u>EIGHTY EIGHT THOUSAND ONE HUNDRED DOLLARS</u>
<u>AND 00/100 CENTS (\$88,100.00)</u> in full for the easement described herein before and for all damages, if any.

The consideration hereinabove mentioned represents the value of all estates or interests in such land, and the damages to remaining lands of the Landowner which may result by reason of the use to which HRSD will put the land to be conveyed.

It is understood and agreed that the consideration paid to the Landowner in connection herewith constitutes payment in full for the Easement hereby conveyed. Damages, if any, to the residue or other property of the Landowner resulting from the project and use made of the Easement conveyed for the installation of the facilities shall be covered by the HRSD.

In the event the Landowner is unable to convey clear title to the above easement to HRSD as herein provided, and HRSD should elect to institute condemnation proceedings for the purpose of acquiring such easement, it is agreed by the Landowner that this instrument may be introduced in such proceedings as evidence of the value of land and damages, if any, to the remaining property of the Landowner.

The Landowner by execution of this instrument acknowledges that the plans for the aforesaid project as they affect the subject property have been fully explained to the undersigned.

HRSD or its contractor will restore Landowner's land and Parcel affected as a result of construction of the project as closely as is reasonably possible to its pre-construction condition (or better) upon completion of the Project including replacing with acceptable landscaping. Any disturbance of the premises during the life of this Agreement by the GRANTEE or its contractor will be restored by the GRANTEE as nearly as practicable. This includes paving, fences, backfilling of trenches, grass, reseeding, replacing or replanting landscaping, addressing ground sink issues, and removal of trash or debris. Landscaping will be replaced with immature trees, shrubs, and ground cover.

HRSD or its contractor hereby agrees that it will perform all such measures in a manner causing as little inconvenience and disruption to the Landowner, and Landowner's invitees, licensees and occupants as is reasonably possible.

RIGHT TO ENTER: The HRSD, or its agents, may exercise the right to enter upon so much of the parcel or Land needed for such purposes as may be necessary for the construction of this project with at least 48-hour notice to the Landowner, unless in cases of emergency repair of HRSD facilities.

ETHICS IN PUBLIC CONTRACTING: By executing this Agreement, the undersigned Landowner or its representative, and the representative of HRSD, certify that the prices agreed to in this Agreement were arrived at without collusion or fraud and that they have not offered or received any payment, kickbacks or other inducement from any other party to this Agreement or its agent or employee in connection with this Agreement, and that they have not conferred on any public employee having responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised unless disclosed in this Agreement.

Agreement – Tax Map# 151.00-05-08, City of Newport News, VA Between HRSD and Lea Company, L.L.C.

Landowner acknowledges that HRSD has relied upon these covenants, representations and warranties in purchasing the above easements.

Settlement shall be within ninety (90) days, or as soon thereafter, allowing a reasonable time to correct any title defects reported by the title examiner and preparation and signing of the necessary documents to enable the HRSD to take proper title.

THE COVENANTS, AGREEMENTS, REPRESENTATIONS, WARRANTIES OF THE LANDOWNER CONTAINED IN THESE PARAGRAPHS SHALL SURVIVE THE CLOSING AND DELIVERY OF THE DEED OF EASEMENT ACROSS THE SUBJECT LAND.

WITNESS the following signatures and seals:

LANDOWNER: Lea Company, L.L.C. a Virginia limited liability company By: Name: (SEAL) Name: (Signature)	
COMMONWEALTH OF VIRGINIA	
City/County of Vivgin1 of BEACK to-wit:	
The foregoing instrument was acknowledged before me this 12 day of WRY, 2022, by Beu 51 MON, on behalf of Lea Company, L.L.C., a Virginia limited liability company. Notary Public	<i>'</i>
Notary Public Registration No. 359 188	
My commission expires: $2-28-25$	
CLAUDIA MARIE WOLFF Notary Public Commonwealth of Virginia	

HRSD:

HAMPTON ROADS SANITATION DISTRICT

By: Jun 3n	_(SEAL)
Name JAY BERNAS	-
Title: GENERAL MANAGEN	3
COMMONWEALTH OF VIRGINIA	
City/County of Virginia Beach	to-wit:
3	21 Vn
The foregoing instrument was acknowledged be	efore me this 26 day of July, 2022, by
Jay A Bernas	as General Manager of
Hampton Roads Sanitation District, a political s	subdivision of the Commonwealth of Virginia.
	Jemson June Cosice
	Notary Public
My commission expires:	ENNIFER LYNN CASCIO RY PUBLIC - REG. #361710 MONWEALTH OF VIRGINIA
	N EXPIRES AUGUST 31, 2022

EXHIBIT A

Ocean of Ercomony Robinson HRSO and Lim Company 1-1-0

PREPARED BY AND RETURN TO:

HRSD Attn: Real Estate Department 1434 Air Rail Avenue Virginia Beach, Virginia 23471-0911

Tax ID: 151 00-05-08

DEED OF EASEMENT

WITNESSETH:

That for and in consideration of the sum of TEN AND 00/100 (\$10.00) DOLLARS and other good and valuable consideration, receipt of which is hereby acknowledged, GRANTOR does hereby grant and convey, all of their right, title and interest, if any, in the following easement, with GENERAL WARRANTY OF TITLE, unto GRANTEE, its successors and assigns, forever, the perpetual right, privilege, casement and right-of-way, hereinafter described, for the purpose of laying, erecting, constructing, operating, and maintaining one underground wastewater and/or water rouse force main and/or gravity main together with below ground equipment, accessories, and appurtenances thereto, hereinafter called "facilities," on the lands of the GRANTOR, said Permanent Eesement (the "Easement") being further described as follows:

All that certain Permanent Utility Easement shown and designated as a "30" SANITARY SEWER EASEMENT HEREBY DEDICATED 5,327 S.F. OR 0.12229 AC.", as shown on the attached plat prepared by Paul W. Michael, Jr., Surveyor, Michael Surveying & Mapping, P.C., 41 Old Oyster Point Road, Suito B. Newport News, Virginia 23602 entitled, "EASEMENT PLAT FROM; LEA CO TO: HAMPTON ROADS SANITATION DISTRICT", and dated APRIL 21, 2020; and being part of the same property containing 0 9262 acres, identified as "PARCEL 5" as shown on Plat entitled "Subdivision Plat of Parcel "E" as shown on Plat of the property of Yoder Development Company in (D.B. 77. PG. 130) and a portion of part of the property of H.E. and C.P. Yoder Parcels "A". "B". "G" Newport Nows. Virginia' dated July 14, 1995, made by Engineering Services, Inc., and recorded in Deed Book 1408, Page 379.

Together with all and singular and improvements, tenements, hereditaments, rights, privileges and appurtonances thereunto belonging or in anywise appertaining (the "Easement"), which Plat is attached hereto and made a part hereof

This easement is subject to the following conditions and provisions:

- A The facilities existing or constructed under the Easement shall remain the property of GRANTEE GRANTEE shall have the right to inspect, rebuild, remove, repair, Improve, and make such changes, alterations, additions to or extensions of its facilities within the boundaries of said right of way as are consistent with the purpose expressed herein GRANTEE shall be permitted to construct or operate an additional sower main within the Easement area without acquiring the additional right to do so from GRANTOR only if such line is necessary to effect emergency repairs on the original line. All construction maintenance, equipment and facilities shall comply with all applicable laws, ordinances, codes and regulations.
- B GRANTEE shall do no work on the facilities between October 1 and January 31, except for necessary preventative maintenance, emergency inspections and, if necessary, emergency repairs
- C GRANTEE or its contractor shall make every effort to complete the initial construction of the sewer main in the Ensement area within the time trames sot forth on the attached diagram. It is understood that variables and factors beyond the control of the GRANTEE could delay or impede this goal. From 10:00 AM to 10:00 PM during such initial construction, GRANTEE or its contractor shall ensure that two-way vehicular travet will be maintained on the paved travel lanes within and adjacent to the Easement.
- D. GRANTEE shall remove from GRANTOR's property any spoils and/or excavated material from construction within the Easement and shall replace it with select material sand. Under no circumstances shall GRANTEE or its contractor place or store any spoils or excavated material on the property of GRANTOR, whether within or outside of the Easement area.
- E GRANTEE shall have the right to trim, cut and remove trees, shribbery or other obstructions which interfere with or threaten the efficient and eafe operation, construction and maintenance of said facilities. All brush, branches, and other debris resulting from any cutting, trimming, or clearing of said right of way shall be removed from tands of GRANTOR for disposal Any work by GRANTEE pursuant to this paragraph shall be in conformity with applicable zoning and land use regulations and shall not cause GRANTOR s property to become out of compliance with applicable zoning and land use regulations.
- F At the conclusion of initial construction of the facilities within the Easement, GRANTEE shall fully restore nill disturbed areas within the Easement to as good or belter condition as before such construction, including but not limited to repaying and restriping GRANTEE shall repaye and, as necessary, restring the entire width of the private road and travel lanes, including areas located outside of the Easement boundaries, so as to restore a uniform treatment to the payed travel lanes.
- G. GRANTOR, its successors and assigns, may use said right of way for any purpose not inconsistent with the rights bereby granted, provided such use does not interfere with the safe and efficient construction, operation or maintenance of said facilities, and further provided that such use is not inconsistent with any laws, ordinances or codes pertaining to the construction,

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operation or maintenance of said facilities. GRANTOR shall not place any permanent improvements within the easement without permission of GRANTEE, or its successors, including but not limited to houses, buildings, pools, sheds, signs, or similar permanent structures. GRANTOR may install fences, driveways, pavement and landscaping (trees and shrubs shall be varieties that will not exceed 20 feet tall at maturity).

- H. It is understood and agreed that the consideration paid to the GRANTOR in connection herewith constitutes payment in full for the property hereby conveyed and for damages, it any, to the residue or other property of the GRANTOR resulting from the project and use made of the property conveyed.
- In using or exercising the Easement rights conveyed herein, GRANTEE shall not, temporarily or permanently, impair any vehicular parking areas on the property of GRANTOR, nor shall GRANTEE impede or otherwise restrict access to any building or dumpster pad. It is understood by the GRANTEE, that it may be necessary for dumpsters to be temporarily shifted outside the bounds of the Easement, but that this temporary relocation will not occur in any way that would impade or restrict access.
- J. GRANTEE and its contractor hereby agree that they will perform all such measures in a manner causing as little inconvenience and disruption to GRANTOR, and GRANTOR's invitees, licensees and occupants as is reasonably possible. Plans for the Easement have been explained to GRANTOR, and GRANTEE warrants that it will not construct above ground facilities, including pumping stations, within the Easement area.

WITNESS the following signature and seal all as of the day and year first above written.

GRA	VIUR:	
Lea (Company, L.L.C., a Virginia firnited liability company	
BY:		
•••	(Signalure)	
ITS:	management of the first of the state of the	
	(Tille)	
STAT	E/COMMONWEALTH OF	
City/C	county of to-wit:	
The (pregoing instrument was acknowledged before me this day of	
of Lea	by	
		Notary Public
	man marketing	7101017 1 0240
	y Public Registration No	
My co	ommission expires;	

DEED OF TRUST/MORTGAGE INFORMATION AND AUTHORIZATION

(Please complete and return this form)

In order to conclude this transaction, the Hampton Roads Sanitation District (HRSD) will obtain a release from all deeds of trust or mortgage loans on your property. You may have one or more mortgages on your property. This procedure complies with the rules of the agreement between you and your mortgage company. This procedure also allows HRSD to comply with our attorney's requirements.

HRSD's attorney will request and obtain any applicable releases and will also respond to the inquiries and requirements of your mortgage company.

To handle this procedure in the timeliest manner, we need to obtain the current mortgage information on your property. As with all transactions, we will review your ownership of this property through research of courthouse records. The information you provide will update our research, furnish the loan number and ensure that the partial

release is forwarded to the current mortgage company as soon as possible. The landowner(s) by their signature hereto authorizes HRSD and its representatives to perform any actions necessary to obtain releases from any deeds of trust, judgment liens, or other encumbrances affecting the real estate being acquired from the landowners in conjunction with the Jefferson Avenue Interceptor Force Main Replacement Improvement Project. (Date) Name: Property Owner(s): Lea Company, L.L.C. 12120 Jefferson Ave., Newport News, Virginia 23602 Address: 151.00-05-08 Tax ID: NO OUTSTANDING MORTGAGES OR LOANS EXIST ON THIS PROPERTY. **DEED OF TRUST/MORTGAGE** Name of Lender/Noteholder: Account/Loan No: Lender/Noteholder Address: Telephone No.: ______ Fax No.: _____ Comments:

AGREEMENT

THIS AGREEMENT, made this day of day of 2022, by and between LEA COMPANY, L.L.C., a Virginia limited liability company, who acquired title as LEA COMPANY, a Virginia general partnership, and whose mailing address is 397 Little Neck Road, Suite 200, Building 3400, Virginia Beach, Virginia 23452 ("Landowner"), and HAMPTON ROADS SANITATION DISTRICT ("HRSD"), a political subdivision of the Commonwealth of Virginia, located at 1434 Air Rail Avenue, Virginia Beach, Virginia 23455 (the "Grantee"), and Collectively, Landowner and HRSD shall be referred to as the "Parties."

WITNESSETH: That for and in consideration of one dollar and other valuable consideration, receipt of which is hereby acknowledged, Landowner agrees to convey to HRSD a Permanent Utility Easement over, across and through the following described property of the Landowner, by Deed of Easement (attached hereto as Exhibit A), properly executed, acknowledged, and delivered.

The land and improvements subject to the Permanent Utility Easement (hereinafter referred to as the "Easement") is described as follows:

All that certain Permanent Utility Easement located in the City of Newport News, Virginia, shown and designated as a "20" SANITARY SEWER EASEMENT HEREBY DEDICATED 5,716 S.F. OR 0.13122 AC.", as shown on the attached plat prepared by Paul W. Michael, Jr., Surveyor, Michael Surveying & Mapping, P.C., 41 Old Oyster Point Road, Suite B, Newport News, Virginia 23602 entitled, "EASEMENT PLAT FROM: LEA CO TO: HAMPTON ROADS SANITATION DISTRICT", and dated DECEMBER 1, 2020; and being part of the same property containing 12.75 acres, identified as "PARCEL 2A" as shown on Plat entitled "Subdivision Plat of Parcels 1, 2, 3A, 3B, 4A, & 4B Yoder Plaza Shopping Center Newport News, Virginia" dated June 10, 1996, made by Engineering Services, Inc., and recorded in Deed Book 1441, Page 7.

Together with all and singular the buildings and improvements, tenements, hereditaments, rights, privileges and appurtenances thereunto belonging or in anywise appertaining (the "Easement"), a copy of which plat is attached hereto and made a part hereof.

The total consideration for the conveyance provided for herein is as follows:

CONSIDERATION: <u>SIXTY SEVEN THOUSAND SIX HUNDRED DOLLARS AND 00/100 CENTS (\$67,600.00)</u> in full for the easement described herein before and for all damages, if any.

The consideration hereinabove mentioned represents the value of all estates or interests in such land, and the damages to remaining lands of the Landowner which may result by reason of the use to which HRSD will put the land to be conveyed.

It is understood and agreed that the consideration paid to the Landowner in connection herewith constitutes payment in full for the Easement hereby conveyed. Damages, if any, to the residue or other property of the Landowner resulting from the project and use made of the Easement conveyed for the installation of the facilities shall be covered by the HRSD.

In the event the Landowner is unable to convey clear title to the above easement to HRSD as herein provided, and HRSD should elect to institute condemnation proceedings for the purpose of acquiring such easement, it is agreed by the Landowner that this instrument may be introduced in such proceedings as evidence of the value of land and damages, if any, to the remaining property of the Landowner.

The Landowner by execution of this instrument acknowledges that the plans for the aforesaid project as they affect the subject property have been fully explained to the undersigned.

HRSD or its contractor will restore Landowner's land and Parcel affected as a result of construction of the project as closely as is reasonably possible to its pre-construction condition (or better) upon completion of the Project including replacing with acceptable landscaping. Any disturbance of the premises during the life of this Agreement by the GRANTEE or its contractor will be restored by the GRANTEE as nearly as practicable. This includes paving, fences, backfilling of trenches, grass, reseeding, replacing or replanting landscaping, addressing ground sink issues, and removal of trash or debris. Landscaping will be replaced with immature trees, shrubs, and ground cover.

HRSD or its contractor hereby agrees that it will perform all such measures in a manner causing as little inconvenience and disruption to the Landowner, and Landowner's invitees, licensees and occupants as is reasonably possible.

RIGHT TO ENTER: The HRSD, or its agents, may exercise the right to enter upon so much of the parcel or Land needed for such purposes as may be necessary for the construction of this project with at least 48-hour notice to the Landowner, unless in cases of emergency repair of HRSD facilities.

ETHICS IN PUBLIC CONTRACTING: By executing this Agreement, the undersigned Landowner or its representative, and the representative of HRSD, certify that the prices agreed to in this Agreement were arrived at without collusion or fraud and that they have not offered or received any payment, kickbacks or other inducement from any other party to this Agreement or its agent or employee in connection with this Agreement, and that they have not conferred on any public employee having responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised unless disclosed in this Agreement.

Agreement -- Tax Map# 151.00-05-03, City of Newport News, VA Between HRSD and Lea Company, L.L.C.

Landowner acknowledges that HRSD has relied upon these covenants, representations and warranties in purchasing the above easements.

Settlement shall be within ninety (90) days, or as soon thereafter, allowing a reasonable time to correct any title defects reported by the title examiner and preparation and signing of the necessary documents to enable the HRSD to take proper title.

THE COVENANTS, AGREEMENTS, REPRESENTATIONS, WARRANTIES OF THE LANDOWNER CONTAINED IN THESE PARAGRAPHS SHALL SURVIVE THE CLOSING AND DELIVERY OF THE DEED OF EASEMENT ACROSS THE SUBJECT LAND.

WITNESS the following signatures and seals: LANDOWNER: Lea Company, L.I. a Virginia limited liability company (SEAL) (Signature) Name: MANAGER Title: COMMONWEALTH OF VIRGINIA City/County of Vivainia Beach The foregoing instrument was acknowledged before me this 11 day of MAI , on behalf of Lea Company, L.L.C., a Virginia WEN SIMON limited liability company. Notary Public Notary Public Registration No. My commission expires:

CLAUDIA MARIE WOLFF
Notary Public
Commonwealth of Virginia
Registration No. 359188
My Commission Expires Feb 28, 2025

HRSD:

HAMPTON ROADS SANITATION DISTRICT

By: Jan ym	_(SEAL)
Name Jay Berens	
Title: OFFISCH WANAGER	-
COMMONWEALTH OF VIRGINIA	
City/County of Virginia Black	to-wit:
9	2100
The foregoing instrument was acknowledged be	as Denoral Manager of
Hampton Roads Sanitation District, a political s	ubdivision of the Commonwealth of Virginia.
	Jennifor Lynn Cascis
	Notary Public
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	FER LYNN CASCIO
	PUBLIC - REG. #361710 IWEALTH OF VIRGINIA
MY COMMISSION EX	PIRES AUGUST 31, 2022

EXHIBIT A

Devol. 2 Fase more Biogeoist HRSD and Lina Company, 1-1-0.

PREPARED BY AND RETURN TO:

HRSD

Altn: Roal Estato Department 1434 Air Rail Avenue Virginia Beach, Virginia 23471-0911

Tax ID: 151.00-05-03

DEED OF EASEMENT

THIS DEED OF EASEMENT made this __day of _______. 2022, by and between LEA COMPANY, L.L.C. a Virginia limited liability company, who acquired little as LEA COMPANY, a Virginia general partnership, whose mailing address is 397 Little Neck Road, Suite 200, Building 3400, Virginia Beach, Virginia 23452, GRANTOR, and HAMPTON ROADS SANITATION DISTRICT, a political subdivision of the Commonwealth of Virginia, GRANTEE whose mailing address is P O Box 5911, Virginia Beach, Virginia, 23471-0911.

WITNESSETH:

That for and in consideration of the sum of TEN AND 00/100 (\$10.00) DOLLARS and other good and valuable consideration, receipt of which is hereby acknowledged, GRANTOR does hereby grant and convey, all of their right, title and interest, if any in the following easement, with GENERAL WARRANTY OF TITLE, unto GRANTEE, its successors and assigns, forever, the perpetual right, privilege, easement and right-of-way hereinafter described for the purpose of laying, erecting, constructing, operating, and maintaining one underground wastewater and/or water reuse force main and/or gravity main together with below ground equipment, accessories, and appurtenances thereto, hereinafter called "facilities," on the lands of the GRANTOR, said Permanent Easement (the "Ensement") being further described as follows:

All that certain Permanent Utility Easement located in the City of Newport News. Virginia, shown and designated as a "20" SANITARY SEWER EASEMENT HEREBY DEDICATED 5,716 S.F. OR 0.13122 AC.", as shown on the attached plat prepared by Paul W. Michael, Jr., Surveyor, Michael Surveying & Mapping, P.C., 41 Old Oyster Point Road, Suite B. Newport News, Virginia 23602 entitled, "EASEMENT PLAT FROM: LEA CO TO: HAMPTON ROADS SANITATION DISTRICT", and deled DECEMBER 1, 2020; and being part of the same property containing 12.75 acres, identified as "PARCEL 2A" as shown on Plat entitled "Subdivision Plat of Percels 1, 2, 3A, 3B, 4A, & 4B Yoder Plaza Shopping Center Newport Nows, Virginia" dated June 10, 1996, made by Engineering Services, Inc., and recorded in Deed Book 1441, Page 7

Together with all and singular and improvements, tenements, hereditaments, rights, privileges and appurtenances thereunto belonging or in anywise appending (the 'Easement'), which Plat is attached hereto and made a part hereof.

Dead of Easter of Believen HH5O and Lea Cket, 199 1 U.S.

This easement is subject to the following conditions and provisions.

- A The facilities existing or constructed under the Easement shall remain the property of GRANTEE GRANTEE shall have the right to inspect, rebuild, remove, repair, improve and make such changes, alterations, additions to or extensions of its facilities within the boundaries of said right of way as are consistent with the purpose expressed herein. GRANTEE shall be permitted to construct or operate an additional sewer main within the Easement area without acquiring the additional right to do so from GRANTOR only if such line is necessary to effect emergency repairs on the original line. All construction, maintenance, equipment and facilities shall comply with all applicable laws, ordinances, codes and regulations.
- B GRANTEE shall do no work on the facilities between October 1 and January 31, except for necessary preventative maintenance emergency inspections and, if necessary, emergency repairs.
- C GRANTEE or its contractor shall make every effort to complete the initial construction of the sewer main in the Easement area within the time frames set forth on the attached diagram. It is understood that variables and factors beyond the control of the GRANTEE could delay or impade this goal. From 10:00 AM to 10:00 PM during such initial construction, GRANTEE or its contractor shall meaure that two-way vahicular travel with the maintained on the paved travel lanes within and adjacent to the Easement.
- D GRANTEE shall remove from GRANTOR's property any spoils and/or excavated material from construction within the Easement and shall replace it with solect material sand. Under no circumstances shall GRANTEE or its contractor place or store any spoils or excavated material on the property of GRANTOR, whether within or outside of the Easement area
- E. GRANTEE shall have the right to trim, cut and remove trees, shrubbery or other obstructions which interfere with or threaten the afficient and safe operation, construction and maintenance of said facilities. All brush, branches, and other debris resulting from any cutting, trimming, or cleaning of said right of way shall be removed from lands of GRANTOR for disposal Any work by GRANTEE pursuant to this paragraph shall be in conformity with applicable zoning and faild use regulations and shall not cause GRANTOR's properly to become out of compliance with applicable zoning and land use regulations.
- F At the conclusion of initial construction of the facilities within the Easement, GRANTEE shall fully restore all disturbed areas within the Easement to as good or better condition as before such construction, including but not limited to repaying and restriping GRANTEE shall impaye and, as necessary, restring the entire width of the payed road and trayel times including areas located outside of the Easement houndaries, so as to restore a uniform treatment to the payed trayel larges.
- G GRANTOR its successors and assigns, may use said right of way for any purpose not inconsistent with the rights horeby grantod provided such use does not interior with the safe and efficient construction, operation or maintenance of said facilities, and further provided that such use is not inconsistent with any laws, ordinances or codes pertaining to the construction, operation or maintenance of said facilities GRANTOR shall not place any permanent

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but not limited GRANTOR ma	within the easement to houses, buildin y install fences, drive Ill not exceed 20 fee	ga, pools, s ways, paven	ission of G heds, sign pent and la	RANTEE,	orits suc ilar pem	cessors, i	including ructures.
H.	It is understood and	t agreed the	it the cons	nollarabie	paid to hereby	the GRAI	NTOR in and for

- H. It is understood and agreed that the consideration paid to the GRANIOR in connection herewith constitutes payment in full for the property hereby conveyed and for damages, if any, to the residue or other property of the GRANIOR resulting from the project and use made of the property conveyed.
- I. In using or exercising the Easement rights conveyed herein, GRANTEE shall not, temporarily or permanently, impair any vehicular parking areas on the property of GRANTOR, nor shall GRANTEE impede or otherwise restrict access to any building or dumpster pad. It is understood by the GRANTEE, that it may be necessary for dumpsters to be temporarily shifted outside the bounds of the Easement, but that this temporary relocation will not occur in any way that would impede or restrict access.
- J GRANTEE and its contractor hereby agree that they will perform all such measures in a manner causing as little inconvenience and disruption to GRANTOR, and GRANTOR's invitees, licensees and occupants as is reasonably possible. Plans for the Easement have been explained to GRANTOR, and GRANTEE warrants that it will not construct above ground facilities, including pumping stations, within the Easement area

WITNESS the following signature and seal all as of the day and year first above written.

GRAN Lea C	ITOR: Company, L.L.C., a Virginia limited liability company	
BY: ITS:	(Signolina) {Titlo}	
Clty/C	E/COMMONWEALTH OF	
2022	oregoing instrument was acknowledged before me this, day of byas a Company, L.L.C , a Virginia limited liability company	
		Notary Public
Notac	y Public Registration No	
	minission expires:	

DEED OF TRUST/MORTGAGE INFORMATION AND AUTHORIZATION

(Please complete and return this form)

in order to conclude this transaction, the Hampton Roads Sanitation District (HRSD) will obtain a release from all deeds of trust or mortgage loans on your property. You may have one or more mortgages on your property. This procedure complies with the rules of the agreement between you and your mortgage company. This procedure also allows HRSD to comply with our attorney's requirements.

HRSD's attorney will request and obtain any applicable releases and will also respond to the inquiries and requirements of your mortgage company.

property. As with all transactions, we will review your ownership of this property through research of courthouse records. The information you provide will update our research, furnish the loan number and ensure that the partial

To handle this procedure in the timeliest manner, we need to obtain the current mortgage information on your release is forwarded to the current mortgage company as soon as possible. The landowner(s) by their signature hereto authorizes HRSD and its representatives to perform any actions necessary to obtain releases from any deeds of trust, judgment liens, or other encumbrances affecting the real estate being acquired from the landowners in conjunction with the Jefferson Avenue Interceptor Force Main Replacement Improvement Project. (Date) Name: Lea Company, L.L.C. Property Owner(s): 12132 Jefferson Ave., Newport News, Virginia 23602 Address: 151.00-05-03 Tax ID: NO OUTSTANDING MORTGAGES OR LOANS EXIST ON THIS PROPERTY. **DEED OF TRUST/MORTGAGE** Name of Lender/Noteholder: Account/Loan No: Lender/Noteholder Address: Telephone No.: ______ Fax No.: ______

AGREEMENT

WITNESSETH: That for and in consideration of one dollar and other valuable consideration, receipt of which is hereby acknowledged, Landowner agrees to convey to HRSD a Permanent Utility Easement over, across and through the following described property of the Landowner, by Deed of Easement (attached hereto as Exhibit A), properly executed, acknowledged, and delivered.

The land and improvements subject to the Permanent Utility Easement (hereinafter referred to as the "Easement") is described as follows:

All that certain Permanent Utility Easement located in the City of Newport News, Virginia, shown and designated as a "VARIABLE WIDTH SANITARY SEWER EASEMENT HEREBY DEDICATED 190 S.F. OR 0.00436 AC.", as shown on the attached plat prepared by Paul W. Michael, Jr., Surveyor, Michael Surveying & Mapping, P.C., 41 Old Oyster Point Road, Suite B, Newport News, Virginia 23602 entitled, "EASEMENT PLAT FROM: LEA CO TO: HAMPTON ROADS SANITATION DISTRICT", and dated DECEMBER 1, 2020; and being part of the same property containing 2.2014 acres, identified as "PARCEL 3Z" as shown on Plat entitled "Subdivision Plat of Parcels 1, 2, 3A, 3B, 4A, & 4B Yoder Plaza Shopping Center Newport News, Virginia" dated June 10, 1996, made by Engineering Services, Inc., and recorded in Deed Book 1441, Page 7.

Together with all and singular the buildings and improvements, tenements, hereditaments, rights, privileges and appurtenances thereunto belonging or in anywise appertaining (the "Easement"), a copy of which plat is attached hereto and made a part hereof.

The total consideration for the conveyance provided for herein is as follows:

CONSIDERATION: TWO THOUSAND SIX HUNDRED DOLLARS AND 00/100 CENTS (\$2,600.00) in full for the easement described herein before and for all damages, if any.

The consideration hereinabove mentioned represents the value of all estates or interests in such land, and the damages to remaining lands of the Landowner which may result by reason of the use to which HRSD will put the land to be conveyed.

It is understood and agreed that the consideration paid to the Landowner in connection herewith constitutes payment in full for the Easement hereby conveyed. Damages, if any, to the residue or other property of the Landowner resulting from the project and use made of the Easement conveyed for the installation of the facilities shall be covered by the HRSD.

In the event the Landowner is unable to convey clear title to the above easement to HRSD as herein provided, and HRSD should elect to institute condemnation proceedings for the purpose of acquiring such easement, it is agreed by the Landowner that this instrument may be introduced in such proceedings as evidence of the value of land and damages, if any, to the remaining property of the Landowner.

The Landowner by execution of this instrument acknowledges that the plans for the aforesaid project as they affect the subject property have been fully explained to the undersigned.

HRSD or its contractor will restore Landowner's land and Parcel affected as a result of construction of the project as closely as is reasonably possible to its pre-construction condition (or better) upon completion of the Project including replacing with acceptable landscaping. Any disturbance of the premises during the life of this Agreement by the GRANTEE or its contractor will be restored by the GRANTEE as nearly as practicable. This includes paving, fences, backfilling of trenches, grass, reseeding, replacing or replanting landscaping, addressing ground sink issues, and removal of trash or debris. Landscaping will be replaced with immature trees, shrubs, and ground cover.

HRSD or its contractor hereby agrees that it will perform all such measures in a manner causing as little inconvenience and disruption to the Landowner, and Landowner's invitees, licensees and occupants as is reasonably possible.

RIGHT TO ENTER: The HRSD, or its agents, may exercise the right to enter upon so much of the parcel or Land needed for such purposes as may be necessary for the construction of this project with at least 48-hour notice to the Landowner, unless in cases of emergency repair of HRSD facilities.

ETHICS IN PUBLIC CONTRACTING: By executing this Agreement, the undersigned Landowner or its representative, and the representative of HRSD, certify that the prices agreed to in this Agreement were arrived at without collusion or fraud and that they have not offered or received any payment, kickbacks or other inducement from any other party to this Agreement or its agent or employee in connection with this Agreement, and that they have not conferred on any public employee having responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised unless disclosed in this Agreement.

Agreement -- Tax Map# 151.00-05-05, City of Newport News, VA Between HRSD and Lea Company, L.L.C.

Landowner acknowledges that HRSD has relied upon these covenants, representations and warranties in purchasing the above easements.

Settlement shall be within ninety (90) days, or as soon thereafter, allowing a reasonable time to correct any title defects reported by the title examiner and preparation and signing of the necessary documents to enable the HRSD to take proper title.

THE COVENANTS, AGREEMENTS, REPRESENTATIONS, WARRANTIES OF THE LANDOWNER CONTAINED IN THESE PARAGRAPHS SHALL SURVIVE THE CLOSING AND DELIVERY OF THE DEED OF EASEMENT ACROSS THE SUBJECT LAND.

WITNESS the following signatures and seals:

LANDOWNER: Lea Company, L.C. a Virginia limited hability company By: Name: (Signature) Title:	
COMMONWEALTH OF VIRGINIA City/County of Vivginia Beach to-wit:	
The foregoing instrument was acknowledged before me this, on behalf o	day of <u>MA4</u> , 2022, by f Lea Company, L.L.C., a Virginia
limited liability company.	el Hearl Co
Notary Pul	olic
Notary Public Registration No. 359188	
My commission expires: $D\overline{A} - \overline{A} - \overline{B} - \overline{A} - \overline{D}$	CLAUDIA MARIE WOLFF
	Notary Public Commonwealth of Virginia . Registration No. 359188 My Commission Expires Feb 28, 2025

HRSD:

HAMPTON ROADS SANITATION DISTRICT

By: Jay Brens	(SEAL)
Title: GENERAL MANAGEN	
COMMONWEALTH OF VIRGINIA	Assault III
City/County of Virginia Brown	to-wit:
	a un \
	is constant the state of
Hampton Roads Sanitation District, a political su	bdivision of the Commonwealth of Virginia.
	Notary Public Syna Cascus
My commission expires: NOTARY I	FER LYNN CASCIO **UBLIC - REG. #361710 **WEALTH OF VIRGINIA **PIRES AUGUST 31, 2022

EXHIBIT A

Owner of Europeanal Bottomen HRSD and Lea Company 1 1 G

PREPARED BY AND RETURN TO

HRSD

Atln: Real Estate Department

1434 Air Rail Avenue

Virginia Beach, Virginia 23471-0911

Tax ID: 151 00-05-05

DEED OF EASEMENT

THIS DEED OF EASEMENT made this __day of ______. 2022, by and between LEA COMPANY, L.L.C. a Virginia limited liability company, who acquired title as LEA COMPANY, a Virginia general partnership, whose mailing address is 397 Little Nock Road, Suite 200, Building 3400, Virginia Beach, Virginia 23452, GRANTOR, and HAMPTON ROADS SANITATION DISTRICT, a political subdivision of the Commonwealth of Virginia, GRANTEE, whose mailing address is: P O Box 5911, Virginia Beach, Virginia, 23471-0911.

WITNESSETH:

That for and in consideration of the sum of TEN AND 00/100 (\$10.00) DOLLARS and other good and valuable consideration, receipt of which is hereby acknowledged, GRANTOR does hereby grant and convey, all of their right, title and interest, if any, in the following easement, with GENERAL WARRANTY OF TITLE, unto GRANTEE, its successors and assigns, forever, the perpetual right, privilege, easement and right-of-way, hereinafter described, for the purpose of laying, erecting, constructing, operating, and maintaining one underground wastewater and/or water reuse force main and/or gravity main together with below ground equipment, accessories, and appurenances thereto, hereinafter called "facilities," on the lands of the GRANTOR, said Permanent Easement (the "Easement") being further described as follows:

All that certain Permanent Utility Easement located in the City of Newport News, Virginia, shown and designated as a "VARIABLE WIDTH SANITARY SEWER EASEMENT HEREBY DEDICATED 190 S.F. OR 0.00436 AC.", as shown on the attached plat prepared by Paul W. Michael, Jr., Surveyor, Michael Surveying & Mapping, P.C. 41 Old Oyster Point Road. Suita B. Newport News, Virginia 23602 entitled, "EASEMENT PLAT FROM: LEA CO TO: HAMPTON ROADS SANITATION DISTRICT", and dated DECEMBER 1, 2020; and being part of the same properly containing 2.2014 acres, Identified as "PARCEL 3Z" as shown on Plat entitled "Subdivision Plat of Parcels 1, 2, 3A, 3B, 4A, & 4B Yoder Plaza Shopping Genter Newport News, Virginia" dated June 10, 1996, made by Engineering Services, Inc., and recorded in Dead Book 1441, Page 7

Together with all and singular and improvements, tenements, hereditaments, rights, privileges and appurtenances thereunto belonging or in anywise appendining (the "Easement"), which Plat is attached hereto and made a part hereof.

Denit of Ease Tant Between HRSD and Loa Contrary 1 L C

This easement is subject to the following conditions and provisions:

- A. The facilities existing or constructed under the Easement shall remain the property of GRANTEE GRANTEE shell have the right to inspect, rebuild, remove, repair, improve, and make such changes, alterations, additions to or extensions of its facilities within the boundaries of said right of way as are consistent with the purpose expressed herein. GRANTEE shall be permitted to construct or operate an additional sewer main within the Easement area without acquiring the additional right to do so from GRANTOR only if such line is necessary to effect emergency repairs on the original line. All construction, maintenance, equipment and facilities shall comply with all applicable laws, ordinances codes and regulations.
- B. GRANTEE shall do no work on the facilities between October 1 and January 31, except for necessary preventative maintenance, emergency inspections and, if necessary, emergency repairs.
- C. GRANTEE or its contractor shall make every effort to complete the initial construction of the sewer main in the Easement area within the time frames set forth on the attached diagram, it is understood that variables and factors beyond the control of the GRANTEE could delay or impede this goal From 10:00 AM to 10:00 PM during such initial construction, GRANTEE or its contractor shall ensure that two-way vehicular traval will be maintained on the paved traval lanes within and adjacent to the Easement.
- D. GRANTEE shall remove from GRANTOR's property any spoils and/or excavated material from construction within the Easement and shall replace it with select material sand. Under no circumstances shall GRANTEE or its contractor place or store any spoils or excavated material on the property of GRANTOR, whether within or outside of the Easement area.
- E. GRANTEE shall have the right to Irim, cut and remove trees, shrubbery or other obstructions which interfere with or threaten the efficient and safe operation, construction and maintenance of said facilities. All brush, branches, and other debris resulting from any cutting, trimming, or clearing of said right of way shall be removed from lands of GRANTOR for disposal. Any work by GRANTEE pursuant to this paragraph shall be in conformity with applicable zoning and land use regulations and shall not cause GRANTOR's property to become out of compliance with applicable zoning and land use regulations.
- F. At the conclusion of initial construction of the facilities within the Easement, GRANTEE shall fully restore all disturbed areas within the Easement to as good or better condition as before such construction, including but not limited to repaying and restriping GRANTEE shall repayo and, as necessary, restripe the entire width of the payed road and lravel tangs, including areas tocated outside of the Easement boundaries, so as to restore a uniform treatment to the payed travel langs.
- G. GRANTOR, its successors and assigns, may use said right of way for any purpose not inconsistent with the rights hereby granted, provided such use does not interfere with the safe and efficient construction, operation or maintenance of said facilities, and further provided that such use is not inconsistent with any laws, ordinances or codes pertaining to the construction, operation or maintenance of said facilities. GRANTOR shall not place any permanent

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improvements within the easement without permission of GRANTEE, or its successors, including but not limited to houses, buildings, pools, sheds, signs, or similar permanent structures. GRANTOR may install fences, driveways, pavement and landscaping (trees and shrubs shall be variouss that will not exceed 20 feet tall at maturity).

- H It is understood and agreed that the consideration paid to the GRANTOR in connection herewith constitutes payment in full for the property hereby conveyed and for damages, if any to the residue or other property of the GRANTOR resulting from the project and use made of the property conveyed.
- In using or exercising the Eesement rights conveyed herein, GRANTEE shall not, temporarily or parmanently, impair any vehicular parking areas on the property of GRANTOR, nor shall GRANTEE impede or otherwise restrict access to any building or dumpster pad. It is understood by the GRANTEE, that it may be necessary for dumpsters to be temporarily shifted outside the bounds of the Easement, but that this temporary relocation will not occur in any way that would impede or restrict access
- J. GRANTEE and its contractor hereby agree that they will perform all such measures in a manner causing as little inconvenience and disruption to GRANTOR, and GRANTOR's invitees, incensees and occupants as is reasonably possible. Plans for the Easement have been explained to GRANTOR, and GRANTEE warrants that it will not construct above ground facilities, including pumping stations, within the Easement area

WITNESS the following signature and seat all as of the day and year first above written.

GRAN Lea C	ITOR: company, L.L.C., a Virginia limited liability company	
BY: ITS:	(Signature)	
City/C	E/COMMONWEALTH OF to-with to-with to-with the second description of th	
-	y Public Registration No	Notary Public

DEED OF TRUST/MORTGAGE INFORMATION AND AUTHORIZATION

(Please complete and return this form)

In order to conclude this transaction, the Hampton Roads Sanitation District (HRSD) will obtain a release from all deeds of trust or mortgage loans on your property. You may have one or more mortgages on your property. This procedure complies with the rules of the agreement between you and your mortgage company. This procedure also allows HRSD to comply with our attorney's requirements.

HRSD's attorney will request and obtain any applicable releases and will also respond to the inquiries and requirements of your mortgage company.

To handle this procedure in the timeliest manner, we need to obtain the current mortgage information on your property. As with all transactions, we will review your ownership of this property through research of courthouse records. The information you provide will update our research, furnish the loan number and ensure that the partial release is forwarded to the current mortgage company as soon as possible. The landowner(s) by their signature hereto authorizes HRSD and its representatives to perform any actions necessary to obtain releases from any deeds of trust, judgment liens, or other encumbrances affecting the real estate being acquired from the landowners in conjunction with the Jefferson Avenue Interceptor Force-Main Replacement Improvement Project. Name: (Date) Property Owner(s): Lea Company, L.L.C. Address: 12150 Jefferson Ave., Newport News, Virginia 23602 Tax ID: 151.00-05-05 NO OUTSTANDING MORTGAGES OR LOANS EXIST ON THIS PROPERTY. DEED OF TRUST/MORTGAGE Name of Lender/Noteholder: ______ Account/Loan No: Lender/Noteholder Address: Telephone No.: ______ Fax No.: _____

P ST

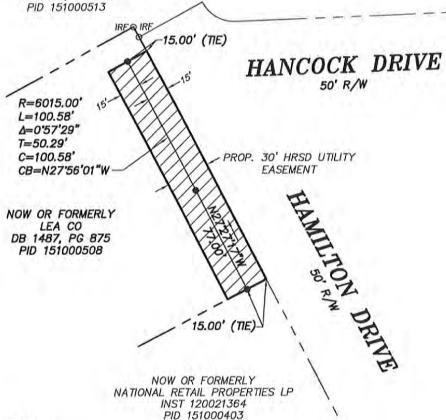
CONTROL

NOTES: 1. HORIZONTAL COORDINATE INFORMATION IS BASED ON THE CITY OF NEWPORT NEWS GEODETIC CONTROL NETWORK, STATE PLANE COORDINATE SYSTEM SOUTH ZONE (NAD 83) (1992), UNITS ARE

2. PROPERTY LINES SHOWN ARE BASED ON COMPILED RECORD INFORMATION, TAX MAP INFORMATION AND MADE TO FIT FIELD FOUND MONUMENTATION. THIS PLAT IS FOR EASEMENT PURPOSES ONLY AND DOES NOT CONSTITUTE A PHYSICAL OR BOUNDARY SURVEY.

3. A TITLE REPORT WAS NOT PROVIDED FOR THIS PROJECT, THEREFORE THERE MAYBE OTHER EASEMENTS THAT AFFECT THE PROPERTY THAT ARE NOT SHOWN.

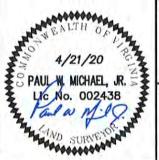
NOW OR FORMERLY DAYTON HUDSON CORPORATION DB 1499, PG 288



LEGEND

- O IPF (IRON PIPE FOUND)
- O IRF (IRON ROD FOUND)
- M CMF (CONC MON FOUND)

DENOTES PERMANENT 30' UTILITY EASEMENT TO BE CONVEYED TO HAMPTON ROADS SANITATION DISTRICT — 5,327 S.F. (TOTAL)



References: D.B. 1487, PG. 875

Notes:

EASEMENT PLAT FROM: LEA CO

TO: HAMPTON ROADS SANITATION DISTRICT

PROJECT: JEFFERSON AVE IFM REPLACEMENT PHASE III

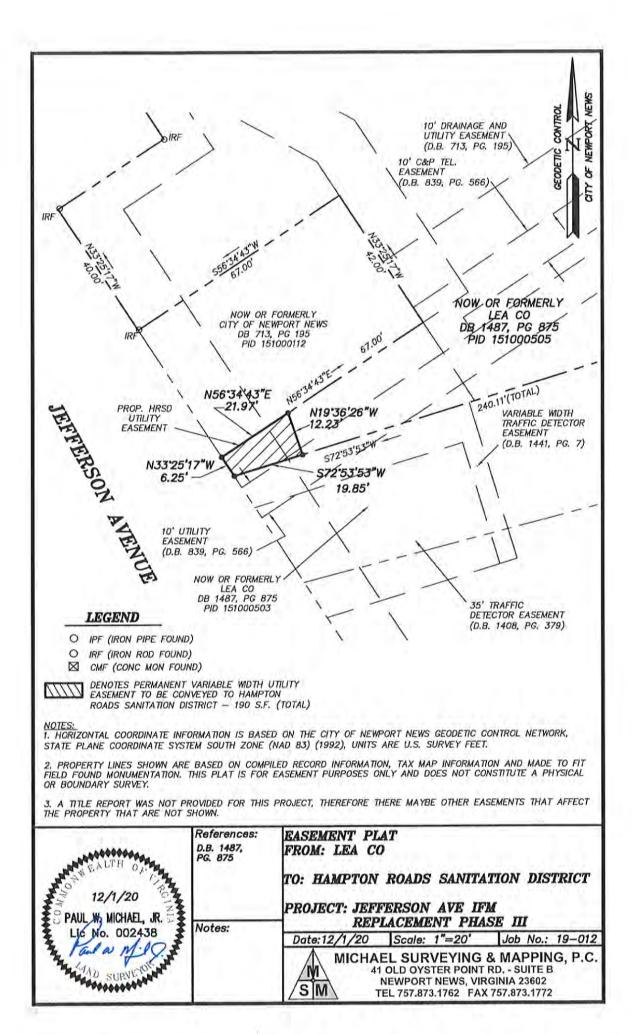
Rev. 3/4/21

Scale: 1"=50' Date: 4/21/20

Job No.: 19-012



MICHAEL SURVEYING & MAPPING, P.C. 41 OLD OYSTER POINT RD. - SUITE B **NEWPORT NEWS, VIRGINIA 23602** TEL 757.873.1762 FAX 757.873.1772





Attachment #10

Item 13. Middlesex Interceptor System Program Phase II – Transmission Force Main Acquisition of Real Property 8210 Waverly Lane, Gloucester, Virginia (Tax Map 26-109)

PURCHASE AND SALE AGREEMENT

THIS PURCHASE AND SALE AGREEMENT (this "Agreement") made this day of ______, 2022, by and between CASH, TIMMY MARTIN, hereinafter referred to as Seller, and HAMPTON ROADS SANITATION DISTRICT, a political subdivision of the Commonwealth of Virginia ("HRSD"), Purchaser.

RECITALS

- A. Seller is the owner in fee simple absolute of a certain parcel of property approximately 2.0 acre [+/-] in area, being a part of 8210 Waverley Lane, Gloucester, Virginia, Tax Map 26-109, such property being more particularly described in Exhibit A [legal description forthcoming] and shown on Exhibit B [boundary line adjustment plat forthcoming], both of which are attached to and made a part of this Agreement (the "Property").
- B. HRSD desires to purchase the Property from the Seller for the purpose of constructing wastewater infrastructure (the "Facilities).
- C. Seller is willing to sell the Property to HRSD subject to the terms and conditions set forth in this Agreement.
- D. These recitals are incorporated by this reference into this Agreement.

NOW, THEREFORE, in consideration of the purchase price and the mutual promises contained in this Agreement, the parties agree as follows:

- 1. <u>SALE</u>. Seller agrees to sell and HRSD agrees to purchase the Property, together with all rights and appurtenances thereto, including all right, title and interest of Seller in and to any land lying in the bed of any highway, street, road, or avenue, open or proposed, in front of or abutting, or adjoining such tract or piece of land and any riparian rights, if any, and any rights, easements, and appurtenances pertaining thereto, and any building and other property situated thereon, including all personal property, attached or appurtenant to, located in or on, or used in connection with the real property, if any. The real property and the personal property are called "the Property".
- PURCHASE PRICE. The purchase price (the Purchase Price) for the Property is <u>Seventy Thousand and 00/100 Dollars</u> (\$70,000.00), and the Purchase Price shall be paid to the Seller by certified check or wired funds at closing.

3. CONVEYANCE.

- a. At the Closing, Seller shall convey title to the Property in fee simple, by general warranty deed, free and clear of any and all liens, mortgages, deeds of trust, security interests, leases, covenants, conditions, restrictions, easements, rights-of-way, licenses, encroachments, judgments or encumbrances of any kind, except for the following permitted exceptions: (a) the lien of real estate taxes not yet due and payable; (b) zoning and building restrictions and other laws, ordinances, and regulations of governmental bodies having jurisdiction over the Property; and (c) matters of record affecting title to the property, as reviewed and approved (or deemed approved) by HRSD in accordance with this Agreement. Except as expressly stated in this Agreement, the Property shall be conveyed in "AS IS" condition.
- Title to the Property shall be good and marketable and, if HRSD b. chooses to obtain title insurance, insurable by a nationally recognized ALTA title insurance company of HRSD's choice at or below normal rates. In the event that a title examination discloses defects of title or other matters unsatisfactory to HRSD at HRSD's sole determination, HRSD shall notify Seller in writing (an "Objection Notice"), within 60 days of the Effective Date, of such title defects or other matters to which HRSD objects. Seller covenants that it shall cure all monetary encumbrances and all title objections which may be cured by execution of a document requiring the signature of no party other than Seller (including any affidavits which may reasonably be required by the title insurer). Seller may notify HRSD in writing (an "Objection Response"), within ten (10) business days after receiving an Objection Notice if it believes that the Objection Notice makes reference to any title defect or other matter that Seller cannot or elects not to cure. Upon receipt of an Objection Response from Seller, HRSD shall have the option either to (i) terminate this Agreement by notice to Seller given within ten (10) business days of the Objection Response or (ii) accept the defects, exceptions or other matters referenced in such Objection Response and proceed to Closing hereunder with no reduction of the Purchase Price. Seller shall have the period until the Closing date within which to correct all defects, exceptions or other matters that it is required or elects to cure. Seller shall provide such documents (including evidence of authority),

- affidavits, and other instruments that may be reasonably required for the issuance of a title insurance policy to HRSD.
- c. Possession of the Property will be given to HRSD at Closing, except that HRSD will have access to the Property for the purposes specified herein.
- d. Seller agrees to pay Grantor's tax, proration of real estate taxes and storm water fees and agrees to deliver possession of the Property to HRSD at settlement. HRSD will pay all other fees charged in connection with preparation and recordation of the deed and resubdivision plat.
- e. Seller and HRSD agree that the attorney selected by HRSD shall act as the Settlement Agent at HRSD's expense. The Settlement Agent shall prepare the settlement statement, update and record the deed, collect and disburse settlement funds in accordance with this Agreement and the settlement statement, and file any required state and federal tax forms or other certifications.
- 4. RIGHT OF ENTRY. HRSD and HRSD's authorized representatives may at any reasonable time and after giving reasonable notice to Seller, enter upon the Property for the purpose of making inspections, appraisals, surveys, including but not limited to the cutting of survey lines and putting up markers and driving stubs and stakes, site analysis, engineering studies, core sampling for engineering reports, and locating existing rights of way, easements, and utilities. HRSD will exercise this right of entry in such a way so as to not cause unreasonable damage to the Property. HRSD agrees to indemnify and save harmless the Seller from all claims of liability for any personal injury or property damage or otherwise to any person or property caused by any action or omission of HRSD or its agents on the Property before or after Closing.

CONDITIONS AND CONTINGENCIES.

a. HRSD's obligations are expressly conditioned upon the waiver or satisfaction of each of the following conditions in the sole determination of HRSD. If any one of the following conditions cannot be met within 60 days after the Effective Date (the Effective Date being defined as the date the contract is endorsed by both HRSD and Seller), HRSD may unilaterally terminate this Agreement:

- Receipt of a satisfactory title commitment with all unacceptable title exceptions, encumbrances, and conditions as deemed by HRSD removed or cured at Seller's cost; however, if Seller chooses not to remove or cure any such title exception, HRSD's sole remedy shall be to terminate this Agreement;
- ii. Receipt of a Phase I Environmental Assessment and Report (Phase I Report) conducted and prepared by an environmental engineering and inspection company selected by HRSD at HRSD's expense and such other testing and reports as may be reasonably required by HRSD or recommended in the Phase I Report;
- iii. Seller's compliance of all of its obligations under this Agreement.
- b. This Agreement is expressly conditioned upon the completion of all title and environmental "due diligence" by HRSD and notification to the Seller in writing of any conditions that are unsatisfactory to HRSD within the 60-day period. In the event HRSD fails to notify the Seller in writing within such 60-day period, any objection to such conditions shall be deemed waived by HRSD and the parties shall proceed to closing; provided, however, in no event shall any mortgage, deed of trust, security agreement or monetary lien against the Property be deemed waived objections and the Seller agrees that the same shall be removed and released as liens on the Property on or before Closing.
- c. This Agreement is contingent upon HRSD receiving approval by the Town of West Point of a resubdivision plat upon terms acceptable to HRSD at their sole discretion, which incorporates this purchase into their existing.
- d. This Agreement is contingent on the review and approval of the purchase by the Hampton Roads Sanitation District Commission and upon such Commission granting authorization to the General Manager to proceed under the terms of this Agreement.

6. ENVIRONMENTAL AND RELATED MATTERS.

- a. As a condition precedent to HRSD's obligation to purchase, HRSD, at HRSD's expense, may have a Phase I Environmental Assessment of the Property performed by a qualified environmental consultant (the Consultant) selected by HRSD and reasonably acceptable to Seller, conducted in accordance with standard commercial practice at the time of the assessment. A copy of the Phase I Environmental Assessment will be made available to Seller, together with copies of any supplemental reports or assessments.
- b. If the Consultant recommends soil, water, or structural remediation or further assessment activity after or as a result of performing a Phase I Environmental Assessment or if HRSD otherwise determines, in its reasonable judgment, that further assessment activity (including, but not limited to, a Phase II Environmental Assessment) is desirable, HRSD may at its option:
 - (i) Terminate this Agreement; or
 - (ii) Extend the time for closing for an additional period of sixty (60) days in order to perform any such additional assessment at HRSD's expense; or
 - (iii) Waive the environmental defect and proceed to Closing.

In the event HRSD chooses to perform any additional assessment, such as a Phase II, and determines that the results of such assessment are not satisfactory, HRSD may at its option:

- (i) Terminate this Agreement; or
- (ii) Waive the environmental defect and proceed to Closing.
- 7. <u>REPRESENTATIONS AND WARRANTIES BY SELLER</u>. Seller represents and warrants as of the date of this Agreement and as of the date of Closing that: Seller has the right, title, and authority to enter into this Agreement and to perform its obligations hereunder.

Seller further represents and warrants and shall deliver to HRSD at or prior to the Settlement, an Affidavit prepared by HRSD evidencing the following facts:

- (i) Other than this Agreement, there are no other contracts for sale or options involving the Property now in effect;
- (ii) To the best of Seller's knowledge, no other party has any right, title or interest in the Property;
- (iv) There are no unrecorded leases, options, licenses or easements existing in connection with the property to which the Seller has knowledge;
- (v) There are no adverse government notifications or proceedings and there is no pending or threatened litigation or any other potentially adverse claims affecting the property to which the Seller has knowledge.
- (vi) Foreign Status. Seller is not a foreign corporation, person or entity and is a "United States Corporations, Person or Entity" as such terms is defined in Section 1445 and in Section 7701 (a)(30) of the Internal Revenue Code of 1986, as amended (the "Code") and shall deliver to HRSD at or prior to the Settlement an Affidavit prepared by HRSD evidencing such fact and such other documents as may be required under the Code.
- (vii) From and after the date of this Agreement, Seller shall not transfer any interest in, or grant any easements or enter into any contractual agreement or understanding, written or oral, with respect to the Property or any portion thereof or make any changes at all that require recordation and therefore modifications to title, without the prior written consent of HRSD.
- (viii) The Seller warrants that to the best of his knowledge there are no wetlands or hazardous wastes, which would prevent HRSD's intended use of the land. To the best of the Seller's knowledge: (i) none of the Property has been excavated (except for standard grading related to site development); (ii) no hazardous materials, toxic chemicals, or similar substances, as defined by 42 U.S.C. §1251, et seq. or 42 U.S.C. §6901, et seq. or 42 U.S.C. §9601, et seq., or 33 U.S.C. §1317(1), or 15 U.S.C. §2606(f), or 49 U.S.C. §1801, et seq., or regulations adopted pursuant thereto, or any similar provision of any applicable state, Federal, or local law

(collectively "Hazardous Materials"), are or were stored or used on or under or otherwise were or are in existence or were in any way dealt with on or under the Property; and (iii) no owner or occupant of the Property has received any notice from any governmental agency with regard to such Hazardous Materials.

8. <u>NOTICES</u>. All notices to the parties hereto will be delivered by hand, via certified mail return receipt requested, or via facsimile and all be deemed effective upon delivery if by hand and upon confirmation of receipt if by other means, to the following address until the address is changed by notice in writing to the other party:

HRSD:

Ayanna R. Williams

HRSD Real Estate Manager

2389 G Avenue

Newport News, VA 23606

Copy to:

Conway Sheild, III

Jones, Blechman, Woltz and Kelly 701 Town Center Dr Ste 800 Newport News, VA 23606

Seller:

Timmy Martin Cash 8842 Marlfield Road Gloucester, VA 23061

- 9. <u>CLOSING</u>. Unless this Agreement is terminated pursuant to its terms or by mutual agreement of the parties, Closing will be made at the offices of the Settlement Agent within 120 days of the Effective Date, unless extended by terms of these agreements or by mutual agreement of the parties.
- 10. <u>SURVIVAL</u>. The provisions contained in this Agreement will be true as of the date of this Agreement and as of the date of Closing.
- 11. <u>PRORATIONS</u>. All rents, interest, taxes, insurance premiums, utility bills, and fuel oil, if any, will be prorated as of the date of Closing.
- 12. <u>RISK OF LOSS</u>. All risk of loss or damage to the Property by fire, windstorm, casualty, or other cause is assumed by Seller until Closing. In the event of substantial loss or damage to the Property before Closing, HRSD will have the option of either:

- a. Terminating this Agreement, or
- b. Affirming this Agreement and proceeding to Closing.
- 13. <u>FUTURE SALE BY HRSD</u>. In the event that HRSD shall determine to sell all or a portion of the property for private development within two (2) years of the Settlement Date, it agrees to notify Seller and give Seller first opportunity to purchase the property on such terms as the parties shall mutually agree. Such notice shall be writing addressed in accordance with the provisions of Section 8 herein or such other address provided to HRSD by the Seller and shall provide Seller with at least thirty (30) calendar days to present HRSD with an offer to purchase the property.
- 14. BROKERS. Seller and HRSD both represent and warrant to the other that it has not hired, engaged, or consulted with any broker or agent in regard to this transaction. Each party agrees to indemnify and hold harmless the other from any and all costs, expenses, or damages resulting from any claim for brokerage fees or other similar forms of compensation made by any real estate broker or other person or entity with whom a party has dealt, and who is not expressly named herein.
- 15. <u>CONDEMNATION</u>. Seller covenants and warrants that Seller has not heretofore received any notice of any condemnation proceeding or other proceeding in the nature of eminent domain in connection with the Property. If prior to Settlement any such proceeding is commenced or any change is made, or proposed to be made, to the current means of ingress and egress to the Property or to the roads or driveways adjoining the Property, or to change such ingress or egress or to change the grade thereof, Seller agrees immediately to notify HRSD thereof. HRSD then shall have the right, at HRSD's option, to terminate this Agreement by giving written notice to Seller within thirty (30) days after receipt of such notice.

16. DEFAULT AND REMEDIES.

- a. If the sale and purchase contemplated by this Agreement is not consummated because of Seller's or HRSD's default, the non-defaulting party may elect to:
 - i Terminate this Agreement;
 - ii Seek and obtain specific performance of this Agreement; or

- iii Pursue all other rights or remedies available at law or in equity, including an action for damages.
- b. If either Seller or HRSD defaults under this Agreement, the defaulting party will be liable for any expenses incurred by the non-defaulting party in connection with the enforcement of its rights under this Agreement.
- c. These remedies are cumulative and non-exclusive and may be pursued at the option of the non-defaulting party without a requirement of election of remedies.
- 17. <u>ENTIRE AGREEMENT</u>. This Agreement contains the entire agreement of the parties and will supersede the terms and conditions of all prior written and oral agreements, if any, concerning the matters it covers. The parties acknowledge there are no oral agreements, understandings, representations, or warranties that supplement or explain the terms and conditions contained in this Agreement. This Agreement may not be modified except by an agreement in writing signed by the parties.
- 18. <u>WAIVER</u>. Failure to insist upon strict compliance with any of the terms, covenants, or conditions hereof will not be deemed a waiver of the term, covenant, or condition, nor will any waiver or relinquishment of any right or power at any one time or more times be deemed a waiver or relinquishment of the right or power at any other time or times.
- 19. <u>SEVERABILITY</u>. This Agreement will be construed in its entirety and will not be divisible, except that the invalidity or unenforceability of any provision hereof will in no way affect the validity or enforceability of any other provision.
- 20. <u>CAPTIONS</u>. Captions are used in this Agreement for convenience only and will not be used to interpret this Agreement or any part of it.
- 21. <u>GOVERNING LAW</u>. This Agreement is to be construed in accordance with the laws of the Commonwealth of Virginia.
- 22. <u>CHOICE OF FORUM/JURISDICTION</u>. The parties hereby consent to the jurisdiction and venue of the courts of the Commonwealth of Virginia, and to the jurisdiction and venue of the United States District Court for the Eastern District of Virginia in connection with any action, suit, or proceeding arising out of or relating to this Agreement and further waive

and agree not to assert in any action, suit, or proceeding brought in the same.

- 23. WAIVER OF TRIAL BY JURY. THE PARTIES WAIVE TRIAL BY JURY IN ANY ACTION, PROCEEDING, OR COUNTERCLAIM BROUGHT BY EITHER PARTY AGAINST THE OTHER ON ANY MATTER WHATSOEVER ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS AGREEMENT OR ANY RELATED AGREEMENTS OR INSTRUMENTS AND THE ENFORCEMENT THEREOF, INCLUDING ANY CLAIM OF INJURY OR DAMAGE TO ANY PARTY OR THE PROPERTY OF ANY PARTY.
- 24. SUCCESSOR/ASSIGNMENT. This Agreement will be binding upon and the obligations and benefits hereof will accrue to the parties hereto, their heirs, personal representatives, successors, and assigns. This Agreement is assignable by HRSD only upon written consent of the Seller, which consent will not be unreasonably withheld. If this Agreement is assigned by HRSD with Seller's consent, HRSD will nevertheless remain fully liable for its performance.
- 25. <u>COUNTERPARTS</u>. This Agreement may be executed in any number of counterparts, each will be considered an original, and together they will constitute one Agreement.
- 26. <u>FACSIMILE SIGNATURES</u>. Facsimile signatures will be considered original signatures for the purpose of execution and enforcement of the rights delineated in this Agreement.
- 27. ETHICS IN PUBLIC CONTRACTING. By executing this Agreement, the undersigned Seller or its representative, and the representative of HRSD, certify that the prices agreed to in this Agreement were arrived at without collusion or fraud and that they have not offered or received any payment, kickbacks or other inducement from any other party to this Agreement or its agent or employee in connection with this Agreement, and that they have not conferred on any public employee having responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services (or anything of more than nominal value, present or promised) unless disclosed in this Agreement.

(Remainder of page intentionally left blank - Signature Pages follow)

06/15/22

Purchase and Sale Agreement dated _____ of Tax Map: 26-109
Between HRSD Timmy Martin Cash - Middlesex Interceptor System Phase II - Transmission Force Main

SELLER:

TIMMY MARTIN CASH

(Signature)

IN WITNESS WHEREOF, the Hampton Roads Sanitation District Commission has caused this Agreement to be signed on its behalf by its General Manager in accordance with authorization granted at its regular meeting held on <a href="https://doi.org/10.1016/j.com/no.1016/j.co

HAMPTON ROADS SANITATION DISTRICT

Зу: 🔟

Jay Bernas, P.E. General Manager

EXHIBIT A

(Legal description forthcoming)

EXHIBIT B

(Boundary Line or Resub Plat forthcoming)



HRSD Commission Meeting Minutes July 26, 2022

Attachment #11

Item 14. Ethics Policy
Commission Adopted Policy

COMMISSION ADOPTED POLICY Ethics



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1.0 Purpose and Need

As a public body, gaining and keeping the trust of the public is paramount. HRSD Commissioners and employees are committed to maintaining high ethical standards in every aspect of their business as members of a public body. As a political subdivision of the Commonwealth, HRSD Commissioners and employees are committed to complying with all applicable laws and regulations governing ethics and conflicts of interest. This policy is applicable to all HRSD Commissioners and employees.

2.0 Definitions

Conflict of Interest – A situation in which a person is in a position to derive personal benefit from actions or decisions made in their official capacity.

Gift – Any goods, meals, services, loans, tickets to events, greens fees, travel, lodging or similar items with monetary value or discounts, favors, gratuities, hospitality, forbearance, etc. This includes prizes awarded from drawings or similar games of chance at events attended in an official capacity. This also includes wreaths, candy, cookies, fruit baskets, etc., whether addressed to an individual or to HRSD.

Not a Gift – For the purposes of this policy the following are not considered gifts:

- Offer of a ticket, coupon, admission or pass if such item is **not** used;
- Honorary degrees;
- Food or beverage consumed and mementos received at an event at which an individual is performing official duties or is a speaker;
- Registration or attendance fees (not travel costs) at an event at which individual is a speaker or event coordinator;
- Unsolicited awards of appreciation or recognition (plaque, trophy, wall or desk memento);
- Gifts from relatives or Personal Friends;
- Travel paid for by the United States government or any of its territories, or any state or political subdivision of such state;
- Travel, meals and activities directly associated with and paid for by a professional association that HRSD pays dues to on behalf of the agency or individual as part of their official duties;
- Scholarships awarded competitively;
- Travel related to an official meeting of HRSD; and
- Travel, lodging, meals, activities and logo clothing and related similar items associated with recruitment activities for permanent employment outside of HRSD while employed in an intern position

COMMISSION ADOPTED POLICY Ethics



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Adopted: October 27, 2015

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HRSD Commissioner – A non-salaried citizen member of the HRSD Commission.

Immediate Family – Includes spouse, children, parents, brothers and sisters, and any other person living in the same household as the employee. (Code of Virginia, § 2.2-4368).

Intern Positions – On-the-job experience for high school students, college and university students, or post-graduate adults, hired on a part-time seasonal or part-time temporary basis.

Official Responsibility - Administrative or operating authority, whether intermediate or final, to initiate, approve, disapprove or otherwise affect a procurement transaction, or any claim resulting therefrom.

Pecuniary Interest Arising from the Procurement - A personal interest in a contract as defined in the State and Local Government Conflict of Interests Act (§ 2.2-3100 et seq.).

Personal Friend – An individual whose relationship with an HRSD employee or HRSD Commissioner pre-dates employment/appointment with HRSD and the relationship has a history of gift exchange or with whom a personal relationship developed totally unrelated to the employee's or HRSD Commissioner's position with HRSD.

Procurement Transaction - All functions that pertain to the obtaining of any goods, services or construction, including description of requirements, selection and solicitation of sources, preparation and award of contract, and all phases of contract administration.

Public employee - Any person employed by a public body, including elected officials or appointed members of governing bodies.

Widely Attended Event – An event to which at least 25 persons have been invited or there is a reasonable expectation that at least 25 persons will attend the event and the event is open to individuals (i) who are members of a public, civic, charitable or professional organization, (ii) who are from a particular industry or profession, or (iii) who represent persons interested in a particular issue. Golf outings are never considered a widely attended event or a part of a widely attended event.

COMMISSION ADOPTED POLICY Ethics



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3.0 Guiding Principles

All HRSD employees having official responsibility for Procurement Transactions shall conduct business in a fair and impartial manner with the avoidance of any impropriety or appearance of impropriety. Transactions relating to the expenditure of public funds require the highest degree of public trust.

Except as may be specifically allowed by the *Code of Virginia* § 2.2-3112, subdivisions B 1, 2, and 3, no HRSD employee having official responsibility for a Procurement Transaction shall participate in that transaction on behalf of HRSD when the employee knows that:

- The employee is contemporaneously employed by a bidder, offeror, or contractor involved in the Procurement Transaction; or,
- The employee, the employee's partner, or any member of the employee's immediate family holds a position with a bidder, offeror, or contractor such as an officer, director, trustee, partner or the like, or is employed in a capacity involving personal and substantial participation in the Procurement Transaction, or owns or controls an interest of more than five percent; or
- The employee, the employee's partner, or any member of the employee's immediate family has a pecuniary interest arising from the Procurement Transaction; or
- The employee, the employee's partner, or any member of the employee's immediate family is negotiating, or has an arrangement concerning prospective employment with a bidder, offeror, or contractor.

No HRSD employee having administrative or operating authority, whether intermediate or final, to initiate, approve, disapprove, or otherwise affect a Procurement Transaction, or any claim resulting there from:

- Shall solicit, demand, accept, or agree to accept from a bidder, offeror, contractor, or subcontractor any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal or minimal value present or promised, unless consideration of substantially equal or greater value is exchanged; (Code of Virginia, § 2.2-4371)
- Shall accept employment from any bidder, offeror, or contractor with whom the employee dealt in an official capacity concerning Procurement Transactions for a period of one year from the cessation of employment by HRSD unless the employee or former employee provides written

COMMISSION ADOPTED POLICY Ethics



| Revised: July 26, 2022 | Page 4 of 5 |

notification to HRSD prior to commencement of employment by that bidder, offeror, or contractor. (Code of Virginia, § 2.2-4370)

HRSD Commissioners and employees shall conduct themselves beyond reproach. Improprieties or the appearance of improprieties will not be tolerated. The following prohibitions apply to HRSD Commissioners, employees and their Immediate Families:

- Soliciting, accepting or receiving any Gift from any entity or person seeking to contract with HRSD subject to exemptions for Gifts from relatives or Personal Friends.
- Having a Personal Interest in or benefiting from any contract with HRSD other than the employee's own employment contract. Where such interest pre-exists, it shall be disclosed and the HRSD Commissioner or employee shall refrain from voting on or acting on behalf of HRSD in any manner in relation to the contract.
- Participating in a transaction with HRSD where the employee has a
 Personal Interest in or may benefit from the transaction. Such interest
 shall be disclosed and the HRSD Commissioner or employee shall refrain
 from voting on or acting on behalf of HRSD in any manner in relation to
 the transaction.
- For a period of 12 months post-employment or appointment, HRSD
 Commissioners and Employees at the Chief Level or above are prohibited
 from engaging in transactions for compensation with HRSD. All other
 former employees must provide a written notification to HRSD prior to any
 such engagement.

Food, beverages, mementos, entertainment or the cost of admission may be accepted when such a Gift is accepted or received while in attendance at a Widely Attended Event and is associated with the event.

Gifts shall be returned whenever practicable. If return is not practicable, perishable gifts may be shared with the entire work center. Non-perishable gifts shall be collected and distributed to local charities as appropriate.

4.0 Procedures

This policy shall be communicated and provided to all HRSD Commissioners and employees upon commencement of appointment/employment and an acknowledgement of such shall be retained permanently in each employee's personnel file [Enterprise Resource Planning (ERP) System]. HRSD

COMMISSION ADOPTED POLICY Ethics



July 26, 2022 Revised: Page 5 of 5 Effective: July 26, 2022 Adopted: October 27, 2015

Commissioners' acknowledgements shall be retained by the Commission Secretary.

HRSD Commissioners or employees who have a Personal Interest in a company doing business with HRSD, or believe they have any other conflict requiring disclosure, shall disclose those interests immediately upon discovery of the personal interest in a company doing business with HRSD or other potential conflict. The Conflict of Interest Disclosure Form will include name and address of company doing business with HRSD, name and position of person at the company, as well as start and end date of the conflict.

HRSD Commissioners or employees who receive gifts at widely attended events that exceed \$100 in value shall disclose those gifts within 60 days of receiving a gift. The Gift Disclosure Form will include the name of the company/vendor giving the gift, estimated value and date received.

Employee disclosure forms will be available in the ERP system. HRSD Commissioner disclosure forms shall be obtained through, filed with and retained by the Commission Secretary. All disclosure forms may be reviewed by legal counsel.

Training on the Ethics Policy shall be provided to all HRSD employees on a biannual basis with records of attendance maintained in the ERP system. Training on the Ethics Policy will be provided to HRSD Commissioners at time of appointment and periodically thereafter.

5.0 Responsibility and Authority

This policy shall be reviewed annually by the Operations and Nominations Committee and revised as required to conform to current law and regulations.

Approved:

Stephen C. Rodriguez

Commission Chair

Attest:

Jennifer L. Cascio Commission Secretary

HRSD Commission Meeting Minutes July 26, 2022

Attachment #12

Item 15. Commission Governance Guidelines

The Commission is charged with managing and controlling the functions, affairs and property of the Hampton Roads Sanitation District ("HRSD"). HRSD's operation is accomplished by its employees under the direct supervision of the General Manager. These governance guidelines ("Governance Guidelines") are intended to support the Commission in its oversight role, which is set forth in the Acts of Assembly 1960, as amended (the "Enabling Act"). Some additional Commission responsibilities are specified in HRSD's Trust Agreements, required by federal law or mandated by the Virginia Public Procurement Act.

The Commission and HRSD's management recognize that the interests of HRSD are advanced by responsibly addressing the concerns of other constituencies, including employees, customers and the communities in which HRSD provides services. The Commission will review these guidelines regularly in its continuing effort to achieve this goal.

SECTION 1. ROLE AND FUNCTION OF THE COMMISSION

A. Composition

- 1. The Commission consists of eight members appointed by the Governor of Virginia to four-year terms.
- 2. At the time of their appointment and throughout their term of appointment, Commissioners must reside in the territory within the District from which they were appointed. Moving from this territory terminates the appointment.
- 3. Unless otherwise terminated pursuant to the Enabling Act, a Commissioner's term continues until the successor is appointed. Any person appointed to fill a vacancy shall serve for the unexpired term.
- 4. Commissioners are eligible for reappointment without limitation to the number of terms. Members may be suspended or removed at the Governor's pleasure.

B. Structure

- 1. The Commission shall annually elect one of its members as Chair and another as Vice-Chair.
- 2. The Commission's advisory committees are (1) Finance and (2) Operations and Nominations ("O&N"). These committees report as needed to the full Commission. The Commission may elect to form a new standing or special committee or to disband an existing committee.
 - a. The Finance Committee shall review the Annual Comprehensive Financial Report; ensure the annual audit is completed and receive the audit report from the external auditor; review the work plan and receive

reports from the audit firm performing internal audits; review the financial forecast and the annual operating and capital budgets and report out to the full Commission prior to Commission action on the annual budgets; participate in selection of internal and external auditors; and other financial related matters as may be referred to the Finance Committee by the Commission Chair.

- b. The O&N Committee shall prepare a slate of officers for Commission consideration annually. Additionally, the O&N Committee will be responsible for reviewing Commission policies as required or directed by the Commission. The O&N Committee will review the following policies on an annual basis:
 - Commission Governance Guidelines
 - Ethics Policy
 - Freedom of Information Act Policy
 - Remote Participation Policy
- 3. The Commission Chair annually appoints the members and chairs of these committees. Committees are composed of two Commissioners and both are required for a quorum. All Commissioners are invited to participate in all Committee meetings.

C. Operation

- 1. The Commission has the authority to adopt bylaws and to make rules and regulations for the management of its affairs and the conduct of its business.
- 2. Unless otherwise announced, the Commission meets on the fourth Tuesday of each month January through November and on the third Tuesday of December. Special meetings are held when necessary. The General Manager sets the meeting agendas with advice from the Department Directors and the chair. Agendas, with any relevant accompanying information or reports, are distributed to the Commissioners prior to meetings for review. When circumstances require, items may be added to the agenda after it has been distributed.
- 3. Four members shall constitute a quorum and the affirmative vote of four members shall be necessary for any action taken by the Commission. No vacancy in the membership of the Commission shall impair the right of a quorum to exercise all the rights and perform all the duties of the Commission.

4. The rules contained in the current edition of *Rosenberg's Rules of Order* shall govern the Commission in all cases to which they are applicable and in which they are not inconsistent with state law or any special rules of order the Commission may adopt.

D. Commissioner Policies

- 1. Newly appointed Commissioners will receive a briefing from the General Manager and Department Directors regarding matters related to HRSD's mission and core services. At a minimum, Commissioners are briefed on operations, financial matters and strategic directions. The Commission Secretary will provide information related to Virginia's Freedom of Information Act and Commission membership. In addition, new Commissioners shall tour HRSD facilities as their schedules permit and be introduced to the chief elected officials of their localities as appropriate and practical to facilitate effective working relationships.
- 2. Commissioners are expected to devote as much time and attention as necessary to discharge their duties. This includes attending all monthly Commission meetings and the meetings of any committees on which they may serve. Commissioners should notify the Commission Secretary whenever they are unable to attend a scheduled meeting. Commissioners may participate remotely in accordance with the Remote Participation Policy. Commissioners must notify the Chair of their desire to participate remotely prior to the meeting. Commissioners also may be asked to participate in special events and to represent HRSD at public meetings.
- 3. Commissioners shall be mindful of the best interest of the HRSD service area at large as opposed to those of the localities in which they reside.
- 4. At the request of the Commission, individual Commissioners may serve as liaisons to officials in the communities in which they reside or other localities within HRSD's service area.
- 5. Commissioners receive no salary but are compensated for travel and expenses associated with meeting attendance or while otherwise engaged in the discharge of their duties at the rate paid to members of the Commonwealth Transportation Board.
- 6. Each Commissioner shall be covered by a public official's liability policy paid for by HRSD.

7. Commissioners are expected to recuse themselves from discussion and abstain from voting on matters in which they may have a personal or professional conflict, and to announce the recusal or abstention in advance.

E. Responsibilities

The Acts of Assembly authorize and empower the Commission to perform a variety of specified acts by means of its own officers, agents and employees or by contracts with any persons. Some of the most significant functions are:

- To construct, improve, extend, enlarge, reconstruct, maintain, equip, repair and operate a sewage disposal system or systems, with or without associated water systems.
- 2. To issue revenue bonds, notes or other obligations.
- 3. To fix and collect rates, fees and other charges for HRSD services and facilities.
- 4. To acquire land, structures, property, rights, rights-of-way, easements, and other property interests by purchase, lease, grant or the exercise of the right of eminent domain in connection with sewage disposal systems or associated water systems.
- 5. To employ, at its discretion, consulting engineers, attorneys, accountants, construction and financial experts, managers and other such officers, employees and agents as may be necessary, and to fix their compensation.
- 6. To sue and to be sued.
- 7. To prevent any person, jurisdiction or corporation from discharging into District waters any sewage, industrial wastes or other refuse that would pollute these waters.
- 8. To seek civil penalties or civil charges against owners in violation of pretreatment standards in permits or other requirements of HRSD's approved industrial waste control program.
- 9. To make and enter into all contracts and agreements necessary or incidental to the performance of its duties and execution of its powers.
- 10. The Commission does not have the power to mortgage, pledge, encumber or otherwise dispose of any part of the sewerage system or associated water systems except that which may no longer be necessary or useful for the Commission's purposes.

SECTION 2. HRSD MANAGEMENT AND THE COMMISSION

Commissioners have complete access to the General Manager and the Deputy General Manager, who each may refer them to Department Directors or other appropriate resources for assistance. The Secretary and Assistant Secretary of the Commission shall assist Commissioners with matters related to scheduling, expense reimbursement, access to information and meeting attendance.

A. Staff Relations

- The Commission appoints a General Manager, who serves at the pleasure of the Commission. As the chief administrative officer, the Commission delegates dayto-day operations to the General Manager within the broad framework of Commission established policies, budget and strategies. The Commission shall review the General Manager's performance and set compensation at least annually.
- 2. The Commission appoints a Secretary, Assistant Secretary and a Treasurer who serve in these roles at the pleasure of the Commission. These appointments are made from existing staff positions. The Commission fixes their compensation through the annual budget process as these positions are in the HRSD position classification and compensation system.
- 3. The Commission periodically reviews and assesses the compensation paid to all HRSD employees as part of the annual budget process.
- 4. The Commission has delegated to the General Manager the responsibility to establish and maintain appropriate human resource policies.

B. Financial Oversight

- 1. The Commission approves HRSD's Financial Policy.
- 2. The Commission approves the Annual Budget, Capital Improvement Program (CIP), Financial Plan and Rate Schedules.
- 3. The Finance Committee meets as required to perform their financial oversight duties, including overseeing the Financial and Internal Auditors, and reports to the Commission regarding these activities.

C. Signatory Authorization

Documents requiring the signature of HRSD shall be signed by such officer or officers as the Commission may from time to time designate. If signature is authorized by a vote of

the Commission, the authorization should also include the identification of those officer or officers permitted to sign the approved document on behalf of HRSD. The General Manager and the Deputy General Manager are authorized to sign on behalf of HRSD in the ordinary course of business any and all documents not requiring specific Commission approval. Additionally, the Commission has authorized the General Manager to delegate formally signatory authority to Senior Management and their staff as necessary for the effective operations of HRSD.

The Commission Secretary shall maintain a record of all specific signatory authorizations.

SECTION 3. COMMISSION ACTIONS

A. Commission Approval Items

- Policies All policies that govern HRSD business processes, financial practices, and service to localities except for those policies specifically delegated to the General Manager.
- 2. Finance and O&N Committee Business Receive reports provided by these Commission appointed committees
- 3. Annual Operating Budget Budget policy allows General Manager and Deputy General Manager to transfer between budget object codes within total approved budget without further Commission action. Additional action is only required if total annual operating budget is amended.
- 4. Capital Improvement Program
 - a. 10-year program without authorization of specific projects
 - b. Authorization of projects in first year without appropriation
 - c. Changes in program that impact first-year projects previously authorized
- 5. Capital Improvement Projects
 - a. Appropriation of full project funding specific to each project at time first dollar is to be spent
 - b. Changes requiring additional appropriation
 - c. Changes resulting in significant reduction in scope (greater than 25 percent of appropriation)
- 6. Rate Schedules including facility charges

- 7. Resolutions authorizing issuance of definitive bonds, interim receipts or temporary bonds, notes or other obligations
- 8. Receive and accept grants or other contributions of value
- 9. Procurement
 - a. The HRSD Procurement Policy
 - b. Use of alternative project delivery methods prior to solicitation (Design-Build, Construction Management, etc.)
 - c. Agreements Contracts, task orders, proposal compensations or purchase orders where the total value is projected to exceed \$200,000
 - d. Rejection of bids for all contracts where total value is projected to exceed \$200,000
 - e. Change orders to contracts (exclusive of increases to individual task orders) that will result in changing the total value of the contract inclusive of all change orders to either 125 percent or more of the original contract award amount or \$50,000, whichever is greater
 - f. HRSD use of an existing competitively awarded contract vehicle (State contract, cooperative procurement, General Services Administration, etc.,) where the total value of HRSD participation is projected to exceed \$200,000
 - g. Sole Source Procurement Initial sole source determination for specific vendor, item(s) and location(s) where total value is projected to exceed \$10,000
 - h. Debarment Review staff recommendation and make the final determination of all firm/contractor debarment, the conditions and length of term for the debarment.
 - i. Real Property
 - (1) Acquisitions by purchase, lease, grant, conveyance, or condemnation in accordance with the Enabling Act
 - (2) Sale, lease or permanent encumbrance of HRSD property
 - (3) Easements or Right of Entry Agreements (temporary or permanent) with value more than \$25,000

- (4) Transfer of ownership, disposition of easements and easement vacation
- 10. Intellectual Property (IP)
 - a. IP rights agreements
 - b. Royalty distribution agreements
- 11. Personnel
 - a. Selection and compensation of General Manager
 - b. Compensation of Deputy General Manager, Treasurer, Secretary,
 Assistant Secretary and other employees through annual budget process
- 12. Regulations
 - a. HRSD Industrial Wastewater Discharge Regulations
 - b. Enforcement Response Plan
- 13. Selection of Commission consultants
 - a. Legal
 - b. Auditors
 - (1) Financial Auditors
 - (2) Internal Auditors
- 14. Agreements with other entities meeting one of the following criteria:
 - a. Design or construction of infrastructure with a constructed value more than \$50,000
 - b. Provides use of real property for temporary (greater than one year) or permanent use
 - c. Provides use of personal property valued at more than \$50,000 for temporary (greater than one year) or permanent use
 - d. Provides a service or other benefit that spans multiple years
 - e. Obligates significant financial resources (\$200,000 or more)
 - f. Obligates significant personnel resources (one full time employee or more)

- g. Is or has the potential to be politically significant
- 15. Regulatory Required Projects Projects required to comply with an existing regulation such as the Integrated Plan and Chesapeake Bay nutrient reduction programs ("Regulatory Required Projects").

B. Commission Recognition Items

- 1. Employees celebrating length of service 20 years and above (in increments of 5)
- 2. New employees Grade 9 and above
- Awards and recognition earned by HRSD
- 4. Awards and recognition granted by HRSD

C. Commission Information Items

- 1. Monthly reports from General Manager and each Department Director, including but not limited to the Finance Director's Report, which shall contain a Monthly Interim Financial Report and Quarterly Investment Report, among other items.
- 2. Notice of declaration of emergency
- 3. Internal Audit Reports and updates
- 4. Other necessary updates, such as CIP, , SWIFT, Water Technology & Research, Water Quality/Nutrient Compliance, Diversity Procurement, etc.

SECTION 4. COMMISSION MEETINGS

All meetings of the Commission shall be held in accordance with the Virginia Freedom of Information Act. Remote participation in meetings shall be in accordance with the Remote Participation policy.

A. Commission Meeting Agenda

The Commission meeting agenda shall be prepared by the General Manager and distributed to the Commission typically five calendar days prior to the meeting date. Public notice of the meeting and posting of the agenda shall be in accordance with the Virginia Freedom of Information Act (§ 2.2-3700 et. Seq. of the Code of Virginia). The General Manager shall review the agenda with the chair prior to the meeting.

The agenda shall be structured to ensure efficient and effective use of Commissioner's time and expertise.

- 1. Full agenda items with briefings may be provided for the following items and other items as deemed appropriate:
 - a. Annual Budget
 - b. Capital Improvement Program quarterly updates including, but not limited to, project updates of significance
 - c. Individual Capital Improvement Projects when requesting appropriation or additional appropriations that are more than 5% of the original appropriation and more than \$200,000 to individual Capital Improvement Projects, except Regulatory Required projects and capitalizable labor below \$10 million.
 - d. Changes in CIP that impact first-year projects, except Regulatory Required projects and capitalizable labor below \$10 million.
 - e. Rate Schedules
 - f. Resolutions related to bonds, notes or other obligations
 - g. Resolutions related to certain employee benefit plans
 - h. Acceptance or award of grants
 - i. New, modified, amended or reissued Commission approved policies
 - j. Use of alternative project delivery methods for contracts
 - k. Proposal compensation for alternative project delivery contracts
 - I. Agreements
 - m. Rejection of bids for contracts
 - n. Real estate acquisitions by condemnation, or other means
 - o. Sale, lease or conveyance of HRSD property
 - p. Intellectual property agreements

- q. Patent applications
- r. Changes, amendments or reissuance of the Industrial Wastewater Discharge Regulations or Enforcement Response Plan
- s. Selection of Commission consultants
- t. Agreements requiring Commission approval
- 2. Consent agenda items shall be limited to items meeting the requirements for Commission approval as detailed herein but not typically warranting of a full briefing due to the nature of the action or previous communication with the Commission. Other items may be moved from the Consent Agenda to the Full Agenda when determined by the General Manager to be significant.
 - a. Individual Capital Improvement Projects when requesting appropriation or additional appropriations that are equal to or less than 5% of the original appropriation and less than \$200,000 to individual Capital Improvement Projects, for regulatory required projects and capitalizable labor below \$10 million.
 - b. Changes in CIP that impact first-year projects for regulatory required projects and capitalizable labor below \$10 million.
 - c. Contract awards
 - d. Contract Change orders
 - e. Task orders
 - f. HRSD use of existing competitively awarded contract vehicle
 - g. Sole source procurement
 - h. Transfer of Ownership of Sanitary Sewer Facilities
 - i. Vacation of Easement
 - j. Service Area Expansion
- 3. Informational agenda items (with or without briefings) may be presented with the agenda as appropriate.
 - a. Monthly reports, including but not limited to Quarterly investment and Interim Financial reports
 - b. Strategic Planning Metrics Summary
 - c. Emergency declarations
 - d. Other items as needed

B. Commission Workshops

Workshops shall be scheduled as needed to allow informal dialogue on a topic or narrow range of topics. Appropriate staff shall be available to brief and facilitate as well

as provide subject matter expertise. No official actions shall be taken during workshops. Workshops are public meetings and shall be held in conformance with Virginia's Freedom of Information Act.

C. Committee Meetings

Committee meetings shall be scheduled as needed. Committee meetings are public meetings and shall be held in conformance with Virginia's Freedom of Information Act. Remote participation in committee meetings is not allowed. The Commission Chair shall be an ex-officio member of all committees, with voice and vote. However, the Commission Chair shall not be counted in determining the number required for a Committee quorum or in determining whether or not a quorum is present.

SECTION 5. ANNUAL CALENDAR OF COMMISSION TOPICS

Topic	Schedule	Frequency
EPA Consent Decree Update and Public Meeting	January	Annually
CIP Update	January	Quarterly
Evaluate General Manager's Performance	January	Annually
Commission Work Session to review Budget	February	Annually
Finance Committee Meeting to Review CIP	March	Annually
Commission Work Session to review Budget	March	Annually
CIP Update	April	Quarterly
Asset Management Update	April	Semi-annually
Finance Committee Meeting to Review Budget	April	Annually
Receive Finance Committee report on Budget	April	Annually
Appoint Operations & Nominations (O&N) Committee	May	Annually
Approve Annual Budget, CIP, Financial Plan and Rate	May	Annually
Schedules		
O&N Committee Meeting after Regular Meeting	May	Annually
O&N Committee Meeting before Regular Meeting	June	Annually
Election of Officers	June	Annually
Water Technology and Research Update	June-July	Annually
Appoint Finance Committee	June-July	Annually
CIP Update	July	Quarterly
Commission Work Session – Ethics, FOIA and	August	Annually
Governance Guidelines Training		
Water Quality / Nutrient Compliance Update	August	Annually
Finance Committee Meeting to Review Annual	October	Annually
Comprehensive Financial Report (ACFR)		
CIP Update	October	Quarterly
Diversity Procurement Report	October	Annually
Accept Finance Committee's Report on ACFR	November	Annually

SECTION 6. ADVISORY ROLE OF FORMER COMMISSIONERS

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So as not to lose the benefit of the insights gained during their years of service, former Commissioners may be asked to serve in an advisory role following the end of their term. Equipment required to facilitate communications with the General Manager and Commission officers may be provided to those serving in an advisory role.

Attest

Jennifer L. Casoro

Commission Secretary

HRSD Commission Meeting Minutes July 26, 2022

Attachment #13

Item 16. Signatory Authority of Deputy General Manager



RESOLUTION Signatory Authority of Deputy General Manager

WHEREAS, Hampton Roads Sanitation District (hereinafter "HRSD") pursuant to the approved Annual Budget for the fiscal year 2023 has approved the creation of the position of Deputy General Manager/CFO effective July 1, 2022; and

WHEREAS, the HRSD Commission deems that it is in best of interests of HRSD to provide the individual holding the position of Deputy General Manager with the authority to execute documents on behalf of HRSD in the same manner as the General Manager of HRSD and to further resolve that the signature of the Deputy General Manager will have the same force and effect as that of the General Manager; and

WHEREAS, effective July 1, 2022, Steven G. de Mik will be the Deputy General Manager/CFO for HRSD; and

WHEREAS, the HRSD Commission desire to authorize that Steven G. de Mik may execute documents on behalf of HRSD as the Deputy General Manager effective July 1, 2022.

NOW, THEREFORE, BE IT RESOLVED, on the 26th day of July, 2022, by the HRSD Commission that:

- 1. The individual holding the position of Deputy General Manager for HRSD is hereby authorized to execute documents on behalf of HRSD in the same manner as the General Manager, and the signature of the Deputy General Manager will have the same force and effect as the signature of the General Manager.
- 2. HRSD, hereby, authorizes Steven G. de Mik, effective July 1, 2022, to execute documents on behalf of HRSD as the Deputy General Manager with such authority remaining in effect until such time as Steven G. de Mik no longer holds the position of Deputy General Manager.

The undersigned further certifies that the foregoing has been properly approved and adopted in accordance with all applicable requirements of the HRSD Commission.

Stephen C. Rodriguez, Cl

HRSD Commission Meeting Minutes July 26, 2022

Attachment #14

Item 20. Capital Improvement Program (CIP)

Quarterly Update



Capital Improvement Program Commission Briefing

July 26, 2022

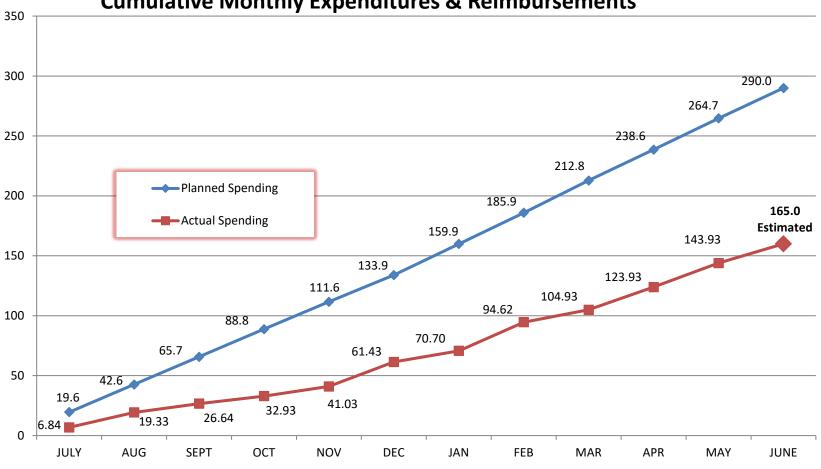
Outline

- CIP Expenditures for FY-2022
- CIP Performance Metrics
- Engineering Department Staffing
- Consent Decree/Sewer Rehabilitation Plan Project Status
- Firms Used for Engineering and Construction Efforts
- Significant Project Updates
- Focus Pump Station Rehabilitation/Replacement Projects



CIP Expenditures for FY-2022

FY2022 Capital Improvement Program Cumulative Monthly Expenditures & Reimbursements



Month



CIP Expenditures for FY-2022

CIP Projects with Largest Spending Projections in FY-2022

Project Name	Planned FY-2022 CIP Spending	Actual FY-2022 Spending	Differential
James River SWIFT Facility	\$20,940,000	\$16,800,000	-\$4,140,000
James River TP ANRI Improvements	\$17,862,000	\$15,500,000	-\$2,362,000
Surry Hydraulic Improvements and IFM	\$14,232,000	\$9,970,000	-\$4,262,000

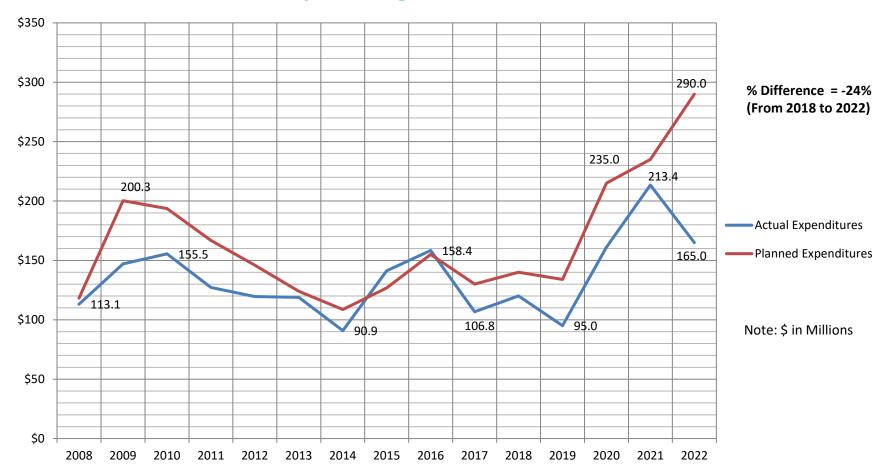


CIP Projects with Largest Spending Projections in FY-2022

Project Name	Planned FY-2022 CIP Spending	Actual FY-2022 Spending	Differential
Nansemond TP RRF and Digester Upgrades	\$10,935,000	\$1,460,000	-\$9,475,000
Jefferson Avenue IFM Replacement Phase III	\$9,709,000	\$515,000	-\$9,194,000
James River SWIFT Land Acquisition	\$9,561,000	\$12,512,000	\$2,951,000
		Total:	-\$26,482,000



Planned vs. Actual CIP Spending





Projects Closed-Out in FY-2022

CIP#	Project	Initial Appropriation	Additional	Final Appropriation	Actual Costs	Act/Orig	Act/Final
AD012310	Central Environmental Laboratory Ph II Study	\$400,000.00	\$2,000.00	\$402,000.00	\$401,682.00	0.4%	-0.1%
AT014500	Atlantic TP Influent Screens 1-3 Replacement	\$3,910,000.00	\$0.00	\$3,910,000.00	\$3,498,271.00	-10.5%	-10.5%
CE011700	Western Trunk FM Replacement	\$4,286,000.00	\$0.00	\$4,286,000.00	\$3,544,798.00	-17.3%	-17.3%
CE011821	Elbow Road PRS	\$8,984,000.00	\$0.00	\$8,984,000.00	\$8,124,622.00	-9.6%	-9.6%
CE011823	Virginia Beach Blvd FM Ph VI	\$15,913,000.00	\$11,950,000.00	\$27,863,000.00	\$23,815,795.00	49.7%	-14.5%
MP013000	SC Collection System Rehab Ph I	\$1,986,250.00	\$0.00	\$1,986,250.00	\$534,410.00	-73.1%	-73.1%
MP013600	Middlesex IFM Ph I Cooks Corner	\$2,348,400.00	\$0.00	\$2,348,400.00	\$1,486,198.00	-36.7%	-36.7%
MP013900	Urbanna WWTP Reliability Improvements	\$270,000.00	\$0.00	\$270,000.00	\$132,519.00	-50.9%	-50.9%
NP012600	Deep Creek IFM Replacement	\$6,233,000.00	\$318,600.00	\$6,551,600.00	\$6,550,665.00	5.1%	0.0%
SU010300	Surry Water and Sewer Infrastructure Imp	\$2,412,922.00	\$0.00	\$2,412,922.00	\$372,508.00	-84.6%	-84.6%
VP017110	Central Norfolk Area GS Imp Ph I	\$320,000.00	\$0.00	\$320,000.00	\$136,403.00	-57.4%	-57.4%
YR013710	York River TP Advanced NRI Ph I	\$2,200,000.00	\$0.00	\$2,200,000.00	\$1,761,791.00	-19.9%	-19.9%
YR014500	York River TP Headworks Bldg MCC Repl	\$498,000.00	\$0.00	\$498,000.00	\$219,283.00	-56.0%	-56.0%
GN016210	SWIFT Nansemond FS MAR Well Install	\$2,705,000.00	\$0.00	\$2,705,000.00	\$2,152,222.00	-20.4%	-20.4%
GN016343	James River SWIFT Land Acquisition	\$12,530,000.00	\$0.00	\$12,530,000.00	\$12,511,761.00	-0.1%	-0.1%
GN018200	Water Quality Dept Insrumentation Equipment	\$463,000.00	\$0.00	\$463,000.00	\$435,630.00	-5.9%	-5.9%
CE012400	Ches Eliz Influent Force Main Modifications	\$600,000.00	\$16,251.00	\$616,251.00	\$571,105.00	-4.8%	-7.3%



Projects Closed-Out in FY-2022 (cont.)

CIP#	Project	Initial Appropriation	Additional	Final Appropriation	Actual Costs	Act/Orig	Act/Final
JR012100	Huxley to Middle Ground	\$2,500,000.00	\$2,685,885.00	\$5,185,885.00	\$5,165,295.00	106.6%	-0.4%
MP013900	Urbanna WWTP Reliability Improvements	\$270,000.00	\$0.00	\$270,000.00	\$132,519.00	-50.9%	-50.9%
BH0f14800	Jefferson Ave Ext Gravity Improvements	\$2,870,400.00	\$196,992.00	\$3,067,392.00	\$2,689,828.00	-6.3%	-12.3%
GN012130	Manhole Siphon North Shore	\$2,834,000.00	\$8,019,969.00	\$10,853,969.00	\$9,153,299.00	223.0%	-15.7%
NP014400	NTP Influent Screen Replacement	\$3,508,700.00	\$0.00	\$3,508,700.00	\$1,688,873.00	-51.9%	-51.9%
NP013500	NTP Land Acquistion Stabilization	\$5,734,789.00	\$0.00	\$5,734,789.00	\$4,215,921.00	-26.5%	-26.5%
JR011300	Patrick Henry Pump Station	\$3,857,468.00	\$0.00	\$3,857,468.00	\$2,690,178.00	-30.3%	-30.3%
MP013100	Small Communities Mob Dewatering Fac Inst	\$1,955,478.00	\$0.00	\$1,955,478.00	\$1,659,219.00	-15.2%	-15.2%
WB012400	WBTP Generator & Swithcgear Replacement	\$17,003,382.00	\$477,000.00	\$17,480,382.00	\$16,732,814.00	-1.6%	-4.3%
YR014400	YRTP Headworks Effluent Pipe Rehab	\$3,500,000.00	\$0.00	\$3,500,000.00	\$2,828,826.00	-19.2%	-19.2%
AT014700	Little Neck IFM Emergency Repair	\$500,000.00	\$0.00	\$500,000.00	\$49,685.75	-90.1%	-90.1%
AD012200	WQSB	\$9,800,000.00	\$9,700,312.00	\$19,500,312.00	\$18,936,655.00	93.2%	-2.9%
CE011828	Kempsville PRS	\$3,208,000.00	\$2,153,940.00	\$5,361,940.00	\$5,084,086.00	58.5%	-5.2%
CE010520	Newtown Road	\$16,555,000.00	\$0.00	\$16,555,000.00	\$4,389,556.00	-73.5%	-73.5%
	Totals =	\$140,156,789.00	\$35,520,949.00	\$175,677,738.00	\$141,666,417.75	1.10%	-19.40%



CIP Performance Metrics

CIP Projects Substantially Completed in FY-2022:

Projects Planned to be Completed = 33

Projects Actually Completed = 18

% of Projects Completed = 55%

Past Performance:

	% Complete by End of FY	% Complete by End of FY-2022
FY-2016	66%	100%
FY-2017	70%	100%
FY-2018	75%	100%
FY-2019	71%	100%
FY-2020	53%	100%
FY-2021	66%	95%



CIP Performance Metrics (cont.)

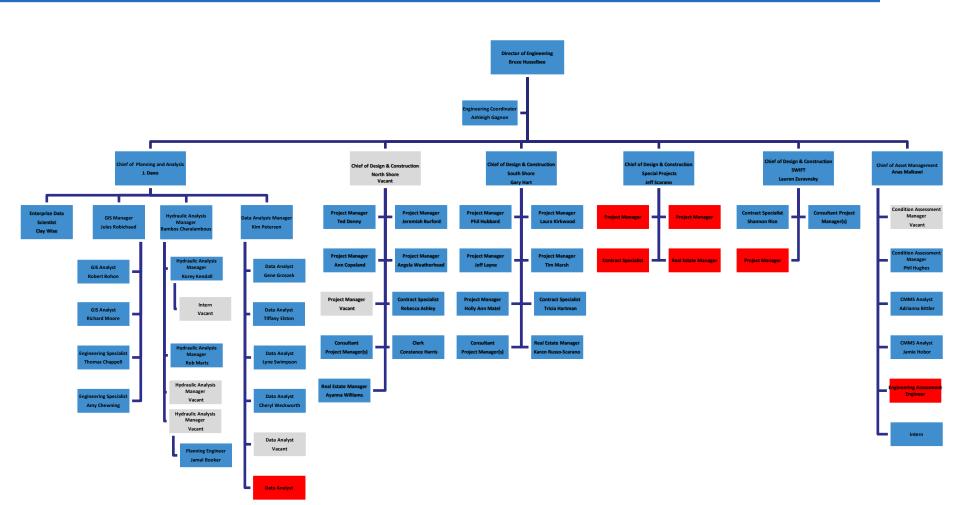
CIP Projects Not Completed in FY-2022:

Reasons for Projects Completed Late	# of Projects
Intentionally delayed project	3
Added/Modified scope to project	3
Duration of work effort took longer than anticipated	3
External project not managed by HRSD	2
Design related delays	2
Supply chain and material delivery delays	2
Construction related delays*	1
Permitting approval delays	1



^{*}No. 1 reason in FY-2021

Engineering Department Staffing





James River SWIFT and Advanced Nutrient Reduction Improvements

Owner's Consultant:

AECOM with Hazen and Sawyer

Design-Build Team:

Ulliman & Schutte-Alberici with HDR and Black & Veatch

Schedule Completion:

April 2026 (substantial) October 2026 (final)

Project Value: \$579M

Funding:

WIFIA, VRLF, WQIF





Nansemond Struvite Recovery & Digester Upgrades

Engineers: Hazen and Sawyer/HDR

Contractor: MEB General Contractors

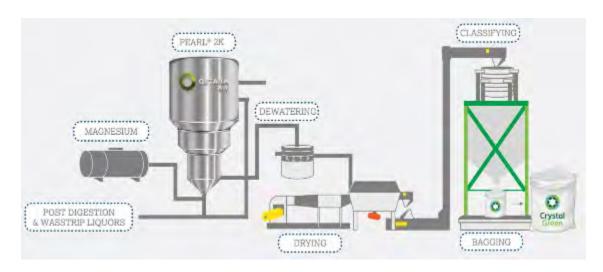
Schedule Completion: October 2024

Project Value: \$60M

Funding: VRLF &

HRSD Revenue Bond







Surry Hydraulic Improvements and Interceptor Force Main

Engineers:

Bowman & HDR Engineering

Design-Build Team:

- RK&K & Timmons
- MEB

Schedule Completion:

November 2022 (substantial) March 2023 (final)

Project Value: \$44.5M

Funding: HRSD Revenue Bond



Industrial Park PS & EQ Tank



Consent Decree/Sewer Rehabilitation Plan – Project Updates

- Consent Decree Condition Assessment Program (CAP)
 identified condition defects in the regional sanitary sewer
 system.
- EPA/VDEQ approved the Rehabilitation Action Plan (RAP) in May 2015.
- RAP addresses improvements to gravity mains, force mains, pump stations and associated system compounds.
- RAP will be implemented in three phases:
 - ➤ Phase 0 (June 2017)
 - ➤ Phase 1 (May 2021)
 - ➤ Phase 2 (May 2025)



Consent Decree/Sewer Rehabilitation Plan Project Updates (Phase 2)

CIP	Project Name	Project Status	Total CIP Cost
AB010000	Army Base 24-Inch and 20-Inch Transmission Main Replacements	Design	\$27,343,000
AT011510	Shipps Corner Interim Pressure Reducing Station	Complete	\$3,691,148
AT011520	Shipps Corner Pressure Reducing Station Modifications	Design	\$1,826,426
AT011900	Great Bridge Interceptor Extension 16-Inch Replacement	Design	\$11,915,000
AT013000	Washington District Pump Station Area Sanitary Sewer Improvements	Design	\$2,496,266
AT013100	South Norfolk Area Gravity Sewer Improvements Phase 1	Complete	\$1,013,961
AT013110	South Norfolk Area Gravity Sewer Improvements Phase 2	Design	\$10,566,000
AT013010	Washington District Pump Station Replacement	Design	\$9,400,000
AT015400	Dozier's Corner Pump Station Replacement*	Design	\$17,121,868
BH014000	West Avenue and 35th Street Interceptor Force Main Replacement	Construction	\$4,404,011
BH014500	Ivy Home-Shell Road Sewer Extension Division I Replacement	Design	\$2,243,200
BH014600	46th Street Diversion Sewer Rehabilitation Replacement	Construction	\$12,178,333
BH014900	Hampton Trunk Sewer Extension Division K Gravity Improvements	Construction	\$4,644,400
BH015900	Bloxoms Corner Force Main Replacement	Design	\$3,495,808
CE011300	Birchwood Trunk 24-Inch 30-Inch Force Main at Independence Boulevard Replacement Phase II	Design	\$1,702,700
CE011600	Poplar Hall Davis Corner Trunk 24-Inch Gravity Sewer Improvements	Design	\$2,262,394
CE012000	Poplar Hall Davis Corner Trunk 24-Inch Gravity Sewer Improvements (I-264 VDOT Betterment)	Complete	\$111,320
GN010730	Horizontal Valve Replacement Phase III	Proposed	\$1,235,285

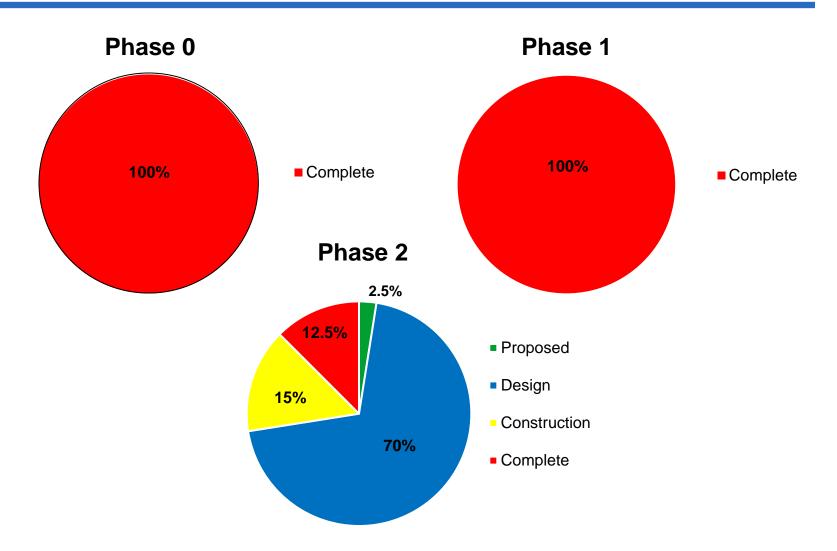


Consent Decree/Sewer Rehabilitation Plan Project Updates (Phase 2)

CIP	Project Name	Project Status	Total CIP Cost
GN014900	North Shore Gravity Sewer Improvements Phase I	Design	\$5,639,906
GN015000			\$942,804
GN015300	Interceptor System Valve Improvements Phase I	Design	\$3,259,305
GN015400	South Shore Aerial Crossing Improvements	Design	\$290,758
JR010600	Lucas Creek Pump Station Upgrade	Construction	\$22,324,564
NP010620	Suffolk Pump Station Replacement*	Design	\$12,049,000
NP012400	Western Branch Sewer System Gravity Improvements	Design	\$5,100,000
NP012500	Shingle Creek and Hickman's Branch Gravity Sewer Improvements	Complete	\$1,230,006
VP010920	Norview Estabrook Division I 18-Inch Force Main Replacement Phase II, Section 2	Design	\$1,988,585
VP014010	Ferebee Avenue Pump Station Replacement	Design	\$5,852,747
VP014020	Sanitary Sewer Project 1950 12 Inch Force Main and 24 and 18 Inch Gravity Replacement	Design	\$7,179,000
VP014021	Sanitary Sewer Project 1950 FM Replacement Part 1	Construction	\$4,232,935
VP014700	Ingleside Road Pump Station Replacement*	Design	\$3,810,449
VP014800	Lee Avenue-Wesley Street Horizontal Valve Replacement	Design	\$4,081,470
VP015320	Larchmont Area Sanitary Sewer Improvements*	Design	\$38,734,000
VP015400	Lafayette Norview-Estabrook Pump Station Replacements	Design	\$18,495,895
VP016500	Norview-Estabrook Division I 12-Inch Force Main Replacement	Design	\$1,973,163
VP016700	Norview-Estabrook Division I 18-Inch Force Main Replacement Phase III	Design	\$3,116,334
VP017110	VP017110 Central Norfolk Area Gravity Sewer Improvements Phase I		\$320,000
VP017120	VP017120 Central Norfolk Area Gravity Sewer Improvements Phase II		\$7,160,000
VP018000	Park Avenue Pump Station Replacement	Construction	\$15,366,578
YR010300	Foxridge Sanitary Sewer System Sections 1, 4 & 5 Gravity and Woodland Road Fox Hill Road Gravity Sewer Rehabilitation	Design	\$3,962,504



Consent Decree / Sewer Rehabilitation Plan – Project Updates





Firms Used for Engineering Services Annual Contracts

CONTRACT	FIRM	SWAM	TERM	#TASK ORDERS	CONTRACT VALUE	REMAINING BALANCE
ARCHITECTURAL MECHANICAL ELECTRICAL PROJECTS	GUERNSEY TINGLE ARCHITECTS PC	Х	5/5	15	\$2,578,987.62	\$497,721.64
CONDITION ASSESSMENT	HAZEN AND SAWYER PC		4/5	46	\$3,663,454.61	\$800,464.52
CONSTRUCTION INSPECTION	MCDONOUGH BOLYARD PECK INC		4/5	8	\$988,299.15	\$226,948.58
ENVIRONMENTAL SERVICES	KIMLEY HORN AND ASSOCIATES INC		N/A	1	\$791,167.08	\$55,219.50
ENVIRONMENTAL SERVICES	TETRA TECH INC		4/5	6	\$1,081,182.78	\$187,344.50
GENERAL ENGINEERING SERVICES	CH2M HILL ENGINEERS INC		N/A	7	\$5,833,762.86	\$234,109.44
GENERAL ENGINEERING SERVICES	GANNETT FLEMING INC		1/4	11	\$829,528.38	\$592,919.25
GENERAL ENGINEERING SERVICES	HAZEN AND SAWYER PC		2/5	22	\$11,974,752.06	\$2,217,910.83
GENERAL ENGINEERING SERVICES	HDR ENGINEERING INC		2/5	29	\$16,480,484.33	\$7,237,867.52
INTERCEPTOR SYSTEM PROJECTS	HDR ENGINEERING INC		N/A	1	\$425,397.00	\$49,075.42
INTERCEPTOR SYSTEM PROJECTS	RUMMEL KLEPPER AND KAHL LLP		4/5	36	\$10,778,164.30	\$3,792,422.54
INTERCEPTOR SYSTEM PROJECTS	WHITMAN REQUARDT AND ASSOCIATES LLP		N/A	4	\$1,111,742.43	\$33,282.01
LAND SURVEYING	RICE ASSOCIATES, INC.	Х	4/5	1	\$3,159.00	\$3,159.00
REAL ESTATE SERVICES	JOHNSON MIRMIRAN AND THOMPSON INC		5/5	14	\$750,576.80	\$360,142.00
STRUCTURAL PROJECTS	COLLINS ENGINEERS INC	Х	2/5	23	\$621,282.37	\$143,512.98
				224	\$57,911,940.77	\$16,432,099.73

Firms Used for Engineering Services Individual Contracts

ENGINEER	SWAM	# CONTRACTS	TOTAL CONTRACT VALUE	REMAINING BALANCE
AECOM TECHNICAL SERVICES INC		11	\$44,984,040.46	\$12,328,479.36
AH ENVIRONMENTAL CONSULTANTS, INC		1	\$474,884.00	\$179,384.00
BOWMAN CONSULTING GROUP, LTD.		1	\$216,573.50	\$6,480.00
BROWN AND CALDWELL		7	\$6,105,083.55	\$4,409,580.34
CDM SMITH INC		4	\$8,470,200.00	\$3,036,349.82
DEWBERRY ENGINEERS, INC		2	\$1,509,078.01	\$496,510.49
EARTH DATA INCORPORATED	X	3	\$7,192,266.17	\$5,768,125.79
GANNETT FLEMING INC		5	\$9,885,709.38	\$3,360,118.56
HAZEN AND SAWYER PC		4	\$5,932,800.34	\$672,945.74
HDR ENGINEERING INC		1	\$15,073,006.00	\$209,634.55
JACOBS ENGINEERING GROUP		3	\$1,124,735.01	\$0.00
JOHNSON MIRMIRAN & THOMPSON		1	\$982,652.87	\$5,451.07
KIMLEY HORN AND ASSOCIATES INC		19	\$18,344,212.25	\$5,376,426.66
MICHAEL BAKER INTERNATIONAL INC		1	\$367,616.00	\$119,336.02
RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.		2	\$1,828,906.60	\$172,616.83
RUMMEL KLEPPER AND KAHL LLP		9	\$12,200,959.14	\$7,179,969.31
TETRA TECH INC		1	\$519,670.00	\$34,705.91
VHB		2	\$1,081,461.62	\$90,479.46
WHITMAN REQUARDT AND ASSOCIATES LLP		1	\$1,543,350.15	\$65,442.27
WOOLPERT		1	\$560,120.90	\$76,382.55
		79	\$138,397,325.95	\$43,588,418.73



Firms Used for Construction Services Annual Contracts

CONTRACTOR	SWAM	#TASK ORDERS	VALUE	REMAINING
BRIDGEMAN CIVIL CONSTRUCTION INC	Χ	46	\$11,187,495.24	\$1,834,181.81
TIDEWATER UTILITY CONSTRUCTION INC	X	24	\$2,429,515.21	\$612,246.70
		70	\$13,617,010.45	\$2,446,428.51



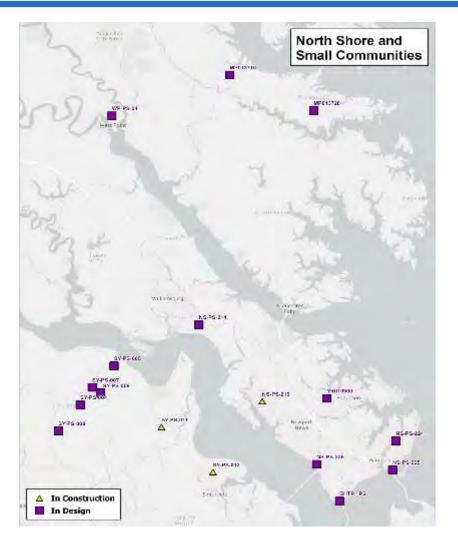
Firms Used for Construction, Design-Build and CM Services Individual Contracts

CONTRACTOR	SWAM	#CONTRACTS	TOTAL CONTRACT VALUE	REMAINING BALANCE
AC SCHULTES OF MD, INC.		2	\$57,839,700.00	\$53,826,520.00
ALLAN MYERS VA, INC.		2	\$3,759,436.98	\$16,825.36
BASIC CONSTRUCTION COMPANY LLC	X	3	\$9,918,799.96	\$1,904,748.44
BRIDGEMAN CIVIL INC	X	12	\$46,551,196.95	\$8,310,643.83
CITY OF NEWPORT NEWS		1	\$1,493,137.92	\$88,897.64
CROWDER CONSTRUCTION COMPANY		3	\$87,669,564.16	\$791,527.05
ET GRESHAM CO INC		2	\$9,085,417.14	\$7,569,969.23
GARNEY		3	\$429,373,448.00	\$411,507,390.81
HENDERSON INC	X	2	\$18,819,844.63	\$335,444.52
J SANDERS CONSTRUCTION	X	1	\$846,768.85	\$0.00
KIEWIT INFRASTRUCTURE SOUTH CO.		3	\$35,456,843.50	\$35,456,843.50
MEB GENERAL CONTRACTORS INC	X	10	\$131,768,520.00	\$70,800,136.77
SAK CONSTRUCTION, LLC		1	\$5,370,870.19	\$121,927.00
SHAW CONSTRUCTION CORP	X	5	\$28,235,365.79	\$12,182,179.26
SUFFOLK UTILITY CONSTRUCTION, INC		1	\$988,188.96	\$49,409.45
TIDEWATER UTILITY CONSTRUCTION INC	X	4	\$29,221,940.15	\$16,599,597.68
ULLIMAN SCHUTTE CONSTRUCTION LLC		2	\$34,658,053.37	\$199,510.00
US-A		2	\$534,098,838.00	\$483,005,857.30
		59	\$1,465,155,934.55	\$1,102,767,427.84



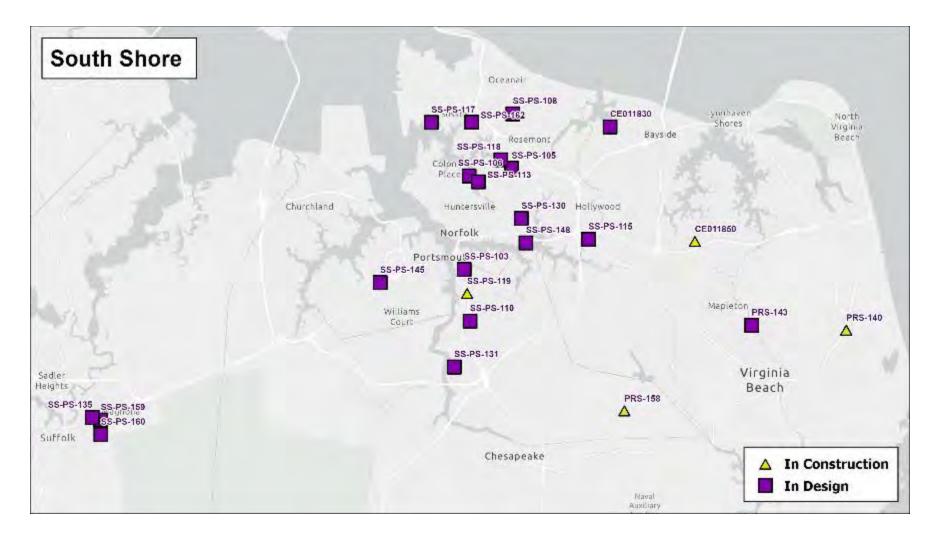
- HRSD's Ten Year CIP = \$3.36B
- # of Existing HRSD Pump Stations = 143
- Projects Including Pumps Stations = 45
- Total Value of Pump Station Projects = \$356M













Marina Drive Pump Station





Surry Pump Station 2





Elbow Road Pressure Reducing Station





Boat Harbor Treatment Plant Pump Station



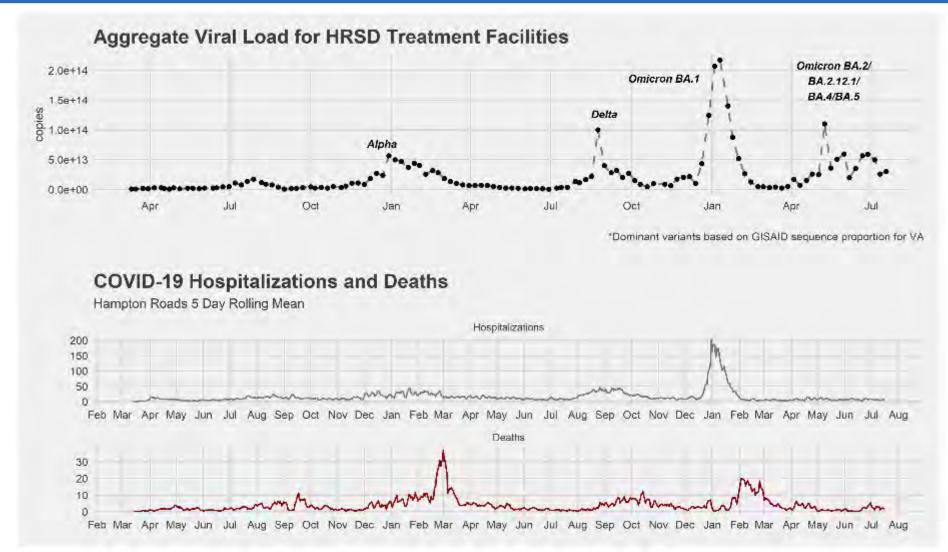


Questions?



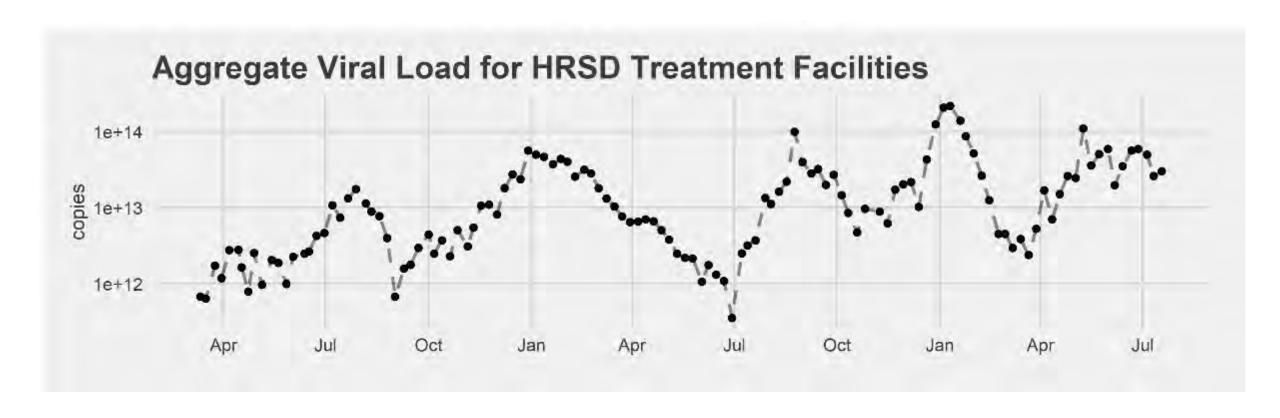
Wastewater Surveillance Update 7/25/22

Regional Viral Load, Hospitalizations, and Deaths



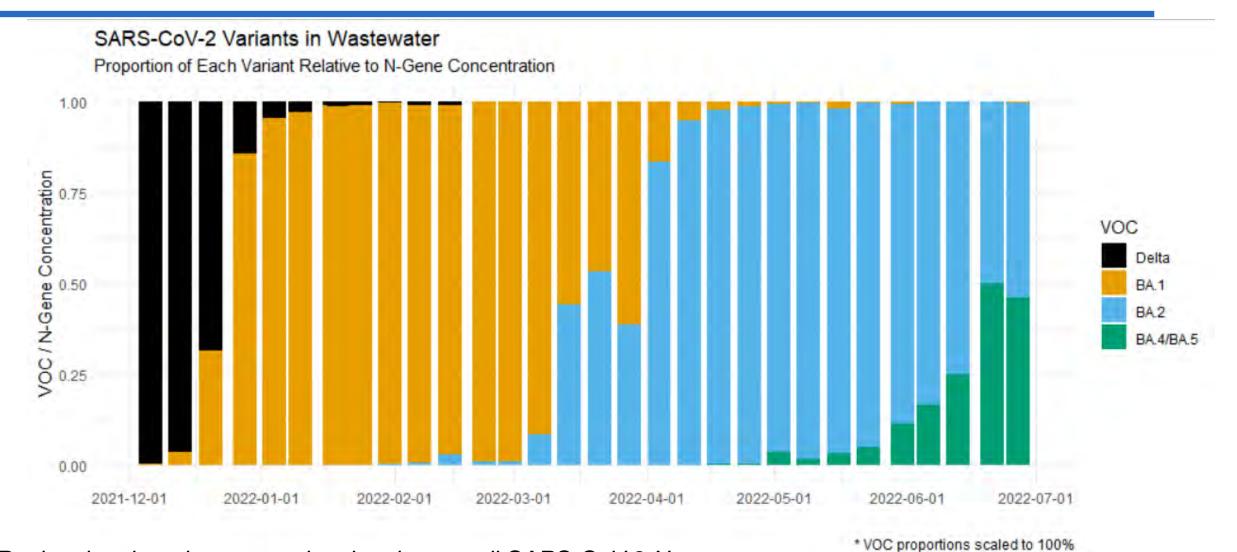


Regional Viral Load





Regional Variant Data



Regional variant data proportional to the overall SARS-CoV-2 N-gene signal



What was CDC doing with early HRSD data?

Unconscied Proof

Journal of Water & Health



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Modeling infection from SARS-CoV-2 wastewater concentrations: promise, limitations, and future directions

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National Institute of Water & Atmospheric Research Ltd (NIWA), Hillcrest, Hamilton, New Zealand

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HRSD Commission Meeting Minutes July 26, 2022

Attachment #15

Item 21. COVID-19 Wastewater Surveillance Study Update

HRSD Commission Meeting Minutes July 26, 2022

Attachment #16

Item 26. Informational Items

- a. Management Reports
 - (1) General Manager
 - (2) <u>Communications</u>
 - (3) Engineering
 - (4) Finance
 - (5) <u>Information Technology</u>
 - (6) Operations
 - (7) <u>Talent Management</u>
 - (8) Water Quality
 - (9) Report of Internal Audit Activities
 - (10) Report of Internal Audit Unifier/ERP Integration
- b. Strategic Planning Metrics Summary
- c. <u>Bowers Hill Interceptor Force Main Section I Emergency Replacement Emergency Declaration</u>



July 18, 2022

Re: General Manager's Report

Dear Commissioners:

HRSD ended Fiscal Year 2022 with several highlights -- the most important being the approval of HRSD's Integrated Plan in February. In addition, the Chesapeake-Elizabeth Treatment Plant was successfully closed with flows diverted to the Atlantic Treatment Plant. For the first time since 2008, there were no capacity related wet-weather overflows. On the financial side, we ended the fiscal year strong as higher than expected water consumption offset increased chemical and utility costs as inflation continues to rise.

On June 7, the EPA started the public notice period for the issuance of our draft James River SWIFT Underground Injection Control (UIC) permit with comments due on July 8. Once the comments are reviewed, the final permit is expected to be issued in the coming months.

The highlights of June's activities are detailed in the attached monthly reports.

- A. **Treatment Compliance and System Operations:** June was a quiet month from an Operations perspective which is partially due to the lack of rain. As a follow up to the Gum Court force main break in Chesapeake a few months ago, staff performed some condition assessment in the surrounding area and found extensive external corrosion similar to the pipe condition of the failed force main. As a result, staff are declaring an emergency project to replace this force main immediately as it is adjacent to Interstate 664.
- B. **Water Quality Enforcement:** U.S. Amines in Portsmouth was issued several administrative and technical violations resulting in two enforcement orders with the civil penalties totaling \$6,800.

Divers Processing Company was issued an enforcement order for technical and administrative violations with a civil penalty assessed at \$6,000.

- C. **Internal Communications:** I participated in the following meetings/activities with HRSD personnel:
 - 1. Strategic Plan kick-off
 - 2. Attended virtual Chief Forum
 - 3. Relationship building with Chief Information Security Officer
 - 4. Attended the Central Environmental Lab Workshop

- D. **External Communications:** I participated in the following meetings/activities:
 - 1. Relationship building with DEQ Tidewater Regional Office Director
 - 2. Relationship building with Suffolk Director of Public Utilities
 - 3. HRSD's priorities presentation at HRPDC's Regional Environmental Meeting
 - 4. Attended VAMWA meeting
 - 5. Interviewed by Peter Annin, former Newsweek reporter authoring a book about water reuse
 - 6. Relationship building with our lobbyist, Preston Bryant, and Chris Pomeroy from Aqualaw
 - 7. Interviewed by Chuck Job from the National Groundwater Association on HRSD's financing strategy for SWIFT
 - 8. Attended the Potomac Aquifer Recharge Oversight Committee meeting
 - Attended the NACWA Audit Committee meeting

Integrated Plan (IP): On June 6, staff responded to EPA's stipulated penalty letter requesting additional information on Sanitary Sewer Discharges from January 16, 2021, and December 31, 2021. HRSD respectfully disputed 21 of the unauthorized discharges. Eleven of these unauthorized discharges were capacity-related, four were infrastructure damage or failure, one was damage by others, and five were non-potable water releases.

Thanks for your continued dedicated service to HRSD, the Hampton Roads region, the Commonwealth, and the environment. I look forward to seeing you in person in Newport News at 10 am on Tuesday, July 26, 2022.

Respectfully submitted,

Jay Bernas, P.E. General Manager TO: General Manager

FROM: Director of Communications

SUBJECT: Monthly Report for June 2022

DATE: July 12, 2022

A. Publicity and Promotion

HRSD and/or SWIFT were mentioned or featured in five news stories or media/social media mentions on topics that included:

- 1. Road closure and detour related to HRSD construction in Hampton
- 2. HRSD access road near Dam Neck and Atlantic Treatment Plant
- 3. HRSD expansion into the Eastern Shore

Analysis of May media coverage:

Mentions, reach and sentiment

 Mentions
 Total Potential News Reach
 Sentiment

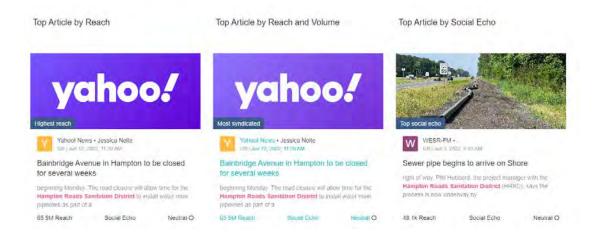
 Compared to last period
 Compared to last period
 Compared to last period

38

70.5_M

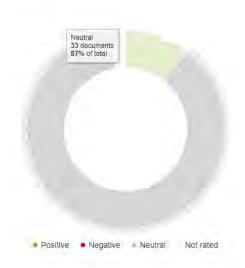
11

What is the top performing news content?

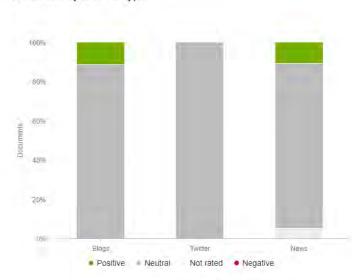


How favorable is the content?

Sentiment Share of Voice

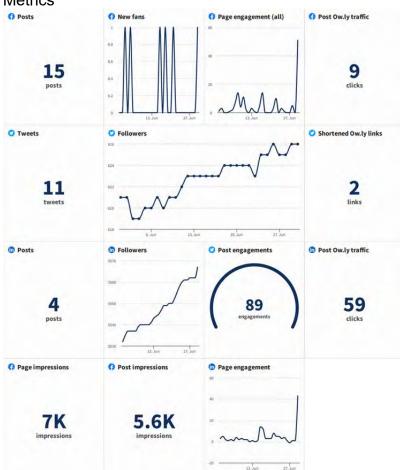


Sentiment by Source Type



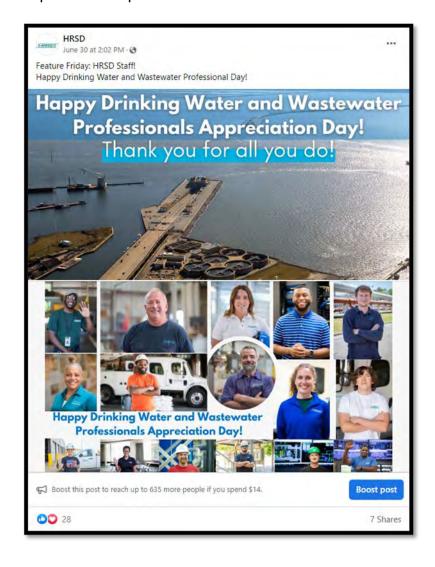
B. Social Media and Online Engagement

1. Metrics





- 2. Top posts on Facebook, Twitter, and YouTube
 - a. Top Facebook post



b. Top Tweet



- c. Top YouTube Videos
 - The Wastewater Treatment Process (257 views)
 - Opening Ceremony of Woodstock Park (96 views)
 - What is Asset Management? HRSD Celebrates Infrastructure Week at HRSD (51 views)
 - HRSD Atlantic Treatment Plant Cambi Tour (16 views)
 - HRSD Employee Testimonials Robert (14 views)
- 3. Website and Social Media Impressions and Visits
 - Facebook: 6,882 page impressions, 4,963 post impressions reaching 4,809 users, and Facebook Engagement of 135 (117 reactions, 16 shares, and 2 comments)
 - b. Twitter: 3,288 tweet impressions; 1,485 profile visits and 1 mention
 - c. HRSD.com/SWIFTVA.com: 878 page visits
 - d. LinkedIn Impressions: 3,537 page impressions and 1,719 post impressions
 - e. YouTube: 586 views
 - f. Next Door unique impressions: 12,103 post impressions from 10 targeted neighborhood posting shared with 35,859 residents
 - g. Blog Posts: (1) <u>Understanding the Impact of Balloon Releases: Sustainable</u>
 Alternatives to Balloons

- h. Construction Project Page Visits 1,138 total visits (not including direct visits from home page, broken down as follows:
 - (1) 771 visits to individual pages
 - (2) 367 to the status page

C. <u>News Releases, Advisories, Advertisements, Project Notices, Community Meetings and Project Web Postings</u>

1. News Releases: 2

2. Traffic Advisories: 0

3. Construction Notices and or notices to neighbors: 11

4. Advertisements: 0

5. Project Notices: 13 (via door hanging, email, reaching 396 residents)

6. Project/Community Meetings: 0

7. New Project Web Pages: 0

8. New Project Videos: 0

D. Special Projects and Highlights

Communications director and staff hosted former *Newsweek* correspondent Peter Annin, who now authors books and op-eds about water. He is currently working on a book about water recycling and spent two days touring the SWIFT Research Center and James River SWIFT full scale well drilling sites and interviewing HRSD subject matter experts in Water Quality and Operations, along with HRSD's current and former general manager.

E. Internal Communications

- 1. Director participated in the following internal meetings and events:
 - a. Ops QST meeting to discuss an Operations web page refresh at HRSD.com
 - b. Strategic plan executive interview with consultants developing the plan
 - c. Director of Operations interviews as part of the interview panel
 - d. SWIFT Community Commitment Plan monthly meeting
 - e. Weekly planning and status update meetings for the James River SWIFT groundbreaking event scheduled for July 21
 - f. Weekly meetings with ATP and TSD staff related to recent odor issues at the plant
 - g. Weekly GM check-in meetings
 - h. Discharge Monitoring Report (DMR), SWIFT Quality Steering Team (QST) and QST meetings
- 2. Director also conducted biweekly communications department status meetings and weekly team and one-on-one check-in meetings.

3. Staff attended project progress and outreach development meetings with various project managers.

F. Metrics

- 1. Educational and Outreach Activities: 34 virtual, five in-person
 - a. Self-guided SWIFT Virtual Tours 35 views (analytics specify number of times "Take a Tour" button was selected)
 - b. 06/04/2022 --- Love Liz Fest (Environmental partner outreach event) | 800 participants
 - c. 06/06/2022 Newsome Park Elementary School Outreach | 106 students
 - d. 06/14/2022 Landstown High School Outreach | 90 students
 - e. 06/15/2022 -- Landstown High School Outreach | 60 students
 - f. 06/29/2022 Envirobase SWIFT Tour and Activity | 15 students
- 2. Number of Community Partners: 4
 - a. Elizabeth River Project
 - b. Newport News Public Schools
 - c. Portsmouth Public Schools
 - d. Virginia Beach Public Schools
- 3. Additional Activities Coordinated by Communications Department: 4
 - 06/06/2022 Francis Asbury United Methodist Church Touch a Truck | 200 students
 - 06/07/2022 SWIFT tabling event at CNU | 100 students
 - 06/10/2022 Treakle Elementary Touch a Truck | 200 students
 - 06/14/2022 Riverside Elementary Career Day | 24 students
- 4. Monthly Metrics Summary

Item #	Strategic Planning Measure	Unit	June 2022
M-1.4a	Total Training Hours per Full Time Employee (3) - Current Month	Hours / #FTE	2
M-1.4b	Total Training Hours per Full Time Employee (3) - Cumulative Fiscal Year-to- Date	Hours / #FTE	81.25
M-5.2	Educational and Outreach Events	Number	41
M-5.3	Number of Community Partners	Number	0

Respectfully,

TO: General Manager

FROM: Director of Engineering

SUBJECT: Engineering Monthly Report for June 2022

DATE: July 11, 2022

A. General

1. Capital Improvement Program (CIP) spending for the 11th month of Fiscal Year (FY) 2022 was below the planned spending target. Actual CIP spending for the FY is likely to continue to trail planned spending with a new FY-2022 target of \$165 million.

CIP Spending (\$ million):

	Current Period	FYTD
Actual	20.00	143.93
Plan	26.10	264.70

- 2. Staffing is the most significant challenge facing the Engineering Department. Due to staff leaving HRSD (3) and internal promotions (4), we are looking to backfill seven open positions. As part of the new budget, the Engineering Department has eight new positions to fill. A total of 15 positions are needed to bring the Engineering Department to a fully staffed level. The recruitment efforts are underway for these open positions with three new employees expected to join the Engineering Department in July. Future efforts to find qualified candidates potentially include:
 - Open House/Job Fair
 - Virtual Career Day
 - Attendance at more events sponsored by professional trade organizations
 - Active recruitment at WaterJAM in September

B. Asset Management Division

- 1. The annual Force Main Condition Assessment Program (FM CAP) has reached the end of the fiscal year although current efforts will continue into FY 2023. There are 10 active pipeline segments that are under assessment. These assessments allow for better decision making when field data is acquired and subsequently reviewed. Another 10 locations will be assessed in FY 2023. This effort is an important part of the validation needed to verify the FM CAP. The results of this effort also help determine possible CIP projects that are a result of aging infrastructure concerns.
- 2. The Asset Management Division has completed the update to the HRSD Hurricane Plan. This plan is updated each year to provide staff with the latest information in the case of a hurricane or other inclement weather. Hurricane season officially started June 1st and although a hurricane is unlikely in June, planning for this possibility is an important and prudent initiative. The plan has numerous resources for staff and provides guidance and documentation for preparedness, response and recovery efforts.

C. North Shore, South Shore and SWIFT Design & Construction Divisions

- 1. The King William Treatment Plant Phase II project recently reached an important milestone. The Preliminary Engineering Report was completed, and important decisions have been made for this project. After careful study, it had been determined that the plant expansion will provide an increase in capacity from 100,000 gallons per day (gpd) to 200,000 gpd. Due to the difficulty in estimating future development in this area, provisions will also be made to expand this plant to 300,000 gpd. These provisions should allow for a future expansion at the plant to occur more easily and in a shorter timeframe if development and flows increase more quickly than anticipated. In addition to increased plant capacity, this project will allow for improved effluent water quality and the ability to continue providing reclaimed water to the adjacent Purina facility into the future.
- 2. Construction has begun on the Eastern Shore Infrastructure Improvements project. The initial work involves the installation of the high-density polyethylene pipe (HDPE) along the railroad right-of-way. This project is using a Design-Build delivery model. Design work continues even though some of the construction work has begun. Three new pump stations will be installed along the pipeline route. Due to the length of pipe to be installed (over 20 miles of HDPE pipe) there is time to complete the pump station design while pipe installation work continues.
- 3. As part of the SWIFT Full-Scale Implementation Program a series of managed aquifer recharge (MAR) wells will be installed. A Well Installation Dashboard will be created to share the status of the various installation efforts and specific information about each new well. This dashboard includes links to the data, status of drilling, and logging of soil information encountered. Several wells exist at Nansemond and new wells are being installed at James River. The MAR well information will be entered into this database and shared with the SWIFT Program Team.

D. Planning & Analysis Division

- 1. Planning and coordination efforts continue with the Town of Chincoteague. Recent efforts include discussions of potential transfer of existing assets and the possibility to expand treatment capacity. Consultant HDR Engineering is assisting with the planning study which includes a review of possible outfall capacity limitations. In addition to coordinating with the Town, a local development, Sunset Bay, and the U.S. Coast Guard are also possible customers to be served in this area.
- 2. As part of the annual update to the regional Hydraulic Model, the Planning & Analysis Division has requested sewer-related information from each locality in the area. The updates include new pump station, pipeline and related infrastructure data. This data is provided in a GIS database to allow for easy integration into the existing model. This data is critical to keep the model current and accurate as we use it to predict future sewer infrastructure needs for the region.

E. Strategic Planning Metrics Summary

- 1. Educational and Outreach Events: 1
 - a. 06/22/2022 Staff made a presentation at the Virginia Water Environment Association (VWEA) Operations Workshop entitled, *Begin with the End in Mind*.
- 2. Number of Community Partners: 1
 - a. VWEA
- 3. Number of Research Partners: 1
 - a. Water Research Institute One Water Cities Framework
- 4. Monthly Metrics Summary:

Item #	Strategic Planning Measure	Unit	June 2022
M-1.4a	Total Training Hours per Full Time Employee (45) - Current Month	Hours / #FTE	0.54
M-1.4b	Total Training Hours per Full Time Employee (45) - Cumulative Fiscal Year- to-Date	Hours / #FTE	23.32
M-5.2	Educational and Outreach Events	Number	1
M-5.3	Number of Community Partners	Number	1
M-5.4	Number of Research Partners	Number	1

5. Annual Metrics:

Item #	Strategic Planning Measure	Unit	FY-2022
M-2.1	CIP Delivery – Budget	Percentage	120%
M-2.2	CIP Delivery – Schedule	Percentage	152%
M-5.4	Number of Research Partners	Number	4

Bruce W. Husselbee, PhD, P.E., DB1a

Bruce W. Husselbee, PhD, P.E., DBIA

TO: General Manager

FROM: Director of Finance

SUBJECT: Monthly Report for June 2022

DATE: July 13, 2022

A. General

1. Water consumption increased in June due to the dry weather as wastewater operating revenues ended the fiscal year over three-percent higher than expected on a cash basis. Fees have started to tick up as expected due to the re-introduction of late payment charges and other delinquency fees. Customers can avoid severance and late payment charges by maintaining their pay plans. Facility Charges ended the fiscal year lower than expected and much lower than the previous year as construction activity continues to slow with rising interest rates and labor and supply constraints. Utilities and Chemicals ended the fiscal year higher than budget as inflation drove costs higher. The remaining Operating Expenses remained under budget. Overall, HRSD's revenues exceeded expenses on a cash basis.

2. Past Due Account Trends:

Arrearages remain stable with staff field activities. HRSD continues to offer penalty-free pay plans as a way for customers to manage their past due balances.

Field Activities:

In response to delinquent accounts, staff shut off water service to 1,439 accounts during June. Over 900 pay plans were created through the online self-service portal and through call center interactions. Pay plans help customers avoid service interruptions or the initiation of the severance process.

Calls to Call Center:

Customer calls have remained consistent as warning tags and turn-off activities steadily increased throughout the month of June. Staff continue to work through resource challenges created by planned leave, unexpected leave and extended vacancies due to a tight labor market, particularly in the Call Center. As such, service levels dropped to 57 percent of calls answered within 3 minutes. Customer Care continues to work with Talent Management to improve staffing levels, including potential internship opportunities.

B. <u>Interim Financial Report</u>

1. Operating Budget for the Period Ended June 30, 2022

	Amended Budget	Current YTD	Current YTD as % of Budget (100% Budget to Date)	Prior YTD as % of Prior Year Budget
Operating Revenues				
Wastewater	\$ 336,455,000	\$ 345,603,432	103%	102%
Surcharge	1,600,000	1,598,361	100%	107%
Indirect Discharge	3,200,000	3,395,425	106%	101%
Fees	3,020,000	442,647	15%	-13%
Municipal Assistance	700,000	1,038,223	148%	99%
Miscellaneous	 1,285,000	2,229,444	173%	137%
Total Operating Revenue	 346,260,000	354,307,532	102%	101%
Non Operating Revenues				
Facility Charge	7,320,000	6,987,275	95%	126%
Interest Income	1,210,000	(1,650,866)	-136%	31%
Build America Bond Subsidy	2,095,000	2,095,930	100%	95%
Other	610,000	1,181,747	194%	208%
Total Non Operating Revenue	 11,235,000	8,614,086	77%	110%
Total Revenues	357,495,000	362,921,618	102%	102%
Transfers from Reserves	 17,346,624	17,346,624	100%	100%
Total Revenues and Transfers	\$ 374,841,624	\$ 380,268,242	101%	102%
Operating Expenses				
Personal Services	\$ 62,776,055	\$ 61,692,088	98%	98%
Fringe Benefits	25,173,707	23,789,801	95%	98%
Materials & Supplies	9,509,735	9,192,603	97%	98%
Transportation	1,555,282	1,365,902	88%	68%
Utilities	12,350,061	13,110,787	106%	98%
Chemical Purchases	9,249,441	9,438,263	102%	78%
Contractual Services	55,345,089	39,188,871	71%	67%
Major Repairs	16,056,857	9,545,043	59%	57%
Capital Assets	655,963	453,200	69%	75%
Miscellaneous Expense	 3,137,304	2,665,267	85%	90%
Total Operating Expenses	 195,809,494	170,441,825	87%	85%
Debt Service and Transfers				
Debt Service	64,308,209	61,017,412	95%	96%
Transfer to CIP	114,463,921	114,464,030	100%	94%
Transfer to Risk management	260,000	260,004	100%	100%
Total Debt Service and Transfers	179,032,130	175,741,446	98%	95%
Total Expenses and Transfers	\$ 374,841,624	\$ 346,183,271	92%	90%

2. Notes to Interim Financial Report

The Interim Financial Report summarizes the results of HRSD's operations on a basis of accounting that differs from generally accepted accounting principles. **Revenues are recorded on an accrual basis, whereby they are recognized when billed**, and expenses are generally recorded on a cash basis. No provision is made for non-cash items such as depreciation and bad debt expense.

This interim report does not reflect financial activity for capital projects contained in HRSD's Capital Improvement Program (CIP).

Transfers represent certain budgetary policy designations as follows:

- a. Transfer to CIP: represents current period's cash and investments that are designated to partially fund HRSD's capital improvement program.
- b. Transfers to Reserves: represents the current period's cash and investments that have been set aside to meet HRSD's cash and investments policy objectives.
- 3. Reserves and Capital Resources (Cash and Investments Activity) for the Period Ended June 30, 2022

HRSD - RESERVE AND CAPITAL A	CTIVITY											Jur	ie 30, 2022		
				Gene	ral	Reserve			1			Capita	ı	1	
		General	CA	ARES - HRSD	-	CARES - JCSA		CARES - ARPA	_	Debt Service	Ris	k Mgmt Reserve	Paygo	De	bt Proceeds
		Unrestricted		Restricted		Restricted		Restricted		Restricted		Unrestricted	Unrestricted		Restricted
Beginning - July 1, 2021	\$	182,380,923	\$	1,373,428	\$	168,124	\$	-	\$	30,454,700	\$	4,019,543	\$ 6,033,913	\$	
Current Year Sources of Funds Current Receipts Line of Credit		352,727,185		51,790											18,422,172
VRA Draws CARES Transfer In Days Cash on Hand Transfer In Transfers In		11,408,613						10,678,341				260.004	71,954,822		
Sources of Funds	_	364,135,798		51,790		-		10,678,341		-		260,004	186,418,852		18,422,172
Total Funds Available	\$	546,516,721	\$	1,425,218	\$	168,124	\$	10,678,341	\$	30,454,700	\$	4,279,547	\$ 192,452,765	\$	18,422,172
Current Year Uses of Funds Cash Disbursements CARES Transfer Out Days Cash on Hand Transfer Out		239,945,025		1,425,218		168,124		10,677,921					159,917,733		18,422,172
Transfers Out Uses of Funds		114,724,034 354,669,059		1,425,218		168,124		10,677,921				-	159,917,733		18,422,172
End of Period - June 30, 2022	\$	191,847,662	\$	-	\$		s	420	s	30,454,700	\$	4.279.547	\$ 32,535,033	s	

Unrestricted Funds \$ 228,662,242

4. Capital Improvements Budget and Activity Summary for Active Projects for the Period Ended June 30, 2022

HRSD - PROJECT ANALYSIS						June 30, 2022
Classification/		Expenditures	Expenditures	Total		
Treatment	Appropriated	prior to	Year to Date	Project		
Service Area	Funds	7/1/2021	FY2022	Expenditures	Encumbrances	Available Funds
Administration	73,738,240	20,771,298	3,246,368	24,017,666	2,089,136	47,631,438
Army Base	163,448,800	123,537,916	1,452,860	124,990,776	669,119	37,788,904
Atlantic	151,309,198	74,355,561	5,613,278	79,968,839	3,136,555	68,203,804
Boat Harbor	382,883,765	42,734,184	13,759,143	56,493,327	185,448,655	140,941,783
Ches-Eliz	183,285,621	105,101,136	12,982,149	118,083,285	6,634,308	58,568,028
Eastern Shore	28,167,651	68,570	3,341,274	3,409,844	20,372,215	4,385,591
James River	335,749,024	21,336,192	20,611,413	41,947,605	222,187,195	71,614,224
Middle Peninsula	99,679,687	13,361,582	7,339,843	20,701,425	4,939,211	74,039,051
Nansemond	461,987,327	27,969,786	14,077,798	42,047,584	262,999,278	156,940,466
Surry	57,612,528	26,413,528	11,948,583	38,362,111	5,519,928	13,730,489
VIP	165,959,940	9,757,328	8,035,648	17,792,976	32,457,551	115,709,413
Williamsburg	28,243,555	17,550,821	3,400,370	20,951,191	4,515,048	2,777,316
York River	71,119,281	9,783,051	4,127,442	13,910,493	9,923,136	47,285,652
General	1,192,193,281	152,763,171	59,497,822	212,260,993	317,496,680	662,435,608
	\$ 3,395,377,898	\$ 645,504,124	\$ 169,433,991	\$ 814,938,117	\$ 1,078,388,014	\$ 1,502,051,768

5. Debt Management Overview

HRSD - Debt Outstanding (\$000's) June 30, 2022										
	Р	rincipal				Principal	Interest			
	Ma	ay 2022	Principal Payments	Principal D	raws	June 2022	Payments			
Fixed Rate										
Senior		183,899	-		-	183,899	-			
Subordinate		605,966	(1,504) 13,	,569	618,031	(185)			
Variable Rate										
Subordinate		50,000	-		-	50,000	(19)			
Line of Credit		33,721				33,721	(32)			
Total	\$	873,586	\$ (1,504) \$ 13,	,569	\$ 885,651	\$ (236)	_		

July 01, 2022

HRSD- Series 2016VR Bond Analysis										
		Spread to								
	SIFMA Index	HRSD	SIFMA							
Maximum	4.71%	4.95%	0.24%							
Average	0.35%	0.49%	0.14%							
Minimum	0.01%	0.01%	0.00%							
As of 07/01/22	0.91%	0.90%	-0.01%							

^{*} Since October 20, 2011 HRSD has averaged 48 basis points on Variable Rate Debt

6. Financial Performance Metrics for the Period Ended June 30, 2022

HRSD - UNRESTRICTED CASH				
Can be used for any purpose since it is not	earmarked for a	specific use and	is extremely liqui	d
			Days Cash on	Adjusted Days Cash
			Hand	on Hand
Total Unrestricted Cash	\$	228,662,242		426
Risk Management Reserve	\$	(4,279,547)	(8)	418
Capital (PAYGO only)	\$	(32,535,033)	(60)	358
Adjusted Days Cash on Hand	\$	191,847,662		358

Risk Management Reserve as a % of Projected Claims Cost is 25% YTD compared to 25% Policy Minimum Adjusted Days Cash on Hand Policy Minimum is 270-365 days.

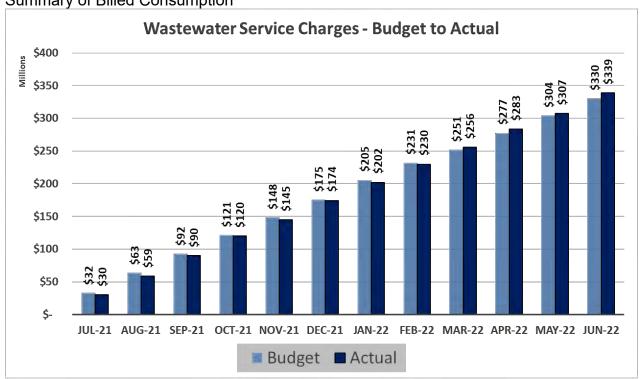
HRSD - SOURCES OF FUNDS June 30, 2022									
Primary Source	Beginning Market Value July 1, 2021	YTD Contributions	YTD Withdrawals	YTD Income Earned	Ending Market Value June 30, 2022	Allocation of Funds	Credit Quality	Current Mo Avg Yield	
BAML Corp Disbursement Account VIP Stable NAV Liquidity Pool Total Primary Source	30,017,420 108,890,465 \$ 138,907,885	473,695,493 50,000,000 \$ 523,695,493	478,257,058 15,000,000 \$ 493,257,058	42,879 377,688 \$ 420.567	25,498,734 144,268,153 \$ 169,766,887	15.0% 85.0% 100.0%	N/A AAAm	0.55% 1.13%	

June 30, 2022

Secondary Source	Beginning Market Value July 1, 2021	YTD Contributions	YTD Withdrawals	YTD Income Earned & Realized G/L	Ending Market Value June 30, 2022	Ending Cost	LTD Mkt Adj	Yield to Maturity at Market
VIP 1-3 Year High Quality Bond Fund	65,054,203	-	12,898	357,370	62,932,017	63,744,015	(811,998)	
Total Secondary Source	\$ 65,054,203	\$ -	\$ 12,898	\$ 357,370	\$ 62,932,017 \$	63,744,015	(811,998)	

		Total	Fund Alloc
Total Primary Source	\$	169,766,887	73.0%
Total Secondary Source	\$	62,932,017	27.0%
TOTAL SOURCES	Ś	232,698,904	100.0%

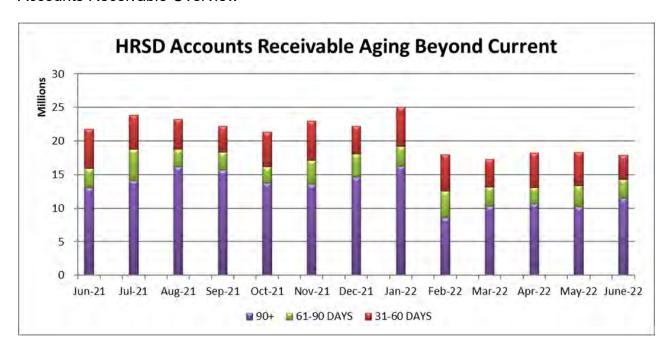
7. Summary of Billed Consumption

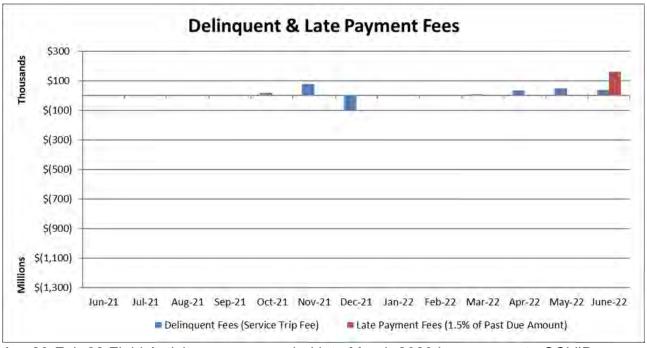


	Summary of Billed Consumption (,000s ccf)							
			% Difference	e	% Differe	nce	% Difference	
	FY2022 Cumulative	FY2022		Cumulative				
	Budget	Cumulative	From	FY2021	From	Cumulative 3	From 3 Year	
Month	Estimate	Actual	Budget	Actual	FY2021	Year Average	Average	
July	5,015	4,976	-0.8%	4,751	4.7%	5,006	-0.6%	
Aug	9,883	9,517	-3.7%	9,459	0.6%	9,866	-3.5%	
Sept	14,413	14,346	-0.5%	14,335	0.1%	14,303	0.3%	
Oct	18,892	19,048	0.8%	18,863	1.0%	18,931	0.6%	
Nov	23,125	22,952	-0.7%	21,192	8.3%	22,474	2.1%	
Dec	27,336	27,541	0.8%	27,614	-0.3%	27,458	0.3%	
Jan	32,088	31,865	-0.7%	32,478	-1.9%	32,116	-0.8%	
Feb	36,182	36,187	0.0%	36,068	0.3%	36,110	0.2%	
March	39,309	40,229	2.3%	41,018	-1.9%	40,340	-0.3%	
Apr	43,360	44,569	2.8%	45,116	-1.2%	44,540	0.1%	
May	47,508	48,315	1.7%	49,256	-1.9%	48,716	-0.8%	
June	51,620	53,243	3.1%	54,195	-1.8%	53,202	0.1%	

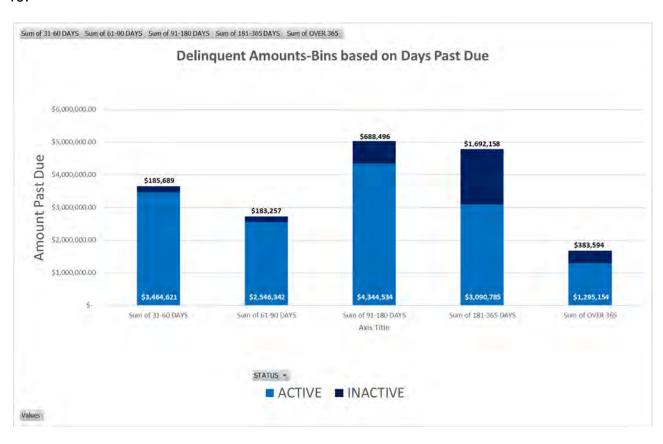
C. <u>Customer Care Center</u>

1. Accounts Receivable Overview

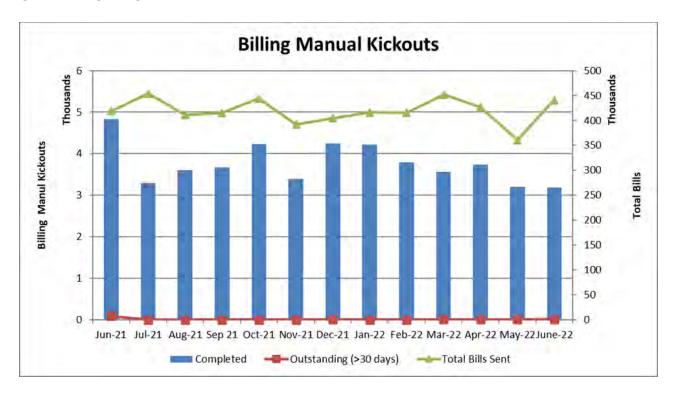


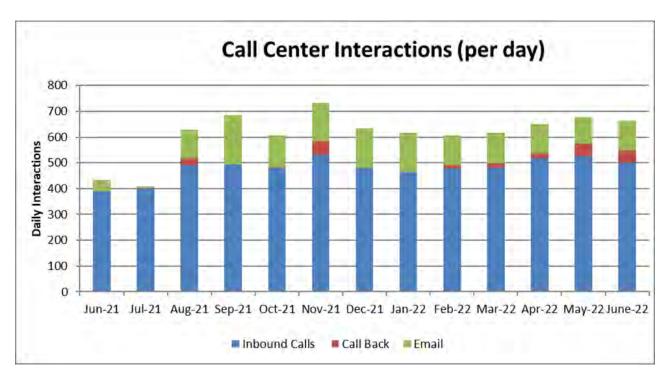


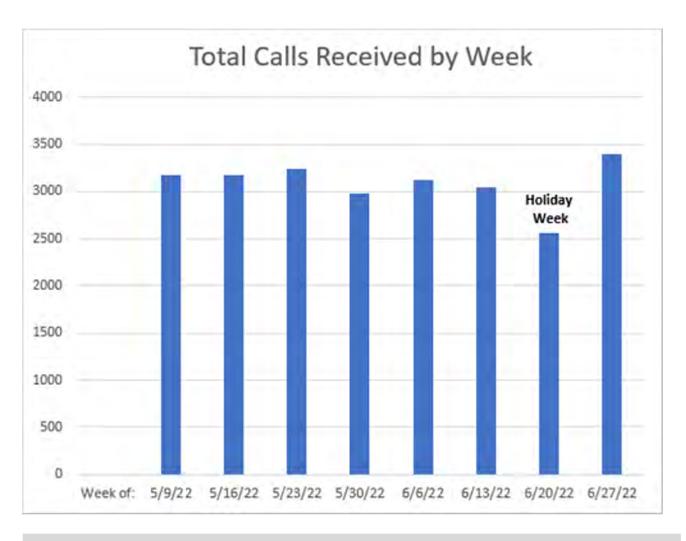
Apr 20-Feb 22 Field Activity was suspended late March 2020 in response to COVID-19.



2. Customer Care Center Statistics







Customer Interaction Statistics	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Calls Answered within 3 minutes	96%	65%	91%	93%	50%	67%	84%	88%	86%	83%	68%	57%
Average Wait Time (seconds)	30	433	57	38	379	193	89	75	81	101	203	291
Calls Abandoned	4%	23%	6%	4%	22%	15%	9%	6%	7%	7%	12%	15%

D. <u>Procurement Statistics</u>

ProCard Fraud	External Fraud Transactions *	Comments
July	0	
August	0	
September	1	Caught by card holder
October	0	
November	1	
December	8	Caught by card holder
January	5	3 caught by the bank, 2 caught by card holder
February	1	Caught by card holder
March	2	Caught by the bank
April	0	
May	0	
June	0	
Total	18	

^{*}External Fraud: Fraud from outside HRSD (i.e.: a lost or stolen card, phishing, or identity theft)

E. <u>Strategic Planning Metrics Summary</u>

1. Educational and Outreach Events: 0

2. Community Partners: 0

3. Monthly Metrics

Item #	Strategic Planning Measure	Unit	June 2022
M-1.4a	Training During Work Hours Per Full Time Employee (102) – Current Month	Hours / #FTE	2.17
M-1.4b	Total Training During Work Hours Per Full Time Employee (102) – Cumulative Fiscal Year-to-Date	Hours / #FTE	24.30
M-5.2	Educational and Outreach Events	Number	0
M-5.3	Number of Community Partners	Number	0
	Wastewater Revenue	Percentage of budgeted	103%
	General Reserves	Percentage of Operating Budget less Depreciation	114%
	Liquidity	Days Cash on Hand	426 Days
	Accounts Receivable (HRSD)	Dollars	\$38,496,476
	Aging Accounts Receivable	Percentage of receivables greater than 90 days	30%

4. Annual Metrics

Item #	Strategic Planning Measure	Unit	FY-2022
M-2.4	Infrastructure Investment	Percentage of Total Cost of Infrastructure	*
M-4.3	Labor Cost/MGD	Personal Services + Fringe Benefits/365/5- Year Average Daily Flow	*
M-4.4	Affordability	6.5 CCF Monthly Charge/Median Household Income ^[1]	*
M-4.5	Operating Cost/MGD	Total Operating Expense /365/5- Year Average Daily Flow	*
	Billed Flow	Percentage of Total Treated	*
	Senior Debt Coverage	Cash Reserves/ Senior Annual Debt Service	*
	Total Debt Coverage		*

^{*} These metrics will be reported upon completion of the annual financial statements.

Respectfully,
Jay A. Bernas
Jay A. Bernas, P.E.
Director of Finance

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^[1] Median Household Income is based on the American Community Survey (US Census) for Hampton Roads

TO: General Manager

FROM: Director of Information Technology

SUBJECT: Information Technology Department Report for June 2022

DATE: July 14, 2022

A. General

1. Programming staff are working with Customer Care Center staff on migrating the Town of Smithfield and the City of Chesapeake from Model 2 to Model 3 HRUBS billing partners.

- 2. Staff are working with Customer Care Center and Facilities Support staff on installation and implementation of a Payment Kiosk in the Cashiering payment location at 1434 Air Rail Ave.
- 3. The IT Help Desk processed 408 work orders in June, with other members of staff completing an additional 55 work orders for a grand total of 463 orders completed, ensuring availability of computing resources to those working locally and remotely.
- 4. Microsoft Internet Explorer v11 reached end of life in mid-June. Staff have taken appropriate actions to ensure that any remaining installations have been rendered inaccessible. They continue to monitor and troubleshoot issues with products using the newer Microsoft EDGE browser.
- 5. Staff have been working with ERP Business Analysts on Oracle WebCenter upgrade scheduled to go live in July 2022.

B. Strategic Planning Metrics Summary

1. Educational and Outreach Events: 0

2. Number of Community Partners: 0

C. Metrics Summary

Item #	Strategic Planning Measure	Unit	June 2022
M-1.4a	Training During Work Hours Per Full-Time Employee (51) – Current Month	Total Training Hours / # FTE	8.07
M-1.4b	Total Training During Work Hours Per Full-Time Employee (51) – Cumulative Fiscal Year-to-Date	Total Training Hours / # FTE	18.48
M-5.2	Educational and Outreach Events	Number	0
M-5.3	Number of Community Partners	Number	0

Respectfully,

Don Corrado

TO: General Manager

FROM: Director of Operations

SUBJECT: Operations Report for June 2022

DATE: July 19, 2022

A. <u>Interceptor Systems</u>

1. North Shore (NS) Interceptors

Operations on the NS were relatively quiet with just a few minor alarms and issues. The Supervisory Control and Data Acquisition (SCADA) project continued to be highly active with several pump station cutovers and factory acceptance tests.

2. South Shore (SS) Interceptor Systems

- a. There was one Miss Utility no show reported this month. On June 16, a contractor submitted a mark ticket for a project on Lilac Avenue in Chesapeake. Due to a large ticket load and staffing challenges, staff were behind for the week and inadvertently missed it. Once discovered, staff called the contractor and marked the ticket after the deadline.
- b. There were three interceptor complaints reported this month. Two of the three were related to city-owned assets in Virginia Beach and Norfolk. On June 14, a motorist in Norfolk reported a sink hole near the intersection of East Little Creek Road and Thompson Road. Staff found a paved over air vent. Staff cut and raised the air vent casting and repaved the surrounding area.
- c. On June 16, a contractor and consultant performed a condition assessment of approximately 60 feet of the 36-inch ductile iron force main that failed on Gum Court in Chesapeake a few months ago. They found extensive external corrosion similar to the failure location. A new emergency project will be proposed to replace the ductile iron force main.

B. <u>Major Treatment Plant Operations</u>

1. Army Base Treatment Plant (ABTP)

- a. Staff procured the necessary Programable Logic Controller (PLC) communications cards to resume normal emergency generator operations and replace outdated PLCs with a new Digital Master Control which includes new hardware and updated software.
- b. Staff installed a temporary polymer dosing system at the secondary clarifiers to aid in the recovery of the treatment because of an upset stemming from an illicit discharge last month. A new permanent polymer dosing system has been installed as well.

- c. Staff removed and replaced one 10,000-gallon aluminum sulfate tank. The old tank needed extensive fiberglass repair.
- d. Staff installed new Jarbalyzer sensors in tanks one and two in the aeration tank second anoxic zone for Biological Nutrient Removal (BNR). This will provide staff more reliable data for nutrient monitoring.

2. <u>Atlantic Treatment Plant (ATP)</u>

- a. On June 3, the Department of Environmental Quality (DEQ) performed an air permit inspection. The inspection went well. The only issue was associated with the rented Thermal Hydrolysis Process boiler. Since the rental boiler has been on site for over 180 days it is no longer considered temporary and is subject to compliance requirements. Staff provided DEQ with fuel throughput on the boiler from the time it went in service (July 2021) to present.
- b. Staff received five odor complaints this month. Most complaints were from off-site digester gas odors. Staff continue to compile complaints and track the types and sources of the odor complaints.
- Staff began feeding 3 mg/l of ferric sulfide to the primary distribution box on June
 13 to help reduce or eliminate off-site odors associated with digester gas and elevated sulfides,
- d. Staff replaced a leaking mechanical seal on the digester feed pump #1. This is a new style seal, so staff had to install a flush water system for the seal prior to completion of the replacement.

2. Boat Harbor Treatment Plant (BHTP)

Salinity and conductivity remain an ongoing treatment challenge. Staff continue monitoring the raw influent coming into the plant to test for bromine and conductivity to help determine what efforts may be necessary to mitigate saltwater infiltration into the collection system.

3. <u>James River Treatment Plant (JRTP)</u>

- a. Staff completed modifications to the #3 primary clarifier scum trough allowing for continual removal of scum to the wet well scum pumps.
- b. A contractor replaced the corroded gravity thickener supernatant line. Staff supported the contractor by providing by-pass piping and pumping.
- c. A conditioned Conex box was installed next to administration building #2 to house staff working on advanced nutrient removal and related research projects.

4. Nansemond Treatment Plant (NTP)

a. On June 14, a contractor discovered that a two-inch PVC non-potable water line was spraying out of the chlorine contact tank onto the ground. Staff repaired the line; approximately 200 gallons of non-potable water was lost to the ground.

- b. Staff replaced the impeller on the #1 odor scrubber induced draft fan and reinstalled the fan housing. Scrubber #3 impeller will be replaced in the coming months.
- c. Sustainable Water Initiative For Tomorrow (SWIFT) Research Center (RC)
 - (1) The total volume of SWIFT water recharged into the Potomac aquifer was 10.93 million gallons (MG) (51 percent recharge time based on 500 gpm) for the month of June.
 - (2) The Granular Activated Carbon (GAC) vessel number one effluent valve automatic actuator failed June 16. Bio-filter # 3 air scour valve actuator failed June 28. Contractor repaired both actuators on June 29.
 - (3) The planned maintenance shutdown began on June 21 and ended on June 26. During this time, staff:
 - (a) Inspected floc-sed trains one and two, the ozone contactor, biofilters #2 and #4 underdrains and GAC vessel underdrains. No new or significant damage to material was found.
 - (b) Flushed and cleaned PVC sample lines.
 - (c) Cleaned both Ultra-Violet (UV) reactors with citric acid and installed new lamps for UV reactor #1.
 - (d) Cleaned and flushed the ozone contactor to remove settled organic material from lower pass of contactor.
 - (4) A contractor worked on Floc-Sed trains one and two during the shutdown and:
 - (a) Installed drain lines with valving on sedimentation basins to make draining the basins possible without the need to use the solids wasting pumps, which require significant operator time and effort.
 - (b) Installed eight-inch diameter skimmer pipes in the top area of the sedimentation basins to remove materials such as grease, scum, and polymer that is still in suspension to prevent them from fouling the plate settlers that are installed in the sedimentation basins.

5. Virginia Initiative Plant (VIP)

a. A small leak was found seeping from the ground near the chlorine contact tank on June 10. Staff determined that the leak was chlorinated plant effluent coming from a seam in the concrete channel between the chlorine contact tank and the Parshall flume. Staff contained the leak and pumped it into the plant drain system. An estimated 200 gallons of chlorinated effluent flowed into the ground.

b. Plant effluent phosphorus levels were higher than normal on several occasions in June, despite overall stable operating conditions. Staff set up sequential samplers in the collection system, and at the plant influent sampling location to determine if there is an ongoing discharge of high-concentration waste entering the system, causing the upset.

6. <u>Williamsburg Treatment Plant (WBTP)</u>

- a. Staff disassembled the #2 centrifuge to determine the cause of excessive vibration. Based on the amount of wear, it was determined the centrifuge will need to be overhauled.
- b. A contractor installed a new, coated effluent pipe for primary clarifier #1.

7. York River Treatment Plant (YRTP)

- a. Staff cleaned out the shallow and deep well stations on the plant drain system.
- b. The replacement of the Motor Control Center (MCC) in the headworks building is complete. To help reduce heat in the building and on the MCC electronics, a contractor insulated air piping on two pre-aeration-grit blowers located in the same space as the MCC.

8. <u>Incinerator Operations Events Summary</u>

- a. Total Hydrocarbon (THC) monthly averages (not to exceed 100 parts per million) were met by all four treatment plants with incinerators with a THC continuous emissions monitoring valid data captured of greater than 79 percent.
- b. There were no deviations from the minimum operating parameters and one minor bypass events (<60 minute).

C. Small Communities (SC)

1. Middle Peninsula

a. <u>Urbanna Treatment Plant (UBTP)</u>

Staff continue to reduce mixed liquor solids inventory in the Integrated Fixed Film Activated Solids (IFAS) train, which provides settling benefits in the clarifier and effluent.

b. <u>King William Treatment Plant (KWTP) and Collections</u>

- (1) Contractors completed the installation and delivery of the UV pad.
- (2) The new Central Drive PS and collection system are now active. Startup went very well, and punch list items are currently being addressed.

2. Surry Systems

- a. On June 4, staff were onsite checking system pressures when a bushing cracked on a blow-off stack below the ball valve and sprayed wastewater into a ditch.
 System pressures dropped quickly, and the blow-off stack was quickly repaired.
 Approximately 250 gallons were lost, with 200 gallons recovered.
- b. On June 7, a total recoverable copper value of 0.007mg/L was taken at the Surry County Treatment Plant, exceeding the weekly limit of 0.0059 mg/L. Later in June, a second sample was taken, and the value was 0.004 mg/L, which brought the monthly average below permit limits. Staff are working with Sussex Service Authority (SSA) and the Surry County Schools to determine the copper source.

3. <u>Eastern Shore (ES)</u>

a. Onancock Treatment Plant (ONTP)

- (1) A contract was awarded for the dewatering and disposal of plant solids. A temporary mobile solids dewatering system has been onsite; work should be complete by the middle of July.
- (2) Staff rebuilt one of the UV systems. The second system will be rebuilt once the parts arrive.

b. <u>Onancock Collection System</u>

Staff installed numerous residential sewer lateral clean-outs to allow access to sewer mains.

D. <u>Electrical & Instrumentation (E&I)</u>

- 1. Contractors installed new lighting at four PSs and conduit for projects at VIP and ABTP.
- 2. Contractors installed Infrared (IR) windows on the primary side of the transformer that feeds MCCs at NTP.
- 3. Contractors replaced a damaged main circuit breaker and automatic transfer switch located inside the MCC that serves the primary PS at NTP.

E. Support Systems (SS)

Staff continue to work on repairs to the ABTP incinerator building elevator. Staff completed moving all items from the Meekins storage facility to the main office complex. Renovation of the electrical shop at ATP continues with the demolition of block walls, rooftop air conditioning units, and hot water fan coils units. Staff completed 16 projects, with three of the projects being total pump rebuilds.

F. Water Technology and Research

With the closure of the Chesapeake-Elizabeth Treatment Plant (CETP), it was necessary to move the BNR pilot facility.

The new pilot facility was constructed at the Virginia Initiative Treatment Plant (VIP) within an available space in the incineration building complex. It includes a flexible space for pilot reactors and equipment, a small laboratory, and an integrated office and control room. The first project targeted for this facility involves the evaluation of BNR process operation at consistently very low dissolved oxygen (DO) concentrations. This work will answer lingering fundamental questions associated with low DO nitrogen and phosphorus removal. The pilot has now started up with final cleanup and punch list items remaining.

G. MOM reporting numbers

MOM Reporting#	Measure Name	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
2.7	# of PS Annual PMs Performed (NS)	2	3	3	4	2	4	4	4	4	5	0	1
2.7	# of PS Annual PMs Performed (SS)	6	6	4	5	2	4	2	10	4	2	4	2
2.7	# of Backup Generator PMs Performed (Target is 4.6)	10	13	8	10	8	13	12	12	10	7	14	15
2.8	# of FM Air Release Valve PMs Performed (NS)	72	89	184	210	166	251	149	41	185	227	174	98
2.8	# of FM Air Release Valve PMs Performed (SS)	124	165	193	269	167	205	211	166	381	265	241	139
2.9	# of Linear Feet of Gravity Clean (NS) (Target is 2,417 for HRSD)	5,209	0	9,963	8,696	3,829	3,161	4,047	4,403	1,801	530	1,817	884
2.9	# of Linear Feet of Gravity Clean (SS) (Target is 2,417 for HRSD)	0	3,531	7,717	10,276	5,272	0	0	745	2,693	0	0	0
2.9	# of Linear Feet of Gravity CCTV Inspection (HRSD Target 3,300 LF)	0	0	11,796	0	11,796	24,175	33,133	10,570	10,570	10,570	33,133	42,000

H. Strategic Measurement Data

- 1. Education and Outreach Events: 15
 - a. 06/01/2022 Pancopia Tour to discuss PFAS Removal at SWIFT Dana Gonzalez
 - b. 06/02/2022 Cambi Tour for engineer from Wellington, New Zealand, Chris French Dana Gonzalez
 - c. 06/03/2022 Touch-a-Truck at Francis Asbury Preschool in Virginia Beach South Shore Interceptors
 - d. 06/06/2022 Arlington Re-Gen Atlantic Plant Tour Dave Ewing, Dana Gonzalez, and Jeff Nicholson
 - e. 06/10/2022 Touch-a-Truck at Treakle Elementary in Chesapeake South Shore Interceptors
 - f. 06/15/2022 HRSD Overview Presentation to Third Grade Class Career Day at Riverside Elementary School Michael Johnson
 - g. 06/16/2022 Charlotte Water Plant Tour Dave Ewing and Dana Gonzalez
 - h. 06/20/2022 WEF Process Engineering Conference, Invited Digital Twin Workshop Presentation Charles Bott
 - i. 06/21/2022 WEF Process Engineering Conference, Invited Opening Session Presentation, Challenges and Opportunities in Process Engineering - Charles Bott
 - j. 06/21/2022 WEF Process Engineering Conference, Podium Presentation, An Evaluation of the Reported vs. Effective Surface Area to Volume Ratios of Plastic Media Carriers – Megan Bachmann
 - k. 06/23/2022 WEF Process Engineering Conference, Podium Presentation, Success at Pilot-Scale leads to Full-Scale Application of PdNA is MBBR and IFAS and the Inadvertent Development of Mainstream PNA Along the Way Megan Bachmann
 - 06/23/2022 WEF Process Engineering Conference, Podium Presentation, Partial-denitrification/Anammox as a Path to Infrastructure and Operational Savings for a WWRF's Facing Stringent Nitrogen Limits – Kester McCullough
 - m. 06/23/2022 WEF Process Engineering Conference, Podium Presentation Kinetic Parameterizations of Nitrifiers Adapting to Low DO Tyler Kisling
 - n. 06/23/2022 WEF Process Engineering Conference, Podium Presentation, Enhancing 1,4-Dioane Removal Through Co-Metabolic Biofiltration in Advanced Water Treatment Systems for Potable Reuse – Hannah Stohr
 - 06/30/2022 Annual Conference of the Association of Environmental

Engineering and Science Professors, Invited Plenary Session Presentation, Convergence of Research and Implementation (mainstream biological process focus) – Charles Bott

2. Community Partners: 5

- a. Chesapeake Bay Foundation-Oyster Cage Maintenance at BHTP for Oyster Garden Project
- b. DOE Jefferson Lab
- c. Old Dominion University (ODU)
- d. City of Chesapeake Public Schools
- e. City of Newport News Public Schools

3. Monthly Metrics

Item #	Strategic Planning Measure	Unit	June 2022
M-1.4a	Training During Work Hours per Full Time Employee (FTE) (538) – Current Month	Hours / FTE	2.74
M-1.4b	Total Training During Work Hours per FTE (538) – Cumulative Year-to-Date	Hours / FTE	28.17
M-2.3a	Planned Maintenance Total Maintenance Hours	Total Recorded Maintenance Labor Hours	23,903.05
M-2.3b	Planned Maintenance – Preventive and Condition Based	percent of Total Maintenance Hours	65.46%
M-2.3c	Planned Maintenance - Corrective Maintenance	percent of Total Maintenance Hours	14.67%
M-2.3d	Planned Maintenance - Projects	percent of Total Maintenance Hours	19.87%
M- 4.1a	Energy Use: Treatment	kWh/MG	2,481
M-4.1b	Energy Use: Pump Stations	kWh/MG	246
M-4.1c	Energy Use: Office Building	kWh/MG	100
M-5.2	Educational and Outreach Events	Number	15
M-5.3	Number of Community Partners	Number	5

4. Annual Metrics

Item #	Strategic Planning Measure	Unit	FY-2022
M-2.3a	Planned Maintenance Total Maintenance Hours	Total Recorded Maintenance Labor Hours(average)	28,030
M-2.3b	Planned Maintenance – Preventive and Condition Based	% of Total Maintenance Hours (average)	61%
M-2.3c	Planned Maintenance- Corrective Maintenance	% of Total Maintenance Hours (average)	15%
M-2.3d	Planned Maintenance- Projects	% of Total Maintenance Hours (average)	24%
M-3.6	Alternate Energy	Total kWh	*
M- 4.1a	Energy Use: Treatment	kWh/MG	*
M-4.1b	Energy Use: Pump Stations	kWh/MG	*
M-4.1c	Energy Use: Office Building	kWh/MG	*

^{*} To be provided once data is reported

Respectfully submitted,

<u>Eddie Abisaab</u>

Director of Operations

TO: General Manager

FROM: Director of Talent Management (TM)

SUBJECT: Monthly Report for June 2022

DATE: July 13, 2022

A. <u>Talent Management Executive Summary</u>

1. Recruitment Summary

New Recruitment Campaigns	23
Job Offers Accepted – Internal Selections	6
Job Offers Accepted – External Selections	27
Internal Applications	52
External Applications	134
Average Days to Fill Position	40.86

2. Employee Separation Summary

	June 2022	Total (April 2022- May 2022)
Career/Better Opportunity	0	2
Content of work	0	1
Family circumstances	0	1
Dismissal	0	3
Going to school	0	1
Lack of Opportunity for Advancement	0	1
Moving from the area	0	1
Salary	1	4
Retirement	1	2
End of Assignment (PT)	3	4
Unknown	0	1

3. Continued addressing and monitoring suspected COVID-19 cases and potential exposures based on Virginia Department of Health (VDH) guidelines:

Description	June 2022	Total (March 2020 – June 2022)
Quarantines due to illness or direct exposure (household or external)	10	439
Work Related Quarantines	4	90
Personal Travel Quarantines	0	59
Confirmed Employee COVID-19 Cases	19	240
Work Related Confirmed COVID-19 Cases	1	13
Contractor COVID-19 Cases on HRSD Sites	0	12
*Work Related exposures no quarantine	10	50
Vaccine Acknowledgements	5	863

Booster Acknowledgements	17	387
HRSD Vaccination Rate	95%	
*HRSD Boosted Rate	47%	

^{*}Added May 2022

- 4. Human Resources continued work with the consultant on system changes to benefit interfaces and benefit plan changes.
- 5. Benefits and Compensation
 - a. The Compensation and Classification (C&C) team evaluated two positions based on being new positions to HRSD.
 - b. Open enrollment changes were reviewed, and data transferred to our appropriate vendors to ensure all changes would be in effect on July 1st.
- 6. Wellness Program
 - a. Participation

Year Ten Participation Activities	Unit	June 2022	Year to Date (March 2022– February 2023)
Biometric Screenings	Number	1	56
Preventive Health Exams	Number	1	51
Preventive Health Assessments	Number	2	49
Online Health Improvement Programs	Number	5	26
Web-MD Online Health Tracking	Number	200	474
New Challenges "Team to Team"	Number	0	30
Fit-Bit Promotion	Number	5	34

- b. The Wellness Specialist managed the WebMD Step Challenge which had 67 employees complete the challenge.
- c. Two summer work center visits took place this month with a total of 19 participants.
- d. Five clinical corner articles were created this month.
- e. One Wellness demonstration was presented this month, *Meal Prep Tips and Tricks for Busy People.*
- 7. Worked with Organizational Development consultant Hicks Carter Hicks (HCH) on the following:
 - a. Worked with consultant Hicks-Carter-Hicks (H-C-H) and the HRSD sponsor on several Diversity, Equity, and Inclusion (DE&I) initiatives. In addition, the team

- promoted several Juneteenth events for the organization to participate in and other diversity events.
- b. Worked with consultant H-C-H on the Leadership Ethical Accountability Program (LEAP) supervisor training program. The topic was Providing Effective Feedback.
- c. Continued working on the LAMA Cohort 2022- 2023 program. The topic was Fostering Motivation.
- d. Facilitated the Full-Day Your Role In workshop and the two-day TAPS workshops.
- e. Continued work with the Customer Care Division to curate online learning paths and integration of available Corporate Training courses.
- f. Continued work with the Water Quality Department to increase quality assurance training courses.
- g. Continued work with Boat Harbor Treatment plant leadership to conduct a StrengthsFinder workshop for their team.
- 8. Coordinated a cross-departmental team to advance the functionality of Canvas.

9. Apprenticeship Program

- a. Continued work on the *Youth Summer Intensive (YSI) Program*. ODT Staff are currently working with high school administrators, apprenticeship instructors and work center staff to develop and prepare for the summer internship.
- b. We interviewed and selected a Math Instructor, Gina Foote.
- c. Work continued on the following:
 - (1) Apprenticeship Mentoring Program
 - (2) Request for Proposals for a Student Information System and Attendance and Assessment applications.
 - (3) Developing Standard Operating Procedures for ODT responsibilities
 - (4) Trade curricula revisions and course development to update and enhance course offerings

10. Mishaps and Work-Related Injuries Status to Date (OSHA Recordable)

	<u>2021</u>	<u>2022</u>	
Mishaps	33	21	
Lost Time Mishaps	12	5	
Numbers subject to change pending HR review of each case.			

11. Safety Division Monthly Activities

Safety Training Classes	23
Work Center Safety Inspections	6
Reported Accident Investigations	1
Construction Site Safety Evaluations	7
Contractor Safety Briefings	6
Hot Work Permits Issued	1
Confined Space Permits Issued/Reviewed	336
Industrial Hygiene Monitoring Events	1

B. <u>Monthly Strategic Planning Metrics Summary</u>

- 1. Education and Outreach Events: (1)
 - 06/21/2022 Youth Summer Intensive Information Session
- 2. Community Partners: (4)
 - a. International Coaching Federation
 - b. VWEA Leadership Academy
 - c. Center for Leadership Studies
 - d. Workforce Sustainability Sub-Committee

3. Monthly Metrics

Item #	Strategic Planning Measure	Unit	June 2022
M-1.1a	Employee Turnover Rate (Total)	Percentage	0.65%
M-1.1b	Employee Turnover - Service Retirements	Percentage	0.00129%
M-1.4a	Total Training Hours Per Full Time Employee (17)	Total Training Hours/ FTE	4.03
M-1.4b	Total Training During Work Hours Per Full Time Employee (17) – Cumulative Fiscal Year-to-Date	Hours / FTE	34.70
M-5.2	Educational and Outreach Events	Number	1
M-5.3	Community Partners	Number	4

4. Annual Metrics

Item #	Strategic Planning Measure	Unit	FY-2022
M-1.1a	Employee Turnover Rate (Total)	Percentage	16.04%
M-1.1c	Employee Turnover Rate within Probationary Period	Percentage	1.64%
M-1.2	Internal Employee Promotion Eligible	Percentage	65.38%
M-1.3	Average Time to Fill a Position	Calendar Days	74.52
M-1.5a	Safety OSHA 300 Incidence Rate Total Cases	# per 100 Employees	4.53
M-1.5b	Safety OSHA 300 Incidence Rate Cases with Days Away	# per 100 Employees	1.09
M-1.5c	Safety OSHA 300 Incidence Rate Cases with Restriction, etc.	# per 100 Employees	3.43

Respectfully submitted,

Dorissa Pitts-Paige

Director of Talent Management

TO: General Manager

FROM: Director of Water Quality (DWQ)

SUBJECT: Monthly Report for June 2022

DATE: July 13, 2022

A. General

1. The Pretreatment and Pollution (P3) Division issued three civil penalties this month.

a. U.S. Amines - Portsmouth

Two Enforcement Orders were issued to U.S. Amines between May and June 2022 for several administrative and technical violations associated with the facility's PRET sample point. The first Enforcement Order, issued on May 25, 2022, contained an invoice for a \$5,200 Civil Penalty. The second Enforcement Order, issued on June 2, 2022, contained an invoice for a \$1,500 Civil Penalty.

The permittee was issued multiple technical violations for improper sampling/analysis of cyanide and organics that occurred in 2021 and 2022, which were escalated due to subsequent occurrences within 180 days. A Show Cause Meeting was held in January 2022, and the permittee attributed the improper sampling/analysis violations to their contracted laboratory. The permittee met with their contracted laboratory multiple times to try and resolve the analytical issues. The permittee switched to a new lab in April 2022. After the January 2022 Show Cause, the permittee was issued an administrative violation for the late submittal of a required report received greater than 45 days late. The violation resulted in the facility accumulating over 4 points and reaching civil penalty status. The Civil Penalty was accepted and paid in full on June 13, 2022.

The second Enforcement Order was due to the permittee receiving technical violations for multiple permit limitation exceedances of the COD:BOD Ratio in March 2022. The permittee was also issued an administrative violation for failing to provide 24-hour notification of a self-monitoring violation. The permittee attributed the violations to a misinterpretation of the HRSD Wastewater Discharge Authorization Criteria for a Calculated COD:BOD Ratio. The Civil Penalty was accepted and paid in full in July 2022.

b. <u>Divers Processing Company, Incorporated – Portsmouth</u>

An Enforcement Order was issued to Divers Processing Company, Incorporated in May 2022 for a series of technical and administrative violations. The Enforcement Order contained an invoice for a \$6,000 Civil Penalty. The permittee was issued multiple administrative violations for late submittal of required reports in 2021 and 2022. The permittee

exceeded the daily maximum permit limit for HEM (Oil &Grease) in December 2021. A Show Cause meeting was held in February 2022 and the permittee explained the causes of the violations and what steps were being taken to prevent the administrative and technical violations. After the Show Cause meeting, the permittee received a violation for the third occurrence of a late report within 180 days in March 2022 and exceeded the daily minimum permit limit for pH in May 2022. The subsequent violations resulted in the facility accumulating over 4 points and reaching civil penalty status. The Civil Penalty was accepted and was paid in full in June 2022.

- 2. EPA Region 3 released the draft HRSD James River SWIFT Underground Injection Control (UIC) permit for public review and comment. This represents HRSD's first full-scale permit for the SWIFT program. The draft permit largely reflects the monitoring structure for SWIFT Water and groundwater developed in collaboration with the Virginia Department of Health and the Virginia Department of Environmental Quality. The public comment period ends on July 8. It is anticipated that the final permit will be issued prior to the end of the summer.
- 3. Water Quality continued work with Operations, General Manager and Communications staff to address ongoing odor issues at the Atlantic Treatment Plant (ATP).
 - (1) Technical Services Division (TSD) maintained increased odor surveillance, continued work with ATP staff to identify and mitigate odor sources and continued immediate response to odor complaints.
 - (2) Participated in bi-weekly status and mitigation meetings
 - (3) Evaluated contracted monitoring results and data trends to identify sources
 - (4) Worked with the consultant performing an Odor Profile Assessment
 - (5) Began planning July Community Outreach TP tours
- 4. Pretreatment Related System Issues: 1

06/01/2022 - P3 was notified that the Army Base Treatment Plant (ABTP) effluent began deteriorating on May 29, 2022. Treatment issues included the inhibition of biological phosphorus removal, a drop in mixed liquor suspended solids, and an increase in effluent ammonia and turbidity. P3 reached out to the four permitted industrial users in the ABTP service area to determine if there were any unusual discharges, including maintenance activities. Sampling was also conducted at permitted industries to identify any potential elevated pollutants, with no elevated concentrations detected. It is suspected that if an illicit discharge caused the treatment issues, it was no longer an active discharge or in the conveyance system.

5. Water Quality held the quarterly Lunch and Learn, *P3 Spill Response and Tracking*

- 6. DWQ Advocacy and External Activities:
 - a. Attended quarterly Virginia Association of Municipal Wastewater Agencies (VAMWA) quarterly meeting
 - b. EPA webcast, Women in Water, the Leadership Journey Forward
- 7. DWQ participated in the following HRSD Activities:
 - a. HRSD Strategic Planning kick-off meeting and Senior Management interview
 - b. Director of Operations interview panel
 - c. A meeting with General Manager and TSD staff to discuss Microbial Source Tracking Grant Allocations for Integrated Plan compliance
 - d. SWIFT Strategy meeting
 - e. Water and Wastewater Professionals Day Celebration

B. Quality Improvement and Strategic Activities

- 1. The Sustainability Environment Advocacy (SEA) Group performed the following:
 - a. Participated in the 33rd annual Clean the Bay Day held on June 4. Sixty-five volunteers, comprised of employees and their family members across eight Hampton Roads locations collected 70 bags of trash weighing approximately 1,035 lbs.
 - b. Held a planning meeting facilitated by Teams and Problem Solving (TAPS) team members to develop a mission, vision, and goals to be reevaluated on an annual basis. Results of the session include:
 - 1) Mission: We support and promote environmental advocacy within HRSD's workforce and the communities we serve through outreach, education, and action.
 - 2) Vision: To be an environmentally focused workforce that is a community partner in environmental stewardship.
- 2. The Water Quality Communication Team reformed with new members and is working on creating a survey to assess ways that the Water Quality Department can improve communication and collaboration between divisions.

C. Municipal Assistance Program (MAP)

 HRSD provided sampling and analytical services to Appomattox Regional Service Authority (ARWA), Prince William County Service Authority (PWCSA), Northumberland County, Westmoreland County, and the Town of Lawrenceville to support monitoring required for their respective VPDES permits and to the City of Chesapeake to support their water quality monitoring program.

- 2. MAP Billed Reimbursements for service provided from April 1 to June 30, 2022.
- 3. MAP Invoice Summary for the second Quarter 2022 calendar year.

D. <u>Microbial Source Tracking (MST)</u>

Hampton Roads Projects - HRSD provided sampling and analytical services to City of Norfolk (Mason Creek), City of Virginia Beach (Thalia Creek), City of Chesapeake (Southern Branch), City of Hampton (New Market Creek), City of Suffolk (downtown), City of Newport News (Lucas Creek/Southeast Newport News), and James City County.

E. Strategic Planning Metrics Summary

- 1. Educational and Outreach Events: 3
 - a. 06/02/2022 Christopher Newport University's "Fear to Hope Symposium" water science career fair. The symposium focused on coastal resilience of ecosystems.
 - b. 06/04/2022 Clean the Bay Day.
 - c. 06/10-12/2022 P3 Boater Education Program staff provided information during City of Norfolk's Harborfest.
- 2. Community Partners: 4
 - a. Christopher Newport University
 - b. City of Chesapeake, Chesapeake Local Health District, and the Virginia Department of Health Local COVID-19 wastewater surveillance
 - c. Hampton Roads Planning District Commission
 - d. Lynnhaven River Now citizen monitoring program
- 3. Odor Complaints:

See attached Effluent and Air Emissions Summary

4. Monthly Metrics

Item #	Strategic Planning Measure	Unit	June 2022
M-1.4a	Training During Work Hours Per Full Time Employee (119) (Current Month)	Total Hours / # FTE	8.14
M-1.4b	Total Training During Work Hours Per Full Time Employee (119) (Cumulative Fiscal Year- to-Date)	Total Hours / # FTE	63.93
M-2.5	North Shore/South Shore Capacity Related Overflows	# within Level of Service	0
M-3.1	Permit Compliance	# of Exceedances: # of Permitted Parameters	9:60,879
M-3.2	Odor Complaints	#	5
M-3.4	Pollutant Removal (Cumulative Fiscal Year-to- Date)	Total Pounds Removed	177,322,331
M-3.5	Pollutant Discharge (Cumulative Fiscal Year-to- Date)	% Pounds Discharged/ Pounds Permitted	15%
M-5.2	Educational and Outreach Events	#	3
M-5.3	Community Partners	#	4
	Average Daily Flow	Total MGD for all Treatment Plants	128.20
	Pretreatment Related System Issues	#	1

5. Annual Metrics

Item #	Strategic Planning Measure	Unit	FY-2022
M-3.3	Carbon Footprint	Tons per MG	*
M-4.2	R & D Budget	Percentage of Total Revenue	*%
M-5.4	Value of Research	Number	*
M-5.5	Number of Research Partners	Number	*
	Rolling 5 Year Average Daily Flow	MGD	145.75
	Rainfall reported at Norfolk International Airport	Inches	38.18"

^{*}These metrics will be reported upon closeout of fiscal year financials.

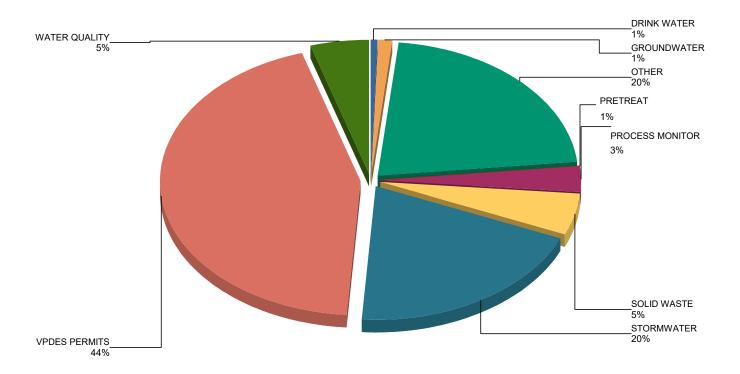
Respectfully submitted,

Paula A Hogg

Director of Water Quality

Municipal Assistance Billed Reimbursements per Service From 04/01/2022 to 06/30/2022

Attachment 1



Notes: Other = Equipment purchase, consultation, validation studies, boater pump-out program, etc.

Municipal Assistance Invoice Summary From 04/01/2022 - 06/30/2022

Municipality	Reimbursements	Reimbursements Fiscal Year 2022
Accomack County	\$3,340.54	\$10,062.52
Buckingham County	\$618.32	\$2,659.65
Chesapeake Public Works	\$1,032.87	\$4,516.66
City of Chesapeake	\$1,581.77	\$8,116.15
City of Emporia	\$232.79	\$917.22
City of Franklin	\$1,655.45	\$6,691.05
City of Fredericksburg	\$0.00	\$25,035.70
City of Hampton	\$3,616.62	\$17,265.76
City of Newport News	\$0.00	\$1,215.00
City of Norfolk	\$2,378.44	\$16,021.11
City of Portsmouth	\$2,916.04	\$17,584.53
City of Roanoke	\$2,087.11	\$2,087.11
City of Suffolk	\$5,103.75	\$29,830.67
City of Virginia Beach	\$3,149.49	\$20,415.55
City of Winchester	\$0.00	\$968.91
DCLS COVID Sampling	\$7,150.00	\$7,150.00
Deerfield Corrections Center	\$0.00	\$862.05
Exmore WWTP	\$1,232.40	\$3,896.68
Fort Eustis	\$0.00	\$1,140.92
Frederick County	\$19,404.82	\$26,289.25
HRPDC	\$50,994.83	\$190,357.45
Hanover County	\$12,283.36	\$34,199.93
Hopewell RWTF	\$5,839.06	\$15,826.22
James City County Service Authority	\$0.00	\$1,140.75
Lynnhaven River NOW	\$535.35	\$535.35
METRO Water Recovery	\$75.48	\$141.93
New Kent County	\$13,131.02	\$40,656.37
Northampton County WWTP	\$1,273.62	\$5,901.81
Northumberland Co Callao WWTP	\$1,352.44	\$8,604.24
Prince William County	\$29,634.49	\$42,687.57
South Central Wastewater Authority	\$746.68	\$21,271.20
Spotsylvania County	\$1,689.35	\$6,500.87
St Brides Corr Ctr COVID	\$0.00	\$158,310.00
St Brides Corr Ctr WWTP	\$2,955.68	\$11,044.68

Stafford County	\$10,801.44	\$11,078.90
Town of Cape Charles	\$8,545.97	\$33,597.04
Town of Lawrenceville	\$1,397.26	\$5,559.70
Town of Round Hill	\$0.00	\$134.04
Town of South Hill	\$0.00	\$485.96
Upper Occoquan Service Authority	\$13,221.41	\$16,382.40
Virginia Department of Health	\$41,715.88	\$218,627.22
Western VA Water Authority	\$7,392.54	\$7,729.01
Westmoreland County	\$969.42	\$6,040.86
Totals	<u>\$260,055.69</u>	<u>\$1,039,539.99</u>

EFFLUENT SUMMARY FOR JUNE 2022

	FLOW	% of	BOD	TSS	FC	ENTERO	TP	TP	TN	TN	CONTACT
PLANT	mgd	Design	mg/l	mg/l	#/UBI	#/UBI	mg/l	CY Avg	mg/l	CY Avg	TANK EX
ARMY BASE	8.05	45%	3	12	12	4	0.73	0.58	8.3	4.6	1
ATLANTIC	43.58	81%	13	12	4	5	NA	NA	NA	NA	19
BOAT HARBOR	10.17	41%	8	5.7	5	2	1.2	0.62	30	24	7
CENT. MIDDLESEX	0.011	43%	<2	1.7	<1	<1	NA	NA	NA	NA	NA
JAMES RIVER	11.39	57%	6	4.5	1	2	0.29	0.77	11	9.9	1
KING WILLIAM	0.073	73%	<2	<1.0	NA	1	0.20	0.19	1.9	2.7	NA
NANSEMOND	14.53	48%	3	4.1	5	2	0.79	0.61	3.7	3.9	0
NASSAWADOX	0.016	16%	<2	7.3	1	1	1.3	0.73	16	15	NA
ONANCOCK	0.175	23%	<2	<1.0	2	2	0.24	0.21	3.8	1.5	NA
SURRY, COUNTY	0.036	56%	7	5.3	NA	1	NA	NA	NA	NA	0
SURRY, TOWN	0.032	54%	3	7.1	NA	8	NA	NA	NA	NA	NA
URBANNA	0.074	74%	3	7.9	3	6	2.2	0.98	7.2	12	NA
VIP	20.25	51%	2	2.1	2	2	0.74	0.38	3.5	3.1	17
WEST POINT	0.312	52%	21	8.7	1	2	2.9	2.7	17	17	0
WILLIAMSBURG	8.49	38%	6	2.8	4	3	0.95	0.82	2.9	3.1	18
YORK RIVER	11.02	73%	1	0.45	1	2	0.18	0.30	5.1	4.8	2
	128.20										

	% of Capacity
North Shore	50%
South Shore Small Communities*	52% 39%
Oman Communics	0070

		T	ributary S	ummary							
	<u>Ann</u>	ual Total Nit	rogen	<u>A</u>	Annual Total Phosph						
	Discharged	Opera	tional	Discharg	jed Ope	rational					
	YTD Pr		n CY22	YTD) Projec	tion CY22					
Tributaries	%	Lbs	%	%	Lbs	%					
James River	27%	2,321,980	65%	24%	214,372	68%					
York River	36%	238,932	83%	40%	16,057	83%					
Rappahannoc	k 26%	NA	NA	9%	NA	NA					

Rainfall (inch) South

Permit Exceedances:Total Possible Exceedances, FY22 to Date: 9:60,879 Pounds of Pollutants Removed in FY22 to Date: 177,322,331		North Shore (PHF)	South Shore (ORF)	Small Communities (FYJ)
Pollutant Lbs Discharged/Permitted Discharge FY22 to Date: 15%	Month	4.33"	2.27"	3.33"
	Normal for Month	4.73"	4.71"	5.08"
	Year to Date Total	25.03"	20.87"	20.19"
*Small Communities includes Eastern Shore	Normal for YTD	23.18"	21.54"	23.19"

AIR EMISSIONS SUMMARY FOR JUNE 2022

	No	. of Permit Dev	viations below 1	29 SSI Rule I	Minimum Ope	erating Parame	ters		Part 50	03e Li	mits
	Temp	Venturi(s) PD	Precooler Flow	Spray Flow	Venturi Flow	Tray/PBs Flow	Scrubber	Any	THC	THC	BZ Temp
	12 hr ave	12 hr ave	12 hr ave	12 hr ave	12 hr ave	12 hr ave	рН	Bypass	Mo. Ave	DC	Daily Ave
MHI PLANT	(F)	(in. WC)	(GPM)	(GPM)	(GPM)	(GPM)	3 hr ave	Stack Use	(PPM)	(%)	Days >Max
ARMY BASE	0	0	0	0	0	0	0	2	73	79	0
BOAT HARBOR	0	0	0	n/a	0	0	0	0	14	99	0
VIP	0	0	0	n/a	0	0	0	0	34	96	0
WILLIAMSBURG	0	0	0	n/a	0	0	0	2	21	97	0

ALL OPERATIONS

DEQ Reportable Air Incidents:	0
DEQ Request for Corrective Action:	0
DEQ Warning Letter:	1
DEQ Notice of Violation:	0
Other Air Permit Deviations:	2
Odor Complaints Received:	5
HRSD Odor Scrubber H2S Exceptions:	0

Items of Interest - June 2022

MULTIPLE HEARTH INCINERATION (MHI)

Total Hydrocarbon (THC) monthly averages (not to exceed 100 ppm) were met by all four MHI plants (Army Base, Boat Harbor, Virginia Initiative, and Williamsburg) with a THC continuous emissions monitoring (CEM) valid data captured of greater than 79%.

The MHIs had no deviations from the required 129 SSI rule minimum operating parameters and four minor bypass events (<60 minute).

Atlantic Plant (ATP) and Atlantic Pressure Reducing Station (PRS) were inspected by DEQ Air on June 3, 2022. The PRS was deemed in compliance with all air permit requirements. ATP was also operating incompliance with their air permit. However, a warning letter was issued by DEQ on June 10 for the lack of initial notification for the temporary backup boiler that had been onsite for more than six months. HRSD submitted the required notification for the boiler to DEQ and EPA on June 14. Plant operations is maintaining the needed fuel use and run time log. Air permitting of the portable boiler is not required.

Army Base had a 129 deviation when the EPA Reference Method 9 visible emissions evaluation (VEE) was not completed within the first seven days of MHI operation for the month. The VEE was completed and demonstrated compliance on day 9 of operation on June 14. The multiple start stop operation during the first week of the month was an aggravating factor to this deviation. DEQ was notified of this deviation and will be captured in the 129 semiannual deviation report.

Boat Harbor had a 129 deviation for failure to record the MHI operating parameter data on June 16 for five hours. The operator failed to select the burn zone that initiates the MACT 129 data recording when the furnace was brought back online. The operator was counseled on this operating requirement. This deviation will be captured in the 129 semiannual deviation report.

AIR PERMITS and ODOR CONTROL

Atlantic Plant received five odor complaints from two different Ocean Lakes neighbors. One neighbor on Haviland Drive west of the plant contacted HRSD on June 8 and June 20. The other neighbor on Unicorn Drive north of the plant called us on June 7, June 13, and June 15. All investigations identified the primary offsite odor as coming from the digesters while other offsite odor sources were also identified to lesser extents digester gas, flares, fermenter, and odor scrubber exhausts. Plant improvement projects for odor control and reliability have been identified that are being scoped out for a single capital improvement project. In addition, interim temporary odor control solutions are being implemented now to reduce the potential for offsite odor.

No other odor complaints were received, or odor control scrubber exceptions measured during June.

TREATMENT

DEQ was notified of the following reportable events:

Virginia-Initiative

On June 10th, a small leak was found at a seam in the concrete channel between the chlorine contact tank and Parshall flume. A sample was taken, and a small amount of chlorine residual (0.06 mg/L) was present, so it was determined to be chlorinated plant effluent leaking from the seam to the ground. A trench was excavated with a submersible pump installed to pump the leakage into the plant process drain until the repair was completed on June 20. Approximately 200 gallons of fully treated plant effluent soaked into the ground.

Nansemond

On June 14th, a contractor discovered and reported to HRSD staff that a PVC 2" non-potable water (NPW) line was spraying out of the contact tanks onto the ground. HRSD staff secured the NPW cutoff valve and identified a glue joint that had failed and slipped out of the PVC Tee. The joint was repaired. Approximately 200 gallons of NPW soaked into the ground.

SYSTEM

Lawnes Point

On June 04th, HRSD staff was on site checking system pressures due to customer complaints of grinder stations not being able to pump into the system. The system contains several air vents with blow off stacks that are used to check pressures and bleed off air. While one of the blow off stacks was accessed, a bushing cracked below the ball valve and sprayed wastewater into a ditch. System pressures dropped quickly, and a DC plug was installed to repair the broken bushing and return the air vent to service. Approximately 250 gallons of raw wastewater were released, with 200 gallons recovered by Vaccon. The remaining 50 gallons entered a ditch draining to Lawnes Creek/James River.

SMALL COMMUNITIES/SURRY/EASTERN SHORE

Nassawadox Riverside

On June 26th, it was discovered the DO, effluent pH and effluent flow samples were missed on June 25th due to the designated Riverside employee not showing up. Corrective action has been completed regarding employee attendance and steps will be taken to prevent future occurrences.

Surry County

On June 7th a total recoverable copper value of 0.007 mg/L was reported which exceeded the weekly limit of 0.0059 mg/L. On June 23rd a second copper sample was collected and the value was 0.004 mg/L, in compliance with the weekly and monthly 0.0059 mg/L limit. Previous copper sampling done by Technical Services Division (TSD) found high copper concentrations in the school complex pump station wet well. School maintenance staff was unaware of any changes in their HVAC system, but the high sample on June 7th was taken the week after school had ended for students and there were likely impacts to the schools cooling system the same week as the sample. This along with dry weather and low flows into the treatment plant most likely led to the copper permit exceedance. This Treatment Plant is currently scheduled to be decommissioned when the Surry to Smithfield Force Main project is completed.

Surry County, continued

The ammonia weekly samples were not collected during the month of June. Ammonia sampling is seasonally required from June through October. Corrective action has been completed regarding sample training and steps will be taken to prevent future occurrences.

HRSD received a warning letter dated June 7 regarding the cBOD monthly and weekly concentration exceedances during the month of April 2022.

2022 Metals, Ammonia, and TKN

		Limit	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Central	Ammonia	0.56	0.03	NA	NA	0.23	NA	NA						
Middlesex	TKN	3.0	<0.50	NA	NA	<0.50	NA	NA						
King William	Zinc	*	75	NA	NA	18	NA	NA						
King William	TKN	3.0	1.3	2.6^	0.44	0.40	0.26	0.27						
	Cadmium	2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50						
Nassawadox	Copper	23	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0						
Riverside	Nickel	38	17	23	14	15	<10	<10						
Miverside	Zinc	150	<50	<50	<50	<50	<50	<50						
	Ammonia	1.7	2.2^	0.09	0.07	0.09	0.07	0.08						
Onancock	Copper	12	2.0	NA	NA	1.3	NA	NA						
Onancock	Ammonia	0.90, 2.0	0.29	0.16	0.02	0.04	0.10	0.18						
	Copper	5.9	3.0	2.0	1.0	4.0	4.0	5.5^						
Surry County	Zinc	56	24	33	11	31	28	37						
Surry County	Ammonia	0.77	NA	NA	NA	NA	NA	**					NA	NA
	TKN	3.0	0.55	NA	0.57	NA	2.7	NA						
	Copper	12	2.0	6.0	3.0	5.0	4.0	2.0						
Town of Surry	Zinc	39	14	12	12	14	11	10						
Town of Surry	Ammonia	4.5	0.11	0.10	0.11	0.11	<0.10	<0.10						
	TKN	6.7	2.0	1.9	1.8	1.3	0.57	1.2						
Urbanna	Ammonia	3.83, 9.08	7.76	0.05	1.26	0.08	0.41	0.14						_

^{*}No limit. Treatment objective 53 ug/L Units: TKN, Ammonia: mg/L. Metals: ug/L

[^] NR Monthly average 2.2, weekly Jan 23 3.4

[^] KW Monthly average 2.6, weekly Feb 6 9.95

[^] CSY Monthly average 5.5, weekly June 5 7.0

^{**} CSY weekly ammonia samples not collected during the month of June

2022 MONTHLY FLOW AVERAGES

	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YR AVG	FY AVG
Army Base	8.38	8.29	9.12	8.56	8.56	8.05							8.49	8.17
Atlantic	42.47	42.46	42.81	40.26	42.88	43.58							42.41	35.89
Boat Harbor	15.64	13.78	13.31	12.04	11.66	10.17							12.76	11.67
C.Middlesex	0.005	0.006	0.006	0.010	0.011	0.011							0.008	0.007
Ches-Eliz	0.00	0.00	0.00	0.00	0.00	0.00							0.00	5.31
James River	14.47	13.70	14.65	13.10	12.12	11.39							13.24	12.83
King William	0.064	0.050	0.066	0.070	0.069	0.073							0.065	0.067
Lawnes Point	0.000	0.000	0.000	0.000	0.000	0.000							0.000	0.000
Nansemond	16.32	15.78	16.16	15.46	15.54	14.53							15.63	15.48
Nassawadox	0.020	0.013	0.022	0.023	0.017	0.016							0.018	0.014
Onancock	0.177	0.160	0.208	0.174	0.171	0.175							0.18	0.187
Surry, County	0.047	0.043	0.057	0.046	0.040	0.036							0.045	0.042
Surry, Town	0.043	0.044	0.057	0.047	0.039	0.032							0.044	0.037
Urbanna	0.041	0.034	0.038	0.059	0.068	0.074							0.052	0.052
VIP	25.64	26.17	27.83	23.85	23.53	20.25							24.54	23.53
West Point	0.433	0.385	0.429	0.415	0.345	0.312							0.387	0.370
Williamsburg	8.25	7.59	8.41	8.51	8.64	8.49							8.31	8.26
York River	14.08	12.97	13.66	12.81	12.35	11.02							12.82	11.59
North Shore South Shore Small Communities TOTAL	52.45 92.81 0.83 146.09	48.03 92.70 0.73 141.47	50.03 95.92 0.88 146.84	46.45 88.13 0.84 135.42	44.76 90.52 0.76 136.04	41.07 86.40 0.73 128.20							47.13 91.08 0.80 139.01	44.35 88.38 0.78 133.51
IOIAL	140.09	141.47	140.04	133.42	130.04	120.20							139.01	133.31

Bold values indicate monthly plant flow average >95% of permitted design flow



Hampton Roads Sanitation District Internal Audit Status June 30, 2022



The following Internal Audit Status document has been prepared by SC&H for the HRSD Commission. Below is a summary of projects in process, upcoming audits, and the status of current management action plan monitoring.

I. Projects in Process

Unifier/ERP Integration

- Tasks Completed (June 2022)
 - o Reviewed management action plans and timelines
 - o Finalized and submitted report

Family Medical Leave Act (FMLA)

- Task Completed (June 2022)
 - o Completed process walkthroughs and documented procedures/process information
 - Developed phase 1 deliverables
- Upcoming Tasks (July 2022)
 - o Finalize planning procedures
 - Finalize audit program for fieldwork/test procedures
 - o Commence fieldwork

Freedom of Information Act (FOIA)

- Task Completed (June 2022)
 - Documented procedures/process information
 - Drafted planning documentation
- Upcoming Tasks (July 2022)
 - o Finalize planning procedures
 - o Finalize audit program for fieldwork/test procedures
 - o Commence fieldwork

Grants Management

- Upcoming Tasks (July 2022)
 - o Commence internal audit



Hampton Roads Sanitation District Internal Audit Status June 30, 2022



II. Management Action Plan Monitoring

SC&H is performing on-going management action plan (MAP) monitoring for internal audits previously conducted for HRSD. SC&H begins MAP follow-up approximately one year following the completion of each audit and will assess bi-annually.

For each recommendation noted in an audit report, SC&H gains an understanding of the steps performed to address the action plan and obtains evidence to confirm implementation, when available.

The following describes the current project monitoring status. This listing does not include audits which were determined by HRSD Management and the Commission to include confidential or sensitive information.

			Reco	tions	
Audit	Report Date	Next Follow-up	Closed	Open	Total
Biosolids Recycling	10/8/16	July 2022	7	1	8
Treatment Plant Operations	10/15/18	July 2022	8	1	9
Safety Division	9/12/19	September 2022	1	1	2
SWIFT Program	2/24/2021	April 2022	9	3	12
Succession Planning	6/4/2021	July 2022	0	4	4
Emergency Repairs	1/18/2022	February 2023	0	3	3
D&C: CIP Project Management	5/11/16	Closed	13	0	13
HR Benefits	11/22/16	Closed	15	0	15
Inventory	4/20/17	Closed	5	0	5
Procurement/ProCard	8/23/17	Closed	11	0	11
Engineering Procurement	4/20/18	Closed	8	0	8
Corporate Governance: Ethics Function	3/21/18	Closed	5	0	5
Permitting	2/4/20	Closed	2	0	2
Payroll	3/27/20	Closed	3	0	3
Customer Care Division	7/26/19	Closed	4	0	4
Pollution Source Control	6/2/20	Closed	8	0	8
Fleet Services	2/24/2021	Closed	17	0	17
		Totals	116	13	129

Hampton Roads Sanitation District Internal Audit Unifier/ERP Integration



June 27, 2022





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Executive Summary

SC&H conducted an internal audit of Hampton Roads Sanitation District's (HRSD) Unifier/enterprise resource planning (ERP) system integration.

Unifier and ERP are two systems HRSD uses to manage finance, accounting, and operational activities. Prior to their integration, the information and data between the two systems needed to be synchronized by manually inputting information and data into the other system. The manual nature of activities presented risk, including the risk that information within the systems could be incomplete, inaccurate, and untimely. HRSD addressed this by implementing an Adapters system, which enabled HRSD to integrate information between Unifier and ERP.

The following provides a summary of the internal audit's objectives, process, and results.

SC&H thanks HRSD's Finance and Engineering Departments and their personnel, whose assistance and attentiveness were vital during the internal audit process.

Objectives

- A. Evaluate data traveling through the following workflow for completeness and accuracy:
 - 1. Unifier workflow
 - 2. Unifier to ERP
 - 3. ERP to Unifier
- B. Evaluate the timeliness of data processes within Unifier.
- C. Evaluate current access to Unifier to ensure access appears appropriate.
- D. Evaluate Unifier's policies and procedures to ensure they are consistently applied.

Internal Audit Process

SC&H conducted the internal audit with the following three-phased approach.

- Planning: Understand processes, evaluate risks/controls, develop audit program
- 2. Fieldwork: Conduct evaluation procedures to achieve internal audit objectives
- 3. Reporting: Conclude internal audit, report results

SC&H will conduct a 4th phase (Follow Up) at a later time to review management action plans resulting from the internal audit's results.

Summary Results

The Unifier/ERP integration function appears to incorporate effective operating processes and controls. The function includes multiple reviews and checks, record processing of daily capital improvement project transactions, and error identification that enables HRSD to mitigate risks associated with the management and execution of capital improvement projects.

The following provides areas where exceptions were noted and opportunities to mitigate risks exist. Details are located in the "Observations and Recommendations" section of this report.

- 1. Activity documentation and timing
- 2. Access management
- 3. Policies and procedures



Internal Audit Summary

Background

SC&H conducted an internal audit of Hampton Roads Sanitation District's (HRSD) Unifier/enterprise resource planning (ERP) system integration function. The Unifier/ERP integration function is an organizational-wide activity centrally managed by the Finance Department (Finance), with collaboration and involvement from the Operations and Engineering departments (Operations and Engineering, respectively).

Unifier/ERP Integration Summary

HRSD uses Oracle Primavera (or, Unifier) and Oracle E-Business (or, ERP), to operate, manage, and maintain contracts and related processes and information for Finance, Operations, and Engineering. ERP is used for accounting and finance purposes by Finance while Unifier is used for the management of capital improvement projects (CIP) by Operations and Engineering. Information and data (collectively, information) between the two systems must be kept synchronized, however the two systems were not originally capable of directly integrating with each other. To address this limitation, HRSD contracted a third-party to implement an Adapters system to broker information between ERP and Unifier and enable departments utilizing these systems to have access to updated information in a timely manner. HRSD now operates and manages the integration function.

Unifier

Unifier is used for the management of capital improvement projects by Operations and Engineering. Capital improvement projects are projects that usually aim to maintain or improve infrastructure. Unifier is used to track and manage project costs, project status and completion, suppliers assigned to projects, and supplier payments; and schedule management of capital improvement projects. Unifier enables users to build capital improvement contracts and communicate about these contracts with internal and external stakeholders, such as suppliers, project managers, or accounts payable, in an organized environment.

ERP

ERP is used by Finance to perform accounting and finance activities such as maintaining the general ledger, making payments, managing budgets, and managing vendors. ERP enables users to track, manage, and report overall finances and financial statements. The management of costs and budgets related to capital improvement contracts may be subject to federal laws and guidelines for government contracts. While some information that Finance needs originates in Unifier, Unifier was designed as a project management system and doesn't cater as much to the needs of financial and accounting activities. For this reason, Finance uses ERP for its finance and accounting activities as ERP is more functional for these activities than Unifier.

Unifier and ERP Integration

Prior to integration, the information between the two systems needed to be synchronized by manually inputting the information and data into the other system when needed. The manual nature of activities presented risk, including the risk of incomplete, inaccurate, and untimely data. Further, manually performed activities could result in latency with obtaining project data, which could furthermore result in decreased reliability of information presented from either system.



The Unifier and ERP integration involved the application of the Adapters system which works to broker information to and from Unifier and ERP. The Adapters system was implemented from 2019 to 2020 by a third-party contractor, and the integration went live in June 2020. Following the go-live period, HRSD assumed full integration operational and management activities. The contractor worked with Finance, Operations, and Engineering to determine what information needed to be brokered to and from Unifier to ERP as well as to identify and perform information cleanup. The Adapters system is scheduled to broker information to and from Unifier and ERP on at least a daily basis for all processes with some process information being brokered numerous times over the course of a day. The integration of Unifier and ERP has allowed the data to be available in both Unifier and ERP in a timely and more reliable manner than manual data inputs.

The following key processes have information that is brokered between Unifier and ERP by the Adapter system. Each of these processes are leveraged by Finance, Engineering, and Operations for finance and capital improvement project management. Below provides a summary of each key process and originating system:

- 1. Supplier management: Information originates in ERP and is used for finding and selecting suppliers, managing suppliers' involvement in contracts, payments to suppliers, reporting, etc.
- Miscellaneous charges: Information originates in ERP and is used for the management and processing of non-purchase order invoices, credit card expenses, retainage, accounts payable corrections, and Computerized Maintenance Management System (CMMS) purchase order invoices.
- 3. Payments: Information originates in Unifier and is used for making payments to suppliers.
- 4. Purchase orders: Information originates in Unifier and is used for the management of capital improvement contracts.
- 5. Change orders: Information originates in Unifier and is used for the management of changes made to capital improvement contracts.
- 6. Ship to: Information originates in ERP and is used to manage shipping locations for purchase orders.

Objectives and Scope

Objectives

The following objectives were established based on the internal audit planning procedures:

- A. Evaluate data traveling through the following workflow for completeness and accuracy:
 - 1. Unifier workflow
 - 2. Unifier to ERP
 - 3. ERP to Unifier
- B. Evaluate the timeliness of data processes within Unifier.
- C. Evaluate current access to Unifier to ensure access appears appropriate.
- D. Evaluate Unifier's policies and procedures to ensure they are consistently applied.

Scope

The internal audit initiated in August 2021. Fieldwork procedures began in November 2021 and were completed in May 2022. The internal audit focused on the policies, procedures, and controls in place at the time of the internal audit. Data analytics and documentation sample selections were examined for the period of June 1, 2020 to October 31, 2021.



Methodology and Approach

SC&H performed the following procedures.

Process Walkthrough and Flowchart Creation

SC&H obtained and reviewed Unifier/ERP integration policy and procedural documentation, implementation and management documentation, and reporting forms utilized during normal operations. SC&H also met with members of Finance, Operations, and Engineering to conduct detailed process understanding discussions of in-scope Unifier/ERP integration functions. Based on the discussions and review of the procedural documentation, SC&H created flowcharts to document the following processes within the Unifier/ERP integration:

- 1. Supplier Management
- 2. Miscellaneous Charges
- 3. Payments
- 4. Purchase Orders
- 5. Change Orders
- 6. Ship To
- 7. Unifier Critical Tasks
- 8. G/L Reconciliation

Risk Ranking and Audit Program Creation

Following the documentation of process steps, SC&H developed a Unifier/ERP integration risk and control matrix (RCM). The RCM aligns risks with controls to analyze the control environment and ranks the risks on perceived likelihood and impact. Based on the understanding of the processes, risks, and related controls, SC&H developed an audit program to achieve the objectives described above. The audit program included detailed steps to address each objective with the goal of verifying the existence of sound internal controls and identifying opportunities for improvement.

Audit Program Execution

SC&H executed the audit program by completing the following tasks:

- 1. Verified records created for Unifier critical tasks are correctly processed through Unifier to ERP. Unifier critical tasks included:
 - a. Purchase Orders
 - b. Change Orders
 - c. Payments
- 2. Verified records that are not processed timely through Unifier are identified and resolved with appropriate timeliness and documentation. Record processing reviews included:
 - a. Adaptors Error Log
 - b. Ball In Court Reviews
- 3. Verified system access to Unifier is aligned with certain users' job responsibilities and users do not share accounts.
- 4. Verified formalized, detailed policies to document Unifier/ERP functional requirements and standards, and related procedures are in place.

Summary of Work

The Unifier and ERP integration appears to incorporate effectively designed processes and controls to address information transfer between systems. The integration and its operations are performed by



personnel who are focused on executing the functions efficiently, effectively, and timely. The practices performed by Unifier record owners and HRSD Business Analysts appear to have strengths in processing records across Unifier and ERP. These methods incorporate the ability to process records such as payments, purchase orders, change orders, and miscellaneous charges integrating to and from Unifier and ERP, and the identification of incorrect information uploaded into the system resulting in system errors.

After reviewing the Unifier and ERP integration, SC&H concludes that opportunities exist to mitigate risks based on exceptions identified during internal audit procedures. These opportunities are documented as three observations that can be incorporated into Unifier daily use and operations. The following section provides detailed observations and recommendations regarding these topics.

We appreciate the assistance and cooperation of the management and staff involved in HRSD's Unifier and ERP integration. Please contact us if you have any questions or comments regarding any of the information contained in the internal audit report.

SC&H Group, Inc.

Matthew Simons, CPA, CIA, CGAP

Principal



Observations and Recommendations

Observation 1

Summary

Certain activities did not have documentation available evidencing their review and completion or were not completed in a timely manner.

Detail

SC&H obtained and reviewed Unifier critical tasks and associated records that integrate to and from Unifier and ERP. The following are the records that did not appear to have all necessary documentation and/or did not appear to be completed in a timely manner.

Adaptors Error Log

The Adaptors Errors Log report can be exported from the Adaptors system showing records that were incorrectly/inaccurately entered and attempting to move to the next process step. A sample of errors from the Adapter Error Log were tested during the internal audit procedures.

3 samples: The documents evidencing the solution lacked the error's identification and steps taken to resolve.

G/L Reconciliation

The general ledger (G/L) reconciliation is a process to evaluate the HRSD general ledger with CIP expenditures, from life to date. The data is exported from Unifier to the Business Intelligence report (which is exported from ERP). The reconciliation identifies and resolves variances between the two reports to help ensure that Unifier and ERP have exact values for CIP expenditures. A sample of G/L Reconciliations were tested during the internal audit procedures.

- 2 samples: The G/L Reconciliations were not completed in a timely manner, and contained reconciling reports dated 50 and 73 days from each other.

Vendor Administration

HRSD vendor information and source documentation is maintained in ERP and integrated to Unifier for CIP vendors within Unifier. A sample of vendors were tested during the internal audit procedures.

- 6 samples: The vendor's W-9 in ERP or Unifier was not maintained.

Ball In Court

The Ball In Court report is exported from Unifier showing Unifier records that have not moved from one step in the Unifier workflow process to the next in the designated/appropriate amount of time. When reviewed and identified, a notification is sent to the current record owner alerting the owner of the task due. A sample of Ball In Court reports were tested during the internal audit procedures.

 10 samples: Information was not available to document steps taken to resolve the Unifier workflow delay.

Data Analytics: Timeliness

A record created in Unifier must be processed in a timely manner ensuring minimal delays in CIP progress. A sample of records were tested for timeliness during the internal audit procedures.

- 5 samples: The change order records were not processed through Unifier in a timely manner.
- 1 sample: The payment record was not processed through Unifier in a timely manner.



- 1 sample: The miscellaneous charge record was not processed through Unifier in a timely manner.

Risks

- 1. Integration related error and issue resolutions may not be supportable, which could result in incomplete and inaccurate system data, transactions, and reporting, and could further impact the integrity and reliability of information.
- 2. Delayed activities could impact the completeness and accuracy of data, reporting, and transactions, and could further impact the integrity and reliability of information.
- 3. Lack of readily available documentation could result in inefficient use of resources, due to the time needed to perform non-project related research activities.
- Delayed activities and lack of readily available documentation to support data/information/transactions could impact the ability to identify incomplete, inaccurate, and unauthorized transactions.
- 5. Lack of appropriate data or review could result in incorrect payments to vendors due to insufficient information from the record creator and/or review by appropriate personnel.

Recommendation 1.1

HRSD should develop and enforce requirements and expectations surrounding the processes identified above. These should focus on process-level criteria including time expectations and data/information retention. Additional components to consider are provided below and within "Observation 3" regarding formalizing policies and procedures.

Adaptors Error Log

- 1. Identifying system owners and/or individuals who are both responsible and accountable for the review and resolution of identified errors.
- 2. Documenting appropriate steps, required communications, and the necessary time for the resolution of identified errors.
- 3. Developing a methodology on maintenance of documentation on error resolution.

G/L Reconciliation

- 1. Identifying system owners and/or individuals who are both responsible and accountable for the review and identification of variances.
- 2. Developing a periodic review and completion of the G/L reconciliation process.
- 3. Documenting appropriate timelines for the export of both the HRSD ledger and Business Intelligence reports.
- 4. Documenting appropriate steps, required communications, and the necessary time for the resolution of identified variances.
- 5. Developing a methodology on maintenance of documentation on variance resolution.

Ball In Court Report

- 1. Identifying system owners and/or individuals who are both responsible and accountable for the review of delayed records in Unifier.
- 2. Documenting appropriate timelines for the following processes to move through Unifier:
 - a. Payments
 - b. Purchase Orders
 - c. Change Orders
- 3. Documenting appropriate steps, required communications, and the appropriate processing time once the record is identified for continued processing.



- 4. Developing a monthly review to identify and document records that appear to be delayed at the current workflow step.
- 5. Developing a methodology on maintenance of documentation on delayed records.

Management Action Plan 1.1

Unifier/ERP Integration Error Report documentation and timeliness to be included with policy and procedures found in Recommendation 3.1. HRSD's Unifier Help Desk Track-it system will be utilized for data/information retention for the following reports:

- 1. Integration Error Reports:
 - a. Adapters Health Report (daily email)
 - b. HRSD Integration Error Report (Panoptra report)
 - c. HRSD EVO Interface Dashboard (ERP report))
- 2. G/L Reconciliation
- 3. Ball in Court Reports

Implementation Date/Period 1.1



Observation 2

Summary

Unifier's access rights are not fully restricted to specific roles and users. Unifier users have access and roles within the system that do not align to their responsibilities at HRSD.

Detail

SC&H obtained a listing of users with access to Unifier and the associated permissions granted to each module per access level. During review, SC&H met with the Unifier system manager to ensure access was appropriate based on the user's job title and responsibilities. During this discussion it was noted that:

- 1. 1 system profile had multiple users assigned to "Enstoa HRSD". Because this account was both assigned to multiple users and was not uniquely named, it is considered to be a shared and generic account.
- 2 users have the ability to run Unifier integration jobs, but no longer needed that level of access.
 The access granted to these two users was originally administered during the initial build out of
 the Unifier integration system. However, access was no longer needed after the development of
 the system was performed.

Risks

Failure to restrict access rights to appropriate unique users could result in:

- 1. Unauthorized access and manipulation of production data by users who currently have access to Unifier in which access is no longer needed.
- 2. The inability to distinguish, with certainty and accuracy, specific user actions within Unifier to production data.

Recommendation 2.1

HRSD has a naming convention for employee users. HRSD should determine and adopt a naming convention for all users, including third-party support users, that would uniquely identify each user within Unifier. Once this naming convention has been approved and implemented, existing and future system users should have their usernames follow the established unique identification requirements. To ensure a user is not reassigned an existing username, the individual administering access should perform a review of the existing usernames prior to assigning the new user access to ensure uniqueness.

Management Action Plan

Each Unifier account has a unique username, as Unifier Administration prevents the duplication of usernames. Users are discouraged from sharing accounts. When sharing of accounts is discovered, a new user account will be established to prevent security issues. After review of the "Enstoa HRSD" account, the current account was established for one individual user and new accounts were created for other Enstoa staff. Formal documentation of policy will be included in 2.2 Action Plan. The policy will state that each Enstoa staff/user will have a unique user account.

Implementation Date/Period



Recommendation 2.2

HRSD should implement a periodic Unifier user access review process. The review should include appropriateness of access and assigned permissions for existing Unifier users. The access and permissions granted should align with the user current job duties within HRSD. This review should be documented and performed by the Unifier system owner or personnel assigned by the system owner. The review documentation should include, but not necessarily be limited to, who performed the review, when the review was performed, and a formal sign-off or confirmation that the users that have been reviewed are appropriate and/or should have their accounts disabled or deleted. Any account modifications based on the review, should be tracked and followed by the reviewer until resolution has been completed.

Management Action Plan

HRSD to create a detailed policy to include ownership, frequency, and guidelines for the review of Unifier user access and permissions. Policy will also include information regarding the creation of user accounts (usernames) and sharing of accounts will not be permitted (see Management Action Plan 2.1).

Implementation Date/Period



Observation 3

Summary

Formalized, detailed policies to document Unifier/ERP daily functional requirements and standards, and related procedures do not exist.

Detail

Per discussion with HRSD, formal Unifier/ERP integration policies and procedures are not in place. HRSD did provide policy/procedural documents on the Adaptors Error Log and Ball In Court reviews. However, there are no current, formal comprehensive procedures for daily record processing through the Unifier/ERP integration workflow.

Risks

Lack of formalized process related policies and procedures could negatively impact:

- 1. The establishment and performance of necessary activities performed consistently, efficiently, and effectively in a controlled and timely manner.
- 2. The ability to perform critical activities in the absence of the primary users.

Recommendation 3.1

HRSD should develop detailed policies and procedures that enable it to achieve business objectives surrounding the processes completed within Unifier/ERP integration. The processes should at least include:

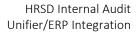
- 1. HRSD Payments
- 2. HRSD Contracts
- 3. HRSD Contract Changes
- 4. Vendors
- 5. Ship-To Locations
- 6. Miscellaneous Costs

The policies and procedures should include, but not be limited to the following:

- Identification of system and process owners for associated record steps within the Unifier workflow.
- 2. Documenting required information and source documentation for each record type being processed.
- 3. Developing timelines for completion of daily Unifier/ERP integration task steps.
- 4. Documenting error resolution for each record type.
- 5. Documenting appropriate access levels for reviews and approvals as well as secondary and/or back up for time off/leave scenarios.
- 6. Documenting the sensitivity of data processed, stored, and transmitted in Unifier.
- 7. Developing a frequency of review for policies and procedures.

Management Action Plan

HRSD to create a detailed formal policy for each Unifier/ERP integration process to include description of business process and which system the record is initiated. Policy will also include responsible party, identification of common errors, suggested timeline for resolution, and documentation retention policy (as detailed in Recommendation 1.1).





Implementation Date/Period

Annual Metrics

M-1.1 Employee Tumover Rate within Probationary Period M-1.2 Internal Employee Promotion Eligible Percentage 100% 59% 80% 70% 114.58% 9.68% 60% 131% 66% 69% 69% 68% 85% 85% 85% 63% 63% 63% 63% 63% 63% 63% 63% 63% 63		Annual Metrics															
M-1.1 Employee Tumover Rate within Probationary Period M-1.2 Internal Employee Promotion Eligible Percentage 100% 59% 80% 70% 114.588 9.688 0.698 0.138 0.90% 1218 0.	Item	Strategic Planning Measure	Unit	Target	FY-10	FY-11	FY-12		FY-14	FY-15		FY-17	FY-18			FY-21	FY-22
M-1.2 Internal Employee Promotion Eligible Percentage 100% 59% 80% 70% 71% 64% 69% 68% 85% 63% 78% 65% 63% 78% 65% M-13 Average Time to Fill a Position Cleim Carlos Transport Control of the Control of	M-1.1a	Employee Turnover Rate (Total)	Percentage	< 8%	5.63%	4.09%	6.64%	7.62%			6.75%		9.99%			6.31%	16.04%
M-1.3 Average Time to Fill a Position	M-1.1b					2.22%	8.16%	14.58%			0.13%	0.90%			3.08%		1.64%
M-1.4 Training Hours per Employee -cumulative fiscal year-to-date M-1.5 a Safety OSHA 2010 incidence Rate Cases with Days Away # per 100 Employees	M-1.2	Internal Employee Promotion Eligible	Percentage					70%				68%					65%
M-1.5a Safety OSHA 300 Incidence Rate Total Cases sper 100 Employees <3.5 6.57 6.15 5.8 11.2 5.07 3.87 7 5.5 5.7 4.1 4.8 4.1 4.5 M-1.5b Safety OSHA 300 Incidence Rate Cases with Days Away sper 100 Employees <1.1 0.74 1.13 1.33 0.96 1.4 0.82 1.9 1 1.1 0.8 1.34 1.3 1.34 M-1.5c Safety OSHA 300 Incidence Rate Cases with Restriction, etc. sper 100 Employees <1.8 3.72 4.27 2.55 4.5 2 1.76 3.6 2.8 2.8 1.8 1.6 4.1 3.4 M-2.1 CIP Delivery - Budget Percentage Second	M-1.3	Average Time to Fill a Position	Calendar Days	< 30		70	60	52	43.76		56	67	67	66			74.52
M-1.5 Safety OSHA 300 Incidence Rate Cases with Days Away # per 100 Employees <1.1 0.74 1.13 1.33 0.06 1.4 0.82 1.9 1 1.1 0.8 1.34 1.3 1.00 1.	M-1.4	Training Hours per Employee - cumulative fiscal year-to-date	Hours	> 40							49.0	48.4		40.9	39.3	28.2	32.3
M-1.5C Safety OSHA 300 Incidence Rate Cases with Restriction, etc. # per 100 Employees < 0.8 3.72 4.27 2.55 4.5 2 1.76 3.6 2.8 2.8 1.8 1.6 4.1 3.4	M-1.5a	Safety OSHA 300 Incidence Rate Total Cases	# per 100 Employees	< 3.5	6.57	6.15		11.2	5.07		7	5.5	5.7				4.53
M-2.1 CIP Delivery - Sudget Percentage M-2.2 CIP Delivery - Schedule Percentage Percent	M-1.5b	Safety OSHA 300 Incidence Rate Cases with Days Away	# per 100 Employees	< 1.1				0.96	1.4			1		0.8		1.3	1.09
M-2.2 Delivery'-Schedule Percentage 169% 169% 161% 150% 109% 172% 173% 167% 159% 159% 155% 152% M-2.3a Total Maintenance Hours Total Maintenance Hours Total Maintenance Percentage of Total Mtx Hours Monthly Avg 20% 27% 70% 73% 48% 41% 43% 44% 59% 59% 62% 619	M-1.5c	Safety OSHA 300 Incidence Rate Cases with Restriction, etc.	# per 100 Employees	< 0.8	3.72				2								3.43
M-2.3a Total Maintenance Hours	M-2.1	CIP Delivery - Budget	Percentage			113%		124%			151%						120%
M-2.3b Planned Maintenance Percentage of Total Mtc Hours Monthly Avg 20% 27% 70% 73% 48% 44% 43% 44% 59% 59% 62% 619	M-2.2	CIP Delivery - Schedule	Percentage			169%											152%
M-2.3c Corrective Maintenance Percentage of Total Mtc Hours Monthly Avg 63% 51% 12% 10% 18% 25% 25% 24% 18% 19% 16% 159 M-2.3d Projects Percentage of Total Mtc Hours Monthly Avg 18% 22% 20% 18% 32% 34% 32% 32% 27% 25% 22% 24% M-2.4 Mtc. The projects Percentage of Total Mtc Hours Monthly Avg 18% 22% 20% 18% 32% 34% 32% 32% 27% 25% 22% 24% M-2.4 Mtc. The projects Percentage of Total Mtc Hours Monthly Avg 18% 22% 20% 18% 32% 34% 32% 32% 27% 25% 22% 24% M-2.4 Mtc. The projects Percentage of Total Mtc. The projects Percentage	M-2.3a	Total Maintenance Hours	Total Available Mtc Labor Hours Monthly Avg			16,495	22,347	27,615	30,863	35,431	34,168	28,786	28,372	31,887	29,596	28,722	28,030
M-2.3d Projects Percentage of Total Mtc Hours Monthly Avg 18% 22% 20% 18% 32% 32% 32% 27% 25% 22% 249 M-2.4 Infrastructure Investment Percentage of Total Cost of Infrastructure Percentage of Total	M-2.3b	Planned Maintenance	Percentage of Total Mtc Hours Monthly Avg			20%	27%	70%	73%	48%	41%	43%	44%	59%	59%	62%	61%
M-2.4 Infrastructure Investment	M-2.3c	Corrective Maintenance	Percentage of Total Mtc Hours Monthly Avg			63%					25%						15%
M-3.3 Carbon Footprint Tons per MG Annual Total 1.61 1.57 1.47 1.46 1.44 1.45 1.58 1.66 1.58 1.7 1.75 1.75 1.47 1.46 1.44 1.45 1.58 1.66 1.58 1.7 1.75 1.75 1.47 1.48 1.48 1.58 1.66 1.58 1.70 1.75 1.47 1.48 1.48 1.58 1.66 1.58 1.70 1.75 1.47 1.48 1.48 1.58 1.58 1.66 1.58 1.70 1.75 1.47 1.48 1.48 1.58 1.58 1.66 1.58 1.75 1.75 1.47 1.48 1.48 1.58 1.58 1.66 1.58 1.75 1.75 1.47 1.48 1.48 1.58 1.58 1.66 1.58 1.75 1.75 1.47 1.48 1.48 1.48 1.58 1.58 1.68 1.58 1.75 1.75 1.47 1.48 1.48 1.48 1.58 1.58 1.58 1.68 1.58 1.75 1.75 1.47 1.48 1.48 1.48 1.58 1.58 1.58 1.58 1.58 1.58 1.58 1.5	M-2.3d	Projects	Percentage of Total Mtc Hours Monthly Avg					20%	18%		34%			27%			24%
M-3.6 Alternate Energy (Incl. Green Energy as of FY19) Total KWH 0 0 0 0,5,911,289 6,525,096 6,052,142 5,862,255 47,375,940 56,473,800 58,044,110 M-4.12 Energy Use: Preatment KWh/MG Monthly Avg 2,473 2,571 2,229 2,189 2,176 2,205 2,294 2,395 2,277 2,408 2,459 M-4.10 Energy Use: Pump Stations KWh/MG Monthly Avg 197 173 152 159 168 163 173 170 181 174 170 M-4.10 Energy Use: Pump Stations KWh/MG Monthly Avg 8 84 77 102 96 104 97 104 104 95 102 82 M-4.2 RoB Budget Percentage for Total Revenue > 0.5 1.08 1.09 1.09 1.14 1.09 1.38 1.09 1.08 1.38 1.38 1.48 1.88 1.33 1.48 M-4.3 Total Labor Cost/MGD Average Daily Flow 51,028 51,028 51,045 51,174 51,222 51,249 51,279 51,246 51,285 51,423 51,348 51,487 51,545 M-4.4 Riffordability Median Household Income < 0.5 10,048 0.48 0.48 0.44 0.43 0.53 0.53 0.55 0.59 0.60 0.60 0.64 0.71 0.67 0.67 0.67 0.67 0.67 0.67 0.67 0.67	M-2.4	Infrastructure Investment	Percentage of Total Cost of Infrastructure	2%		8.18%		6%			7%			4	5%		*
M-4.1a Energy Use: Treatment kWh/MG Monthly Avg 2,473 2,571 2,229 2,189 2,176 2,205 2,294 2,395 2,277 2,408 2,459 M-4.1b Energy Use: Pump Stations kWh/MG Monthly Avg 197 173 152 159 168 163 173 170 181 174 170 M-4.1c Energy Use: Pump Stations kWh/MG Monthly Avg 84 77 102 96 104 97 104 104 95 102 82 M-4.2 R&D Budget Percentage of Total Revenue >0.5% 1.0% 1.4% 1.0% 1.3% 1.0% 0.8% 1.3% 1.4% 1.8% 1.3% 1.4% M-4.3 Total Labor Cost/MGD Average Daily Flow \$1,028 \$1,095 \$1,174 \$1,232 \$1,249 \$1,279 \$1,246 \$1,285 \$1,487 \$1,548 M-4.4 Affordability Median Household Income <0.5%	M-3.3	Carbon Footprint	Tons per MG Annual Total			1.61	1.57	1.47	1.46	1.44				1.58			*
M-4.1b Energy Use: Pump Stations	M-3.6	Alternate Energy (Incl. Green Energy as of FY19)	Total KWH			0	0	0	5,911,289								*
M-4.1c Energy Use: Office Buildings	M-4.1a	Energy Use: Treatment	kWh/MG Monthly Avg			2,473	2,571	2,229		2,176	2,205		2,395	2,277	2,408		*
M-4.2 R&D Budget Percentage of Total Revenue > 0.5% 1.0% 1.4% 1.0% 0.8% 1.3% 1.4% 1.8% 1.3% 1.4% M-4.3 Total Labor Cost/MGD Average Daily Flow \$1,028 \$1,095 \$1,174 \$1,232 \$1,249 \$1,279 \$1,246 \$1,285 \$1,487 \$1,548 M-4.4 Affordability Median Household Income <0.5%	M-4.1b	Energy Use: Pump Stations	kWh/MG Monthly Avg														*
M-4.3 Total Labor Cost/MGD Average Daily Flow 51,028 \$1,095 \$1,174 \$1,232 \$1,249 \$1,279 \$1,246 \$1,285 \$1,423 \$1,348 \$1,487 \$1,545 \$1.44 Affordability Median Household Income < 0.5% 0.48% 0.48% 0.48% 0.43% 0.53% 0.55% 0.55% 0.59% 0.60% 0.64% 0.71% 0.67%	M-4.1c	Energy Use: Office Buildings	kWh/MG Monthly Avg			84	77	102	96			104	104		102	82	*
M-4.4 Affordability Median Household Income < 0.5% 0.48% 0.41% 0.43% 0.53% 0.55% 0.59% 0.60% 0.64% 0.71% 0.67% M-4.5 Total Operating Cost/MGD 365/5-Year Average Daily Flow \$2,741 \$2,970 \$3,262 \$3,316 \$3,305 \$3,526 \$3,434 \$3,592 \$3,959 \$3,823 \$4,048 \$4,311	M-4.2	R&D Budget	Percentage of Total Revenue	> 0.5%													*
M-4.5 Total Operating Cost/MGD 365/5-Year Average Daily Flow \$2,741 \$2,970 \$3,262 \$3,316 \$3,305 \$3,526 \$3,434 \$3,592 \$3,959 \$3,823 \$4,048 \$4,311	M-4.3	Total Labor Cost/MGD	Average Daily Flow		\$1,028	\$1,095	\$1,174	\$1,232	\$1,249	\$1,279	\$1,246	\$1,285	\$1,423	\$1,348	\$1,487	\$1,545	*
	M-4.4	Affordability	Median Household Income	< 0.5%		0.48%	0.48%	0.41%	0.43%	0.53%	0.55%	0.59%	0.60%	0.64%	0.71%	0.67%	*
M-5.1 Name Recognition Percentage (Survey Result) 100% 67% 71% N/A 62% N/A 60% N/A N/A 53% N/A 53% N/A 53% N/A N/A 53%	M-4.5	Total Operating Cost/MGD	365/5-Year Average Daily Flow		\$2,741	\$2,970	\$3,262	\$3,316	\$3,305	\$3,526	\$3,434	\$3,592	\$3,959	\$3,823	\$4,048	\$4,311	*
	M-5.1	Name Recognition	Percentage (Survey Result)	100%	67%	71%	N/A	62%	N/A	60%	N/A	N/A	53%	N/A	53%	N/A	N/A
M-5.4 Value of Research Percentage - Total Value/HRSD Investment 129% 235% 177% 149% 181% 178% 143% 114% 117% 143% 138%	M-5.4	Value of Research	Percentage - Total Value/HRSD Investment			129%	235%	177%	149%	181%	178%	143%	114%	117%	143%	138%	*
M-5.5 Number of Research Partners Annual Total Number 42 36 31 33 28 35 15 20 26 32 27	M-5.5	Number of Research Partners	Annual Total Number			42	36	31	33	28	35	15	20	26	32	27	*
Rolling 5 Year Average Daily Flow MGD 157.8 155.3 152 154.36 155.2 151.51 153.09 154.24 152.8 152.23 149.84 149.72 145.75		Rolling 5 Year Average Daily Flow	MGD		157.8	155.3	152	154.36	155.2	151.51	153.09	154.24	152.8	152.23	149.84	149.72	145.75
Rainfall Annual Total Inches 66.9 44.21 56.21 46.65 46.52 51.95 54.14 66.66 49.24 53.1 48.49 54.04 38.11		Rainfall	Annual Total Inches		66.9	44.21	56.21	46.65	46.52	51.95	54.14	66.66	49.24	53.1	48.49	54.04	38.18
Billed Flow Annual Percentage of Total Treated 71.9% 82.6% 78% 71% 73% 74% 72% 73% 76% 72% 78% 72%		Billed Flow	Annual Percentage of Total Treated		71.9%	82.6%	78%	71%	73%	74%	72%	73%	76%	72%	78%	72%	*
Senior Debt Coverage Net Revenue/Senior Annual Debt Service > 1.5 2.51% 2.30% 2.07% 1.88% 1.72% 1.90% 2.56% 3.10% 3.59% 4.84% 5.80% 6.03%		Senior Debt Coverage	Net Revenue/Senior Annual Debt Service	> 1.5	2.51%	2.30%	2.07%	1.88%	1.72%	1.90%	2.56%	3.10%	3.59%	4.84%	5.80%	6.03%	*
Total Debt Coverage Net Revenue/Total Annual Debt >1.4 1.67% 1.67% 1.67% 1.45% 1.45% 1.32% 1.46% 1.77% 1.93% 2.03% 2.62% 2.81% 2.66%		Total Debt Coverage	Net Revenue/Total Annual Debt	>1.4	1.67%	1.67%	1.46%	1.45%	1.32%	1.46%	1.77%	1.93%	2.03%	2.62%	2.81%	2.66%	*

*to be reported

	Monthly Updated Metrics																FY-22	FY-22
Item	Strategic Planning Measure	Unit	Target	FY-10	FY-11	FY-12	FY-13	FY-14	FY-15	FY-16	FY-17	FY-18	FY-19	FY-20	FY-21	FY-22	May-22	Jun-22
	Average Daily Flow	MGD at the Plants	< 249		136	146.5	158.7	156.3	153.5	155.8	153.5	145.8	152.7	141.5	155.3	131.3	136.0	128.2
	Industrial Waste Related System Issues	Number	0		3	6	6	6	2	4	7	4	7	1	2	4	1	1
	Wastewater Revenue	Percentage of budgeted	100%		97%	96%	98%	107%	102%	104%	103%	103%	104%	104%	106%	106%	101%	103%
	General Reserves	Percentage of Operating and Improvement Budget	75% - 100%		72%	82%	84%	92%	94%	95%	104%	112%	117%	119%	108%	106%	111%	114%
	Accounts Receivable (HRSD)	Dollars (Monthly Avg)			\$17,013,784	\$17,359,488	\$18,795,475	\$20,524,316	\$20,758,439	\$22,444,273	\$22,572,788	\$22,243,447	\$23,900,803	\$27,335,100	\$34,060,154	\$39,539,639	\$32,641,336	\$38,496,476
	Aging Accounts Receivable	Percentage of receivables greater than 90 days			21%	20%	18%	19%	21%	20%	18%	18%	17%	18%	29%	33%	31%	30%
M-2.5	Capacity Related Overflows	Number within Level of Service	0		25	1	30	5	11	16	6	10	5	2	25	0	0	0
M-3.1	Permit Compliance	# of Exceedances to # of Permitted Parameters	0		12:55,045	1:51995	2:52491	1:52491	2:52491	2:52,491	9:53236	9:58338	2:60879	9:60879	23:60879	9:60879	8:55806	9:60879
M-3.2	Odor Complaints	Number	0		6	2	7	11	5	9	7	6	9	15	31	51	20	5
M-3.4	Pollutant Removal (total)	Total Pounds Removed			178,163,629	171,247,526	176,102,248	185,677,185	180,168,546	193,247,790	189,765,922	190,536,910	187,612,572	182,759,003	183,123,855	177,322,331	162,842,046	177,322,331
M-3.5	Pollutant Discharge (% of permitted)	Pounds Discharged/Pounds Removed	< 40%		25%	22%	25%	22%	22%	20%	22%	17%	17%	17%	18%	14%	15%	15%
M-5.2	Educational and Outreach Events	Number			302	184	238	322	334	443	502	432	367	256	145	687	48	59
M-5.3	Number of Community Partners	Number			280	289	286	297	321	354	345	381	293	230	128	125	10	8

Resource: Eddie Abisaab

AGENDA ITEM 26.c. - July 26, 2022

Subject: Bowers Hill Interceptor Force Main Section I Emergency Replacement

Emergency Declaration

Recommended Action: No action is required. Information Only

CIP Project: NP015210

Regulatory Requirement: None

Brief: On April 23, a force main failed near 3025 Gum Court in Chesapeake. Bridgeman Civil, Inc. (BC) immediately mobilized on-site and repaired the failure. BC subsequently worked with Hazen and Sawyer (Hazen) to provide condition assessment on the pipeline near the failure and found severe corrosion near where the pipeline goes under Interstate-664.

An emergency declaration was authorized on July 15, 2022

Staff will utilize the Prompt Repair On-Call Services contractor, BC, to rehabilitate and/or replace the 36-inch ductile iron (DI) force main and restore the area impacted by the construction. BC will also install a linestop and bypass to keep the force main in use during the rehabilitation and/or replacement. Staff will also utilize the On-Call General Engineering consultant, Hazen, to provide construction administration and inspection while BC completes the rehabilitation and/or replacement.

The attached map depicts the project location

<u>Analysis of Cost</u>: The estimated cost of this work is \$3,500,000 and will be funded from the CIP NP015210 appropriation.