

12/3/2020

Dear Lewes BPW

I would like to take this opportunity to personally thank you for selecting Inframark to manage your wastewater treatment operations. I truly appreciate the confidence and trust you have placed in our organization, and all of us, particularly Project Manager Jeffery Deats and Regional Manager Michael Wolgemuth look forward to a long and successful partnership with you.

Our partnership begins at a very exciting time for Inframark — a time where we are committed to our mission "to be the partner and protector of the most critical resource that helps communities prosper." We embrace it. We deliver on it. We live it — together. At the heart of our mission and everything we do are three powerful principles that define our culture:

- Alignment. We are customer-focused, results-oriented and a team player.
- Accessibility. We are open, honest and engaged.
- Accountability. We are safe, compliant and responsible.

At Inframark, we define success by delivering an outstanding customer experience, providing best value service, and keeping our precious water resource safe and clean. This is exactly what I commit we will do for you and the Town of Lewes.

I look forward to meeting you in the very near future. In the meantime, if you have any questions or thoughts, please do not hesitate to contact me.

Sincerely,

Stephane Bouvier Chief Executive Officer



LEWES BPW

Howard Seymour Water Reclamation Plant

November 2020 Management, Operations & Maintenance Report



December 3, 2020

Summary

Inframark staff started shadowing personnel from the former operator on October 19, 2020 in preparation to take over operation and maintenance of the plant November 1, 2020. As of November 1st, our staff were in place and mostly onboarded. During November, local staff were supported by Inframark Regional Manager, Michael Wolgemuth and remotely by our network of support staff. New employees completed online safety training specific to the hazards at the BPW's wastewater facilities. Additional classroom and practical trainings were completed prior to operating equipment or entering confined spaces. Please find details related to operation and maintenance of the WWTP and pump stations within this report.

Critical Issues

- Covid. Inframark is following CDC recommendations to ensure undisrupted service to the BPW and the Lewes community. We are communicating with our teams daily to ensure employees with primary or secondary exposure are staying home until receiving a negative test. So far, we have had little impact across our projects
- Inframark has retained an additional DE Class 4 licensed operator to work part-time to address DNREC's concern over having one DE licensed operator at the facility. The gentleman started on December 2, 2020 and will be working weekends through at least the end of January. DNREC has facilitated an emergency exam to allow our two additional operators to move forward with the Delaware licensing process. Inframark also employees a DE Class 4 licensed operator at one of our southeast PA facilities that would be available as a backup if needed. Our Regional Manager, Michael Wolgemuth, had applied for reciprocity in March of 2020 but has not received a definitive response from DNREC as to whether it will be granted.

Noteworthy Events

- Inframark engineer onsite to help in asset assessment activities at pump stations.
- Inframark support lab specialist onsite to develop lab procedures and train operators on proper laboratory testing procedures.
- Four Inframark team members from our Elkton MD project came down for a day to help with housekeeping at the WWTP.
- A Kubota service representative was onsite to diagnose issues with the digester membrane system not running in Auto. He also evaluated further repairs needed to bring equipment back to specifications.

Projects

Project	Status	Priority Level	Approval	Est. Complete Date
PS12 pump replacement	Ordered	High	Yes	12/20
Repairs to Digester Filtration System	A service representative was onsite 11/23/20 to diagnose issues. A new diffuser flush valve and actuator are required. A second actuator to control the permeate flow is missing and needs replaced. Both recirculation pumps have failed and need rewound. The touch screen is in need of replacement. Inframark will obtain the valve and actuators and have the pumps repaired. A proposal for the touch screen is pending. The unit is currently permeating using a smaller submersible utility pump in place of the recirculation pump.	High	Needed for touch screen replacement when proposal is received	ASAP
Replace EQ Pump Drives and Control Panel	Only one drive operates in Auto. Inframark reached out to the Gorman Rupp Rep for a proposal	High	Needed	2021
Buildout CMMS	An asset list was passed along by the former operator. Our support team has added the list to our CMMS. A member of our support services is scheduled to be onsite the first full week of December to verify assets and add preventive maintenance activities to the program	High	Part of our base services	QTR 1 2020

OperationsNPDES Permit Compliance

- Please review the following tables that summarize NPDES reporting criteria for November 2020. Results for week four have not been received from the lab. No violations are anticipated. The November DMR will be forwarded when all results are received. The October DMR, completed by the former operator, is included as an attachment to this report.
- The average daily influent flow for November was 1.061 MGD with a maximum daily flow of 1.630 MGD. Precipitation totaled 5.1 inches for November with a maximum daily total of 2.0 inches.

		Average	Min	Max	
Precipitation (inches)		0.17	0.00	2.00	
Influent	Limit	Average	Min	Max	
Flow (MGD)		1.06	0.75	1.63	
BOD (mg/L)		152.33	106.00	205.00	
BOD Load (lbs)		1295.76	984.82	1610.54	
TSS (mg/L)		177.33	102.00	234.00	
TSS Load (lbs)		1506.79	947.66	1838.37	

Effluent	Limit	Average	Min	Max	Vio
Flow (MGD)		1.05	0.72	1.53	N
Dissolved Oxygen (mg/L)		4.59	3.15	5.70	N
pH (SU)	Min 6/ Max 9	7.34	7.11	7.66	Ν
Enterococcus (col/100ml)	Avg 10/ Max 104	<2.3	<1.0	5.0	N
BOD (mg/L)	Avg 15/ Max 23	<2.4	<2.4	<2.4	N
BOD Load (lbs)	Avg 188/ Max 288	<21	<20	<22	N
BOD Removal (%)		>98.4	>98.4	>98.4	
TSS (mg/L)	Avg 15/ Max 23	<1.3	<0.5	2.0	N
TSS Load (lbs)	Avg 188/ Max 288	<11	<4	17	N
Total Nitrogen (mg/L)	Avg 8	6.30	6.30	6.30	N
Total Nitrogen Load (lbs)	Avg 100	57.70	57.70	57.70	Ν
Total Phosphorous (mg/L)	Avg 2	1.42	1.42	1.42	Ν
Total Phosphorous Load (lbs)	Avg 25	13.00	13.00	13.00	Ν

Process	Limit	Average	Min	Max	
Bio-Train 1 MLSS (mg/L)		12266.67	12000.00	12620.00	
Bio-Train 2 MLSS (mg/L)		11996.67	11370.00	12530.00	
Membrane Train 1 MLSS (mg/L)		14,096.67	13,200.00	15,320.00	
Membrane Train 2 MLSS (mg/L)		12,986.67	12,140.00	13,770.00	
Membrane Train 3 MLSS (mg/L)		13,560.00	12,810.00	13,950.00	
Membrane Train 4 MLSS (mg/L)		12,303.33	11,800.00	12,730.00	
TSS Digester 1 (mg/L)		27263.33	25450.00	28720.00	
TSS Digester 2 (mg/L)		28470.00	27460.00	29750.00	

Sludge Operations and Disposal

Liquid Hauled	80,100	Gallons	DELCORA
Cake Hauled	81.8	Wet Tons	Pioneer Crossing

- 11-12-2020- During a period of heavy rain, runoff from stacked sludge cake was discovered in the paved area in front of Drying Bed 7. The stormwater inlet was already plugged due the construction project. A swale leaving the paved area was dammed off while the sludge was cleaned up. No solids were observed entering the marsh. DNREC was notified.
- 11-12-2020- A small sludge spill from the anoxic tank in the digester occurred while manually wasting sludge. The spill was cleaned up and reported. No solids made it to the stormwater system
- 11-27-2020- A small sludge spill was discovered during a plant walkthrough. The spill
 discharged from hose leak in a small sump pump that was temporarily installed into the anoxic
 tank to move sludge into the digester while the recirculation pump was down due to failure. The
 spill was cleaned up and DNREC was notified. No solids made it to the stormwater system.

Zenon Membrane Report

- During the month of November, we have been having issues related to air in the membrane trains. Low flows and false turbidity spikes have caused several shutdowns and alarms. Inframark has been working with Zenon to mitigate these issues.
- A three-day training provided by Zenon has been scheduled for the first full week of January.
- Included for your review are Zenon's Biweekly Reports

LEWES BPW WWTP Biweekly InSight Report

Date: 11/4/2020

From: Erin Horocholyn - Suez Water Technologies & Solutions

To: Dave Weed, Darrin Gordon

cc: Matt Stapleford - Suez Water Technologies & Solutions

System Equipment

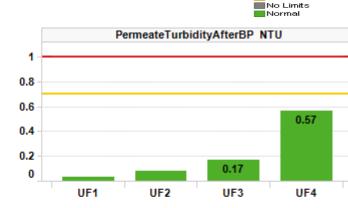
4 × ZW trains, each train consists of 4 - 500D cassettes, 120 modules x 370 sq. ft. per train (surface area 44,400 sq. ft. per train)

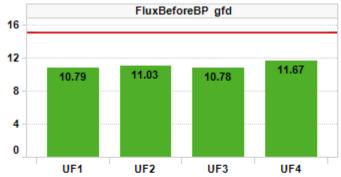
Replacement membranes installed Q1 2020 on all 4 trains

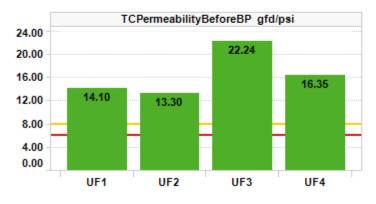
Cleaning Strategy

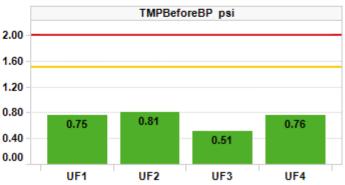
Recovery cleaning - 2 NaOCI @ 2000 ppm dose/1000 ppm soak per year, 1 Citric acid @ 2000 ppm per year Maintenance cleaning - 1 NaOCI per week @ 200 ppm, 1 Citric acid per week @ 2000 ppm

KPI Dashboard – Avg values through reporting period









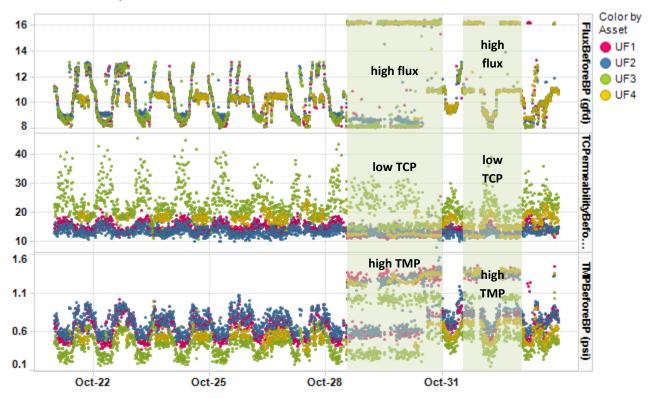
Action Required Caution



Plant Summary

Overall, the plant operated well. Max flux was hit from Oct 28 – Nov 1; during these periods TMPs and permeabilities were impacted but all KPIs returned to normal levels once flow receded.

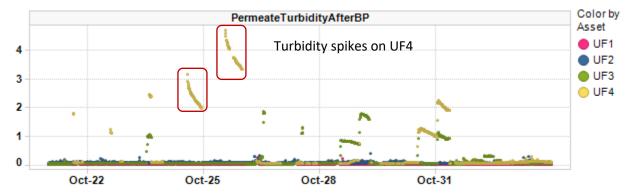
- Daily permeate production averaged 1.1 MGD. Flow peaked on Oct 29 at 1.6 MGD. Average daily
 production by train was 287 kgal for UF1, 306 kgal for UF2, 283 kgal for UF3, and 199 kgal for UF4
- Flux averages ranged from 10.78 11.67 gfd. Even flux between trains is beneficial for even wear across the membrane trains over time. Max flux was hit in this reporting period, during which TMP rose and permeabilities were suppressed. KPI values returned to regular trends once flow decreased
- TC permeability BBP was good on all trains, and excellent on trains UF3 and UF4. UF1 and UF2 averaged 14.10 and 13.30 gfd/psi respectively. UF3 and UF4 averaged 22.24 and 16.35 gfd/psi respectively. For reference, TC permeability BBP is considered good above 8 gfd/psi
- Average TMP was great on all trains. UF1 and UF2 averaged 0.75 and 0.81 psi, while UF3 and UF4 averaged 0.51 and 0.76 psi. There was a 12 26% rise in TMP across all trains. For reference, excellent TMP is below 1.0 psi



- Maintenance clean (MC) design specifies 1 hypo/chlorine MC and 1 citric acid MC per week, per train
 - o UF1, UF2, and UF3 had 4 MCs over the past 2 weeks, meeting design
 - o UF4 had 5 MCs over the past 2 weeks, exceeding design which is fine
- Permeate turbidity ABP was below 0.10 NTU on all trains except UF3 and UF4. UF1 averaged 0.03 NTU,
 UF2 averaged 0.09 NTU. UF3 averaged 0.17 NTU (+70%). UF4 averaged high at 0.57 NTU (+36%)



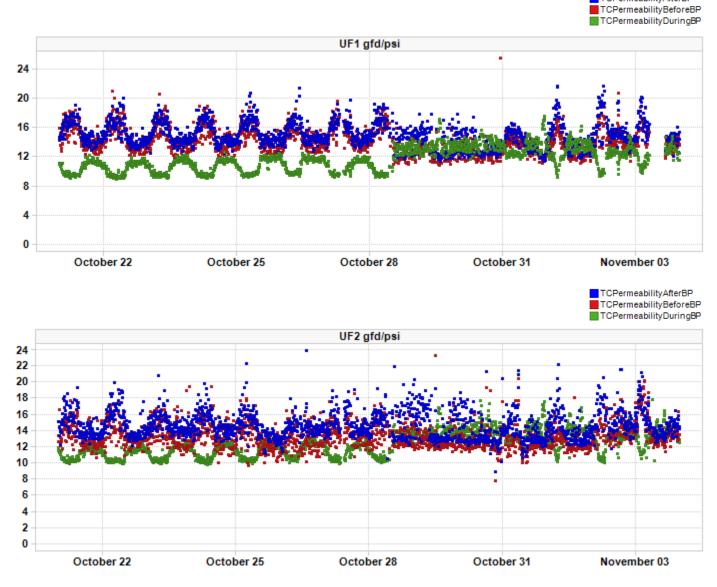
• UF4 had two major turbidity spikes in this reporting period on Oct 24 and 25. The peak values were 3.2 and 4.7 NTU respectively. For reference, excellent turbidity is less than 0.1 NTU, and good turbidity less than approximately 0.3 NTU



Acronyms:

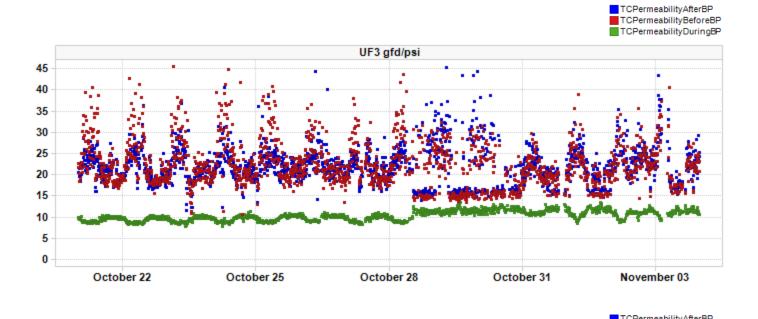
TC = temperature corrected, BBP = before backpulse, ABP = after backpulse, RC = recovery clean, MC = maintenance clean, TMP = trans membrane pressure

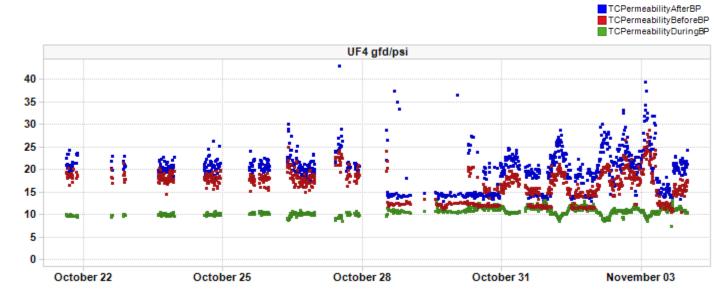
TC Permeability Trends By Train



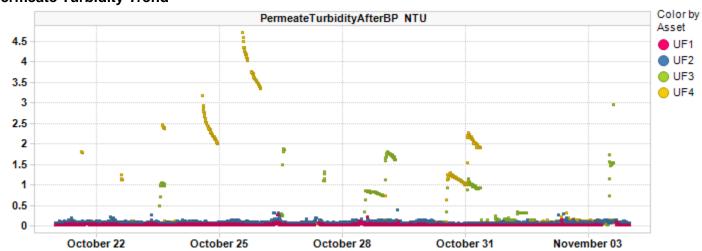
TCPermeabilityAfterBP





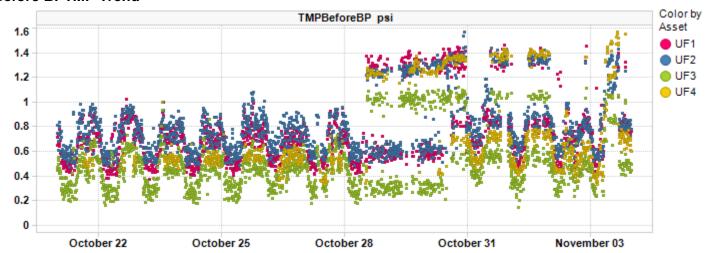


Permeate Turbidity Trend

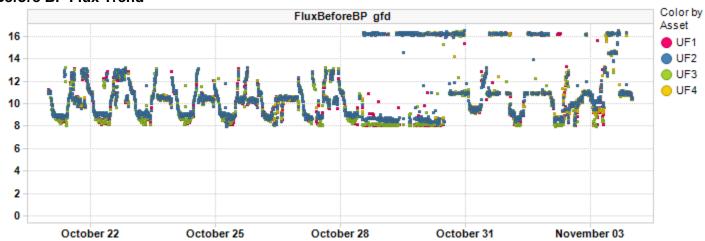




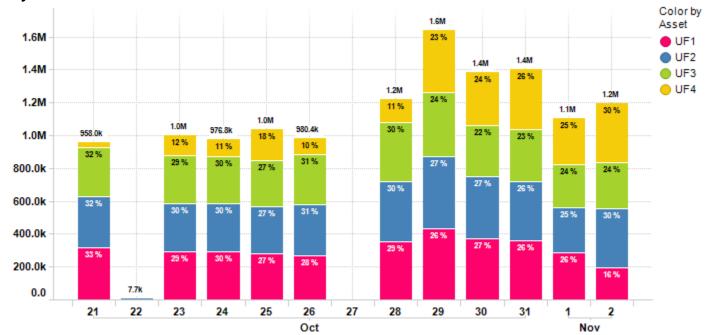
Before BPTMP Trend



Before BP Flux Trend



Daily Permeate Flow



Average Daily permeate flow from 10/21/2020 to 11/3/2020 is 1.1M gal with a maximum daily flow of 1.6M gal.

Asset Summary

KPI Parameters	Value/Change	UF1	UF2	UF3	UF4
FluxBeforeBP gfd	Value	10.79	11.03	10.78	11.67
	Change	5.45 %	6.55 %	4.98 %	9.00 %
FluxDuringBP gfd	Value	18.82	18.68	18.54	18.77
	Change	-0.12 %	-0.15 %	0.13 %	-0.42 %
PermeateTurbidityAfterBP NTU	Value	0.03	0.08	0.17	0.57
	Change	-89.76 %	-22.60 %	70.11 %	36.20 %
TCPermeabilityBeforeBP	Value	14.10	13.30	22.24	16.35
gfd/psi	Change	-2.91 %	-2.19 %	-2.57 %	-9.19 %
TMPBeforeBP psi	Value	0.75	0.81	0.51	0.76
	Change	11.88 %	12.05 %	13.04 %	25.59 %
TotalPermeateFlowDaily gal	Value	287.43k	306.36k	282.57k	198.74k
	Change	22.61 %	25.78 %	19.90 %	59.26 %

Plant Summary

KPI Parameters	Value/Change	UF Plant
TotalPermeateFlowDaily gal	Value	1.19M
	Change	28.42 %

Contract Expiry Date: (Empty)

For InSight technical assistance please email insight.src@suez.com or please call technical support at 1 866 271 5425 or 905 469 7723 and follow the prompts, if you require after hours assistance please contact the 24/7 Emergency number provided in your plant documentation. This email is a summary of issues identified during a manual review of InSight data from the time period above. This review is an analysis of data that is logged by InSight and identifies key plant performance issues determined from this data. This data review was not focused on minor data issues but on identifying possible existing and/or upcoming critical operational issues.

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LEWES BPW WWTP Biweekly InSight Report

Date: 11/18/2020

From: Erin Horocholyn - Suez Water Technologies & Solutions

To: Darrin Gordon, Austin Calaman, Inframark

cc: Matt Stapleford - Suez Water Technologies & Solutions

System Equipment

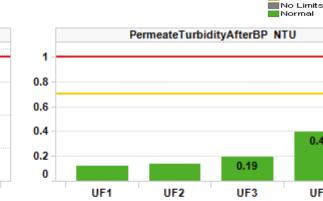
4 × ZW trains, each train consists of 4 - 500D cassettes, 120 modules x 370 sq. ft. per train (surface area 44,400 sq. ft. per

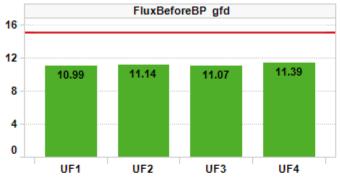
Replacement membranes installed Q1 2020 on trains UF3 and UF4

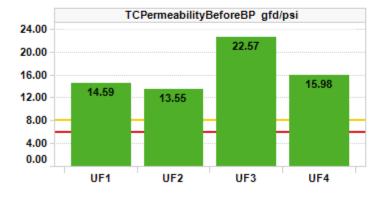
Cleaning Strategy

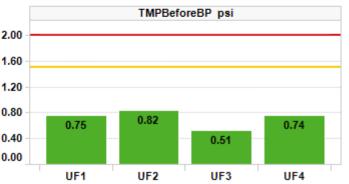
Recovery cleaning - 2 NaOCI @ 2000 ppm dose/1000 ppm soak per year, 1 Citric acid @ 2000 ppm per year Maintenance cleaning - 1 NaOCl per week @ 200 ppm, 1 Citric acid per week @ 2000 ppm

KPI Dashboard - Avg values through reporting period









Action Required Caution

0.40

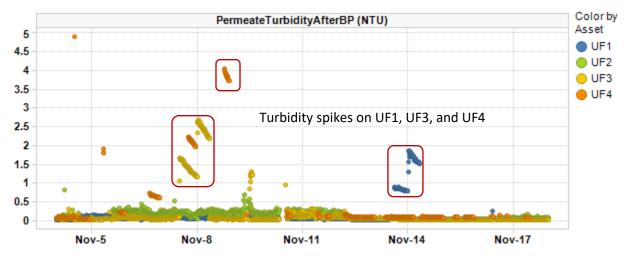
UF4



Plant Summary

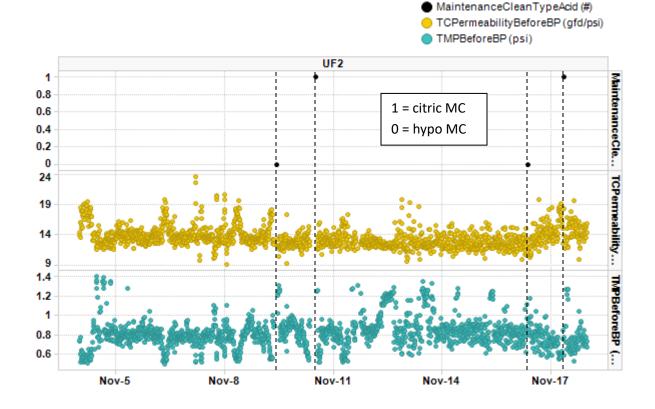
Overall, the plant operated well. There was high flux from Nov 11 - 17 impacting TMPs and permeabilities. All KPIs returned to normal levels once flow receded.

- Daily permeate production averaged 1.3 MGD during production days. Flow peaked on Nov 12 at 1.7 MGD. Average daily production by train was 332 kgal for UF1, 345 kgal for UF2, 342 kgal for UF3, and 130 kgal for UF4
- Flux averages ranged from 10.99 11.39 gfd. Even flux between trains is beneficial for even wear across the membrane trains over time. High flux (14 16 gfd) was hit in this reporting period on Nov 4, and Nov 11 17, temporarily causing TMP to rise and permeabilities to decrease
- Average TMP was good on all trains. UF1 and UF2 averaged 0.75 and 0.82 psi, while UF3 and UF4 averaged 0.51 and 0.74 psi. From Nov 11 15 TMPs rose due to high flux on UF1, UF2, and UF4 especially. UF3 also saw a TMP rise, though it peaked around 1.0 psi versus around 1.3 1.5 psi on the other trains over these dates
- TC permeability BBP was good on all trains, and excellent on trains UF3 and UF4. UF1 and UF2 averaged 14.59 and 13.55 gfd/psi respectively. UF3 and UF4 averaged 22.57 and 15.98 gfd/psi respectively. For reference, TC permeability BBP is considered good above 8 gfd/psi
- Permeate turbidity ABP was above 0.10 NTU on all trains. UF1 averaged 0.12 (+74%) NTU, UF2 averaged 0.14 NTU, UF3 averaged 0.19 NTU, and UF4 averaged 0.10 NTU (-43%). For reference, excellent turbidity is less than 0.1 NTU, and good turbidity less than approximately 0.3 NTU. UF1 had a turbidity spike from Nov 13 14 peaking at 1.83 NTU. UF3 spiked from Nov 7 8 peaking at 2.69 NTU. UF4 spiked from Nov 6 8 peaking at 4.04 NTU





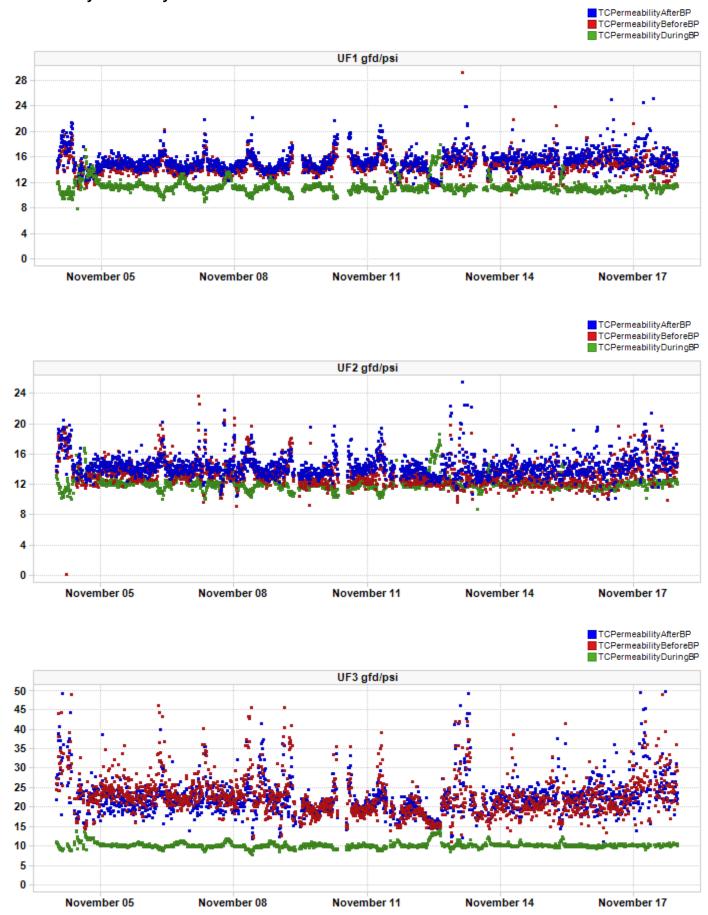
- Maintenance clean (MC) design specifies 1 hypo/chlorine MC and 1 citric acid MC per week, per train
 - o UF1, UF2, and UF4 had 4 MCs (2 hypo, 2 citric) over the past 2 weeks, meeting design
 - o UF3 had 5 MCs (3 hypo, 2 citric) over the past 2 weeks, exceeding design which is fine
 - o In the following plot, the black dots indicate when an MC occurred (1 = citric, 0 = hypo). UF2 is presented below, and other UF trains are comparable. Zooming into the data, there is no large performance impact on TMP or permeability for individual MCs, either hypo or citric. This is normal for plants with low baseline TMP. Even without a decrease in TMP (and the resulting rise in permeability), regular MCs are beneficial for train longevity, as MCs will still remove thin layers of foulant which can turn irreversible over time and shorten membrane lifespan. Citric MCs are specifically important for this function as inorganic foulant layers are more prone to becoming irreversible over time than organic foulant layers. However regular hypo MCs are also important so they can remove biological growth early, as established bacterial/fungal/algal colonies are harder to remove from the fibers to restore performance
 - MC and RC optimization usually occurs after the first year of operation for new membranes so
 there is a historical baseline for data-based decisions. For the two new membrane trains, it's
 recommended to leave the cleaning at default frequency for at least the first year. The older
 two trains can be modified if desired, such as changing MC duration and frequency first, then
 looking into potential changes in temperature, concentration, and pH



Acronyms:

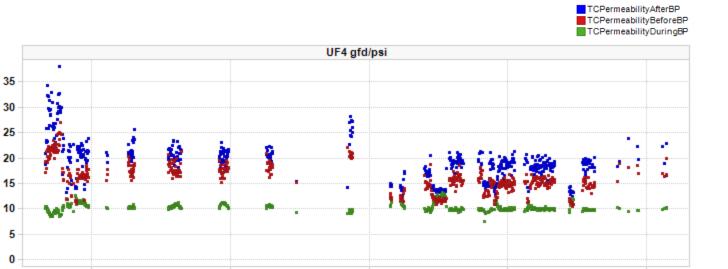
TC = temperature corrected, BBP = before backpulse, ABP = after backpulse, RC = recovery clean, MC = maintenance clean, TMP = trans membrane pressure

TC Permeability Trends By Train



November 08





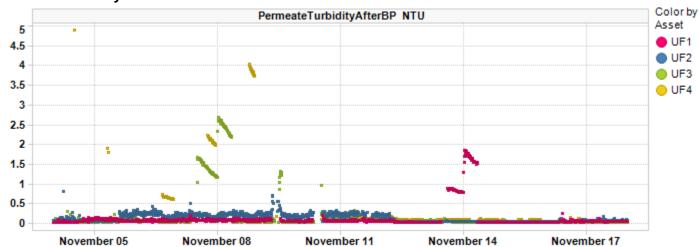
November 11

November 14

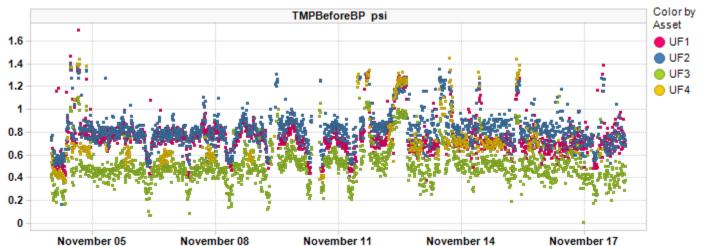
November 17

Permeate Turbidity Trend

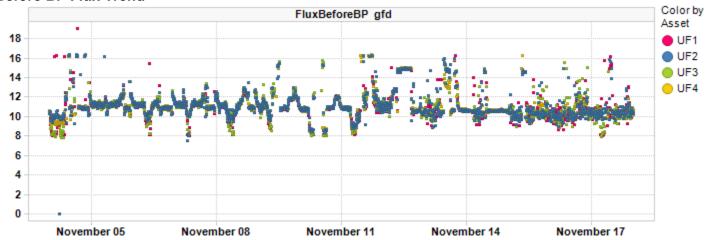
November 05



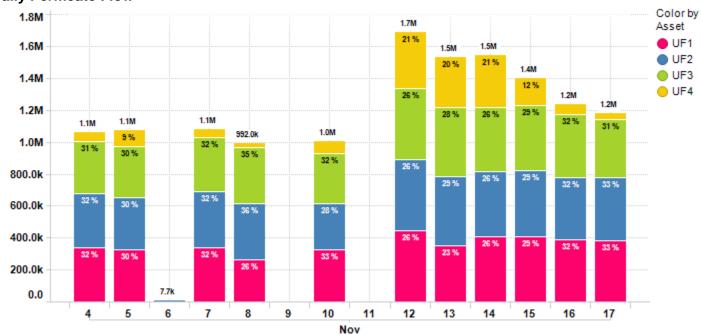
Before BPTMP Trend



Before BP Flux Trend



Daily Permeate Flow



Average Daily permeate flow from 11/4/2020 to 11/17/2020 is 1.1M gal with a maximum daily flow of 1.7M gal.

Asset Summary

KPI Parameters	Value/Change	UF1	UF2	UF3	UF4
FluxBeforeBP gfd	Value	10.99	11.14	11.07	11.39
	Change	1.82 %	0.97 %	2.60 %	-2.45 %
FluxDuringBP gfd	Value	18.86	18.66	18.57	18.72
	Change	0.21 %	-0.13 %	0.16 %	-0.24 %
PermeateTurbidityAfterBP NTU	Value	0.12	0.14	0.19	0.40
	Change	74.09 %	44.14 %	9.83 %	-42.75 %
TCPermeabilityBeforeBP	Value	14.59	13.55	22.57	15.98
gfd/psi	Change	3.34 %	1.89 %	1.43 %	-2.29 %
TMPBeforeBP psi	Value	0.75	0.82	0.51	0.74
	Change	-0.50 %	1.09 %	0.34 %	-2.39 %
TotalPermeateFlowDaily gal	Value	332.06k	344.93k	342.23k	129.94k
	Change	12.97 %	10.86 %	18.08 %	-56.37 %

Plant Summary

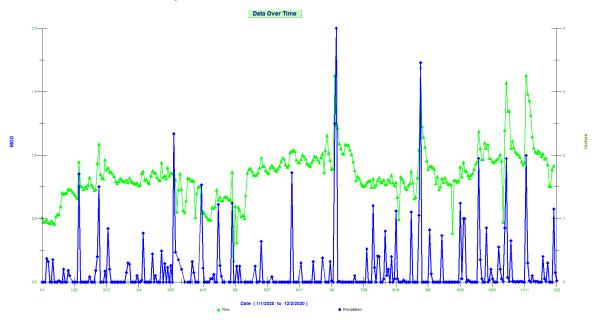
KPI Parameters	Value/Change	UF Plant
TotalPermeateFlowDaily gal	Value	1.19M
	Change	-0.27 %

Contract Expiry Date: (Empty)

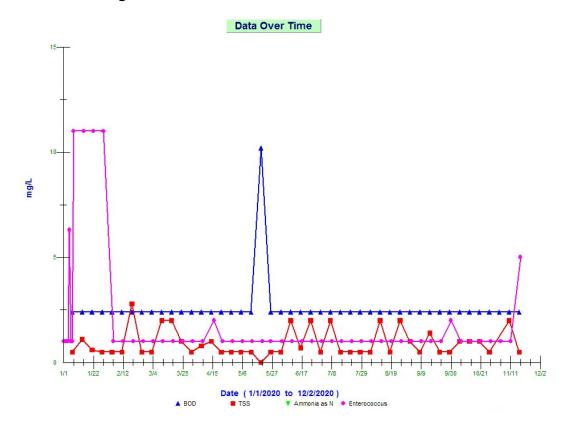
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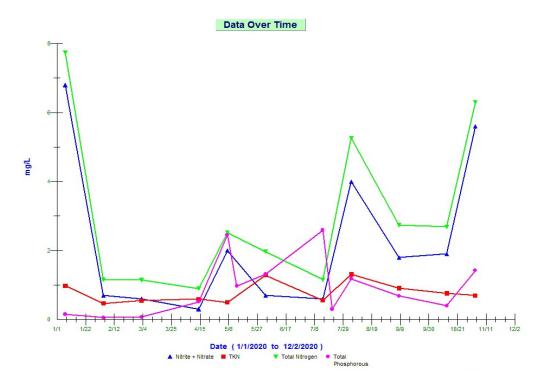
TrendsInfluent vs Precipitation Trend Year to Date



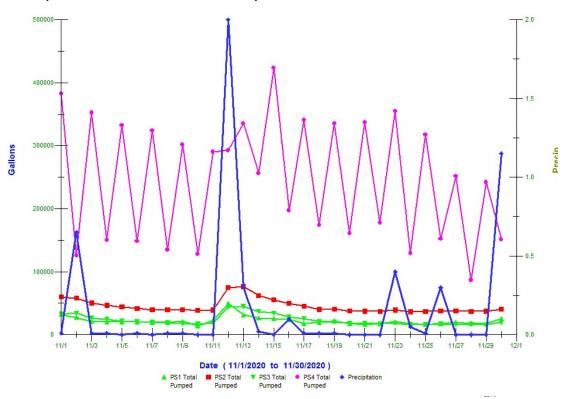
Effluent Biological Contaminants Trend Year to Date

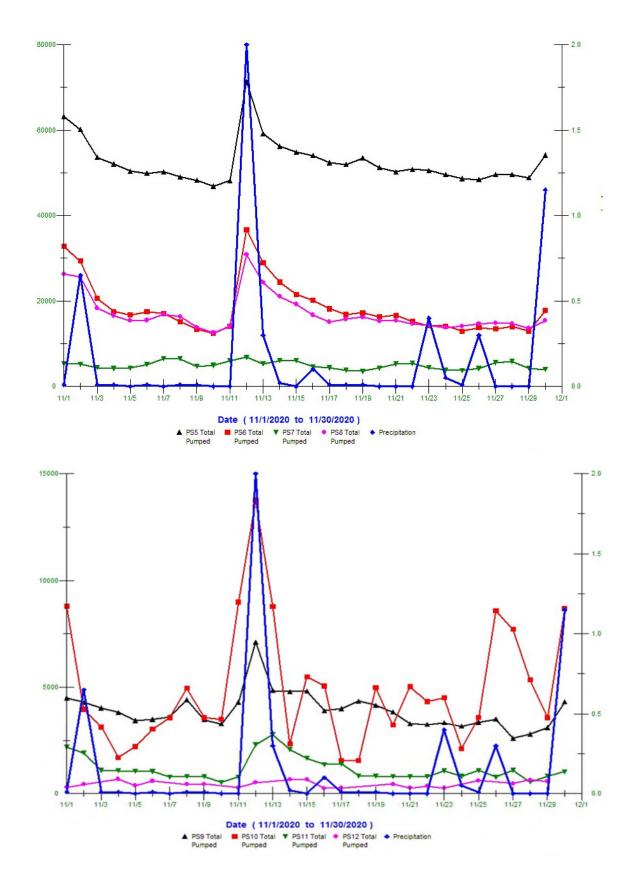


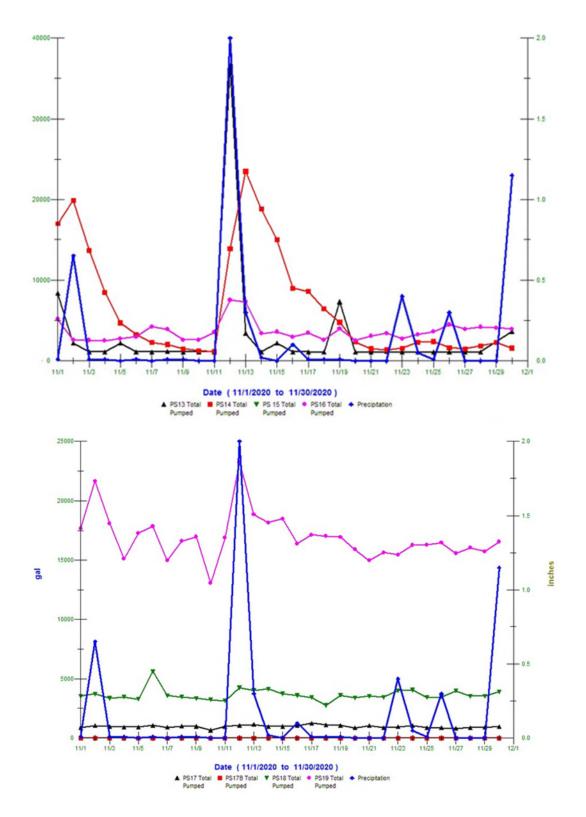
Effluent Nutrient Trends Year to Date

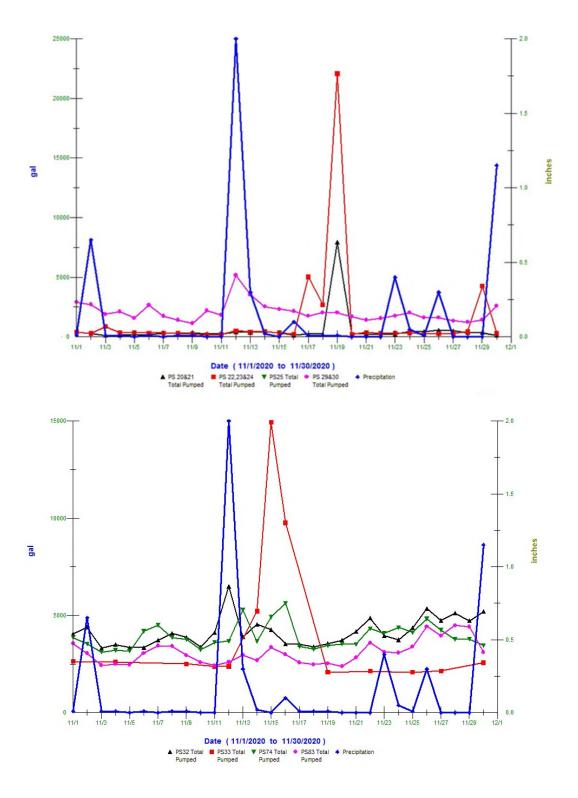


Pump Station Trends vs Precipitation November









Maintenance & Repair

- Replaced CV-3537-3 solenoid valve Membrane Train 3 turbidimeter
- Torqued all MBR air piping couplings to manufacture's specifications
- Replaced AV-3494-3 air relief valve Membrane Train 3
- Received a report of a high level at pump station on Monroe St. Alarm not working. Freemire & Associates onsite to diagnose and repair issue.
- Harry Caswell onsite at PS 12 to repair force main.
- Keystone onsite to replace PLC in Filter Control Room
- PS 12 pump sent to Hills for evaluation. Repair was not cost effective. Staff received approval from BPW to purchase a new pump.
- Replaced the Anoxic Mixer on side 2 with a spare due to a seal fail alarm. Mixer sent to Hills for repair evaluation.
- Replaced failed Digester membrane recirculation pump with a spare. The spare pump failed the next day. Installed a utility submersible pump until pumps are repaired.

Afterhours Alarm Callouts

•	10/31/2020	Low Flow Back-pulse Train 3
•	11/3/2020	Train 3 low flow shutdown
•	11/4/2020	Train 3 low flow shutdown
•	11/13/2020	High EQ Level

11/26/2020 High Level Trains 1,2,3,4
11/28/2020 Train 1 High Turbidity

11/29/2020 Process Blower C Low Flow

Financial Update

Caps	Monthly Cap	November 2020	Contract Year to Date	Remaining Balance
Maintenance Cap	\$7,500	\$ 8,500	\$ 8,500	\$81,500

Maintenance Expenditures

Vendor	Description	Expense
Harry Caswell, Inc.	Repair to LEWES Pump Station #12. Sawcut 8x8 paving, remove, excavate down to force main. Replace up to 6' force main and one 90. Backfill replace paving and camera existing force main.	\$8,500

Health & Safety

- Inframark monthly training presentations Medical and Exposure Records & Slips, Trips and Falls.
- A trainer from United Rental was brought into to train and certify staff on proper operation of the forklift and skid loader at the plant.
- A trainer from Delaware Safety Council was brought into train and certify staff on Confined Space Entry.
- Through the end of November, Inframark Lewes employees have worked 43 days without a lost time injury.

Personnel

Name	Title	
Jerry Shupe Jr.	Regional VP	
Michael Wolgemuth	Regional Manager	
Jeff Deats	Project Manager	
Paul Gunderson	Lead Operator	
David Sylvester	Operator II	
Nick Karpin	Maintenance Technician II	
Tom Callahan	Regional Safety Advisor	

PUMP	STA	TION	196
Nov-a	20	PS 196	
		METER	24 HOUR
		READING	FLOW
SUN	1	93143590	0.329180
MON	2	93472770	0.197930
TUE	3	93670700	0.332070
WED	4	94002770	0.328190
THUR	5	94330960	0.331700
FRI	6	94662660	0.326870
SAT	7	94989530	0.334760
SUN	8	95324290	0.335450
MON	9	95659740	0.328650
TUE	10	95988390	0.317730
WED	11	96306120	0.247490
THUR	12	96553610	0.173410
FRI	13	96727020	0.368760
SAT	14	97095780	0.442750
SUN	15	97538530	0.352930
MON	16	97891460	0.341970
TUE	17	98233430	0.321420
WED	18	98554850	0.345970
THUR	19	98900820	0.322830
FRI	20	99223650	0.354220
SAT	21	99577870	0.366900
SUN	22	99944770	0.306739
MON	23	301216	0.351767
TUE	24	652983	0.360809
WED	25	1013792	0.367754
THUR	26	1381546	0.282756
FRI	27	1664302	0.127318
SAT	28	1791620	0.131571
SUN	29	1923191	0.132481
MON	30	2055672	0.142337
		2198009	
TOT 4			9.004712
TOTA	1		9.004/12
COUN	i		0.300157
AVERA	90		0.300137
WINIW	UM		0.127318
MAXIM	UM		0.442750

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

90

DATA ENTRY COMPLETE REPORT SUBMITTED BY STATUS OF SUBMISSION REPORT DESIGNATOR 2020 10 31 DISCHARGE NUMBER

MONITORING PERIOD

PERMIT NUMBER DE0021512

PERMITTEE NAME/ADDRESS (include Facility Name/Location if different);

116 American Legion Road, Lewes, DE 19958 US Howard Seymour Water Reclamation Plant

> ADDRESS FACILITY

NAME

Б

2020 10 01

FROM

116 American Legion Road, Lewes, DE 19958 US Howard Seymour Water Redamation Plant

LOCATION

Submitted for Signature 11/23/2020

jmarion@tuiwater.com * DRAFT COPY *

	PARAMETER		<u>ā</u>	QUANTI	TITY OR LOADING		9	QUALITY OR CONCENTRATION	ENTRATION		8,9 E 0	FREQUENCY OF ANALYSIS	SAMPLETYPE
#				AVERAGE	MAXIMUM	UNITS	MINIMOM	AVERAGE	MAXIMUM	UNITS			
1 ,7	Flow	SAMPLE MEASUREMENT		0,9757	1.457	Mil Gal/Day				ł	0	66/66	RCOTOT
	Gross Effluent (50050)	PERMIT REQUIREMENT		No Limit Monitoring Reqd	No Limit Monitoring Read	Mil Gal/Day	No Monitoring Required	No Monitoring Required	No Monitoring Required	1	1	66/66	RCOTOT
12	Dissolved oxygen (DO)	SAMPLE MEASUREMENT				1	3.02		4.76	mg/l	0	66/66	Imersion
	Gross Effluent (00300)	PERMIT REQUIREMENT		No Manitoring Required	No Monitoring Required	1	No Limit Monitoring Read	No Monitoring Required	No Limit Monitoring Reqd	mg/l	1	56/66	Imersion
1/3	Нď	SAMPLE MEASUREMENT				ŧ	7.2		7.6	Std pH Units	0	01/01	Grab
	Gross Efficent (00400) PERMIT REQUIREMENT	PERMIT REQUIREMENT		No Monitoring Required	No Monitoring Required	•	9	No Monitoring Required	6	Std pH Units	1	01/01	Grab
1/4	Enterococcus	SAMPLE MEASUREMENT	consider Gibbert			ł		I>	۲	CFU/100 ML	0	01/02	Grab
	Grass Effluent (31639) PERMIT REQUIREMENT	PERMIT REQUIREMENT		No Monitoring Required	No Monitoring Required		No Monitoring Required	10	104	CFU/100 ML	,	70/10	Grab
1/5	воре	SAMPLE MEASUREMENT	•	<2.47	<21,94	lbs/Day		<2.4	<2.4	mg/l	0	01/02	Composite 24
	Gross Efficient (00310) PERMIT REQUIREMENT	PERMIT REQUIREMENT		188	288	lbs/Day	No Monitoring Required	15	23	J/gm	1	70/107	Composite 24
1/6	BODS	SAMPLE MEASUREMENT				I		201	252	l/gm	0	01/02	Composite 24
	Raw Sewage (00310) PERMIT REQUIREMENT	PERMIT REQUIREMENT		No Monitoring Required	No Monitoring Required	l	No Monitoring Required	No Limit Monitoring Read	No Limit Monitoring Reqd	mg/l		01/30	Composite 24
7	TSS	SAMPLE MEASUREMENT		<0.75	8	lbs/Day		<0.75	₽	l/gm	0	01/07	Composite 24
	Gross Effluent (00530) PERMIT REQUIREMENT	PERMIT REQUIREMENT		188	288	lbs/Day	No Monitoring Required	15	23	mg/l	i de la composition della comp	01/07	Composite 24
ខ្ល	COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachme	ANY VIOLATIONS	S (Ref	ference all attachm	nents here)								

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY (ATTACH DIGITAL SIG	MATTACH DIGITAL SIG
	PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INOUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE	
	INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF WINDWILDING AND BEITER TRUE, ACCURATE SIGNATURE OF PIF	SIGNATURE OF PR
	AND COMPLETE, I AM AWARE, ITAL INDIE, AND SIGNIFICANT TEXAL IES FOR SUBMITTING FALSE INTURNATION. INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.	OFFICER OR AL

	L		Σ
TELEPHONE			
MY (ATTACH DIGITAL SIGNATURE RECEIPT FROM		SIGNATURE OF PRINCIPAL EXECUTIVE	OFFICER OR AUTHORIZED AGENT
¥ C	ጅ	RATE.	

ĕ YEAR

DAY

DATE

NDI (No Data Indicator) Reasons: 8 - No Sample (Other); 9 - No Sample (Monitoring Not Required this Monitoring Period); B - Not Detected; C - No Sample (No Discharge) DNREC DISCHARGE MONITORING REPORT - DMR1 [EPA FORM 3320-1 (Rev. 10-96) USED AS TEMPLATE]. 2016.

TYPED OR PRINTED

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12/2/2020 7:23 AM

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

* DRAFT COPY ** ⋖

imarion@tuiwater.com 11/23/2020 REPORT DESIGNATOR

Submitted for Signature

STATUS OF SUBMISSION DATA ENTRY COMPLETE REPORT SUBMITTED BY DISCHARGE NUMBER

MONITORING PERIOD

PERMIT NUMBER

DE0021512

PERMITTEE NAME/ADDRESS (include Facility Name/Location if different):

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2020 10 01

FROM

116 American Legion Road, Lewes, DE 19958 US Howard Seymour Water Reclamation Plant 116 American Legion Road, Lewes, DE 19958 US Howard Seymour Water Reclamation Plant

PARAMETER

LOCATION

ADDRESS FACILITY

NAME

QUANTITY OR LOADING

FREQUENCY OF ANALYSIS

5 전

SAMPLETYPE

Composite 24

01/07 01/30

0 1

UNITS mg/ mg/l

MAXIMUM 693554.4

AVERAGE 55740.26

MINIMOM

UNITS ı 1

MAXIMUM

AVERAGE

SAMPLE MEASUREMENT PERMIT REQUIREMENT

2SST

Raw Sewage (00530)

Composite 24

Composite 24

01/07

0 1

'n mg/

2.69

2.69

lbs/Day

24.59

21.89

SAMPLE MEASUREMENT

Total Nitrogen

272

PERMIT REQUIREMENT

Gross Effluent (00600)

No Limit | Monitoring Read

No Limit | | Monitoring Read

No Monitoring Required

No Monitoring Required

No Monitoring Required

Composite 24

01/30

No Limit | Monitoring Read

No Monitoring Required

No Limit | Monitoring Reqd

0.4 ∞

lbs/Day lbs/Day

3.66

3.25 8

55

Ň

No Monitoring Required

Ibs/Day

Composite 24

Composite 24

QUALITY OR CONCENTRATION 2020 10 31

01/30 01/30 0 - 1 ľĝu √gш No Limit | Monitoring Regd 9.4

> No Limit | Monitoring Read COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

PERMIT REQUIREMENT

Gross Effluent (00565)

SAMPLE MEASUREMENT

Phosphorus, Total

23

(ATTACH DIGITAL SIGNATURE RECEIPT FROM CROMERR)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

** DRAFT COPY **

ND! (No Data Indicator) Reasons: 8 - No Sample (Other); 9 - No Sample (Monitoring Not Required this Monitoring Period); B - Not Detected; C - No Sample (No Discharge)

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

TYPED OR PRINTED

DNREC DISCHARGE MONITORING REPORT - DMR1 [EPA FORM 3320-1 (Rev. 10-96) USED AS TEMPLATE], 2016.

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PAGE 2 OF 2

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YEAR

DATE

TELEPHONE