

**WHITE MARSH**  
ENVIRONMENTAL SYSTEMS, INC.  
A Middlesex Water Company Affiliate

Mr. Darrin Gordon  
General Manager  
Lewes Board of Public Works  
107 Franklin Avenue  
Lewes, DE 19958

**Subject: Monthly Report,**

Attached is a summary of the Operations and Maintenance activities of the Board's lift Wastewater Treatment Plant and Lift Stations for the month of September, 2019. Please direct any questions to my attention. Thank you.

Sincerely,



Mike Evans  
District Manager  
Tidewater Utilities, Inc.

I. Effluent Quality and Compliance

September 2019 Effluent Testing

Sample Data	Total Nitrogen	Total Phosphorus	BOD	TSS	Enterococcus
Average:	2.41 mg/L	0.88 mg/L	<2.40 mg/L	<0.75mg/L	<1.0 COL.
Maximum:	N/A	N/A	<2.40 mg/L	<1.00 mg/L	<1.0 COL.
Permit Limit:	8 mg /L average	2 mg /L average	15 mg/L average	15 mg/L average	10 Col. average
			23 mg/L MAX	23 mg/l MAX	

Maximum daily flow 0.8040

Monthly average flow 0.6518

II. Activities

STATION MAINTENANCE PERFORMED

- 9/3/2019 Station #74 - Five new floats installed
- 9/5/19 Station #4 - Generator fuel leak. BPW is aware and contacting their vendor. (Standing by)
- 9/9/19 Station #6 - Replaced alternating relay
- 9/11/19 Station #6 - Replaced both starters
- 9/13/19 Station #6 - Pulled and replaced #2 pump
- 9/17/19 Stations #11 - High level in pump station (needs cleaning)
- 9/18/19 Station #7 – Replaced pump run and alarm floats
- 9/19/19 Station #11 - BPW cleaned lift station #11. Thank You
- 9/27/19 Station #8 – Investigated pump cavitation

MAINTENANCE PERFORMED

- 9/9/19 - Pump out onsite #3 electrical manhole
- 9/9/19 - Repaired airline in process building
- Changed oil, belts, greased spare blower to standby flow equalizations tank in preparation for train cleaning.
- 9/10/19 - BPW replaced failed yard hydrant at treatment plant. THANKS
- TUI Maintenance replaced steps to old sludge building.
- Hosed and cleaned trains #1 and #2
- Decanted standby flow equalization tank
- 9/16/19 - Pulled out grit pump and sent to Hill's for repair.
- 9/19/19 - Replaced timer relay on 2MM screen
- 9/23/19 - CDI on site and cleaned standby flow equalization tank. (104,700 gallons)
- 9/30/19 - Pumped out #3 and #4 onsite electrical manholes.
- 9/13/19 - Initiated pumping down train #1 for cleaning, County flow isolated.
- 9/17/19 - CES on site cleaning train #1.
- 9/19/19 - CES completed cleaning of train #1 followed by Breakwater completing diffuser cleaning and repair project.
- 9/24/19 - Installed new sump pump in standby in flow equalization tank.

## **SAFETY INFORMATION**

No workplace injuries.

PPE inspected.

Eyewash and fire extinguisher inspections conducted.

\*\*Caustic lines in chemical building, process building and in the retaining area of process building have deteriorated.

Crystallization is occurring causing a safety hazard. Leaking Caustic is seeping through the retaining wall in the process building as well. Options are currently being discussed between BPW and WMES.

## **ADDITIONAL INFORMATION**

The Bobcat used to move sludge is out for service and we may need BPW's assistance in cleaning of beds.



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

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

NAME: Howard Seymour Water Reclamation Plant  
 ADDRESS: 116 American Legion Road, Lewes, DE 19958 US  
 FACILITY: Howard Seymour Water Reclamation Plant  
 LOCATION: 116 American Legion Road, Lewes, DE 19958 US

DE021512 PERMIT NUMBER  
 001 DISCHARGE NUMBER  
 REPORT DESIGNATOR: A  
 DATA ENTRY COMPLETE: 10/8/2019  
 REPORT SUBMITTED BY: davaveed69  
 STATUS OF SUBMISSION: Submitted for Signature

MONITORING PERIOD

FROM: 2019 09 01 TO: 2019 09 30

#	PARAMETER	NDI	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
			AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
1/1	Flow		0.6518	0.804	Mil Gal/Day				0	99/99	RCOTOT
	Gross Effluent (50050)	-	No Limit   Monitoring Req'd	No Limit   Monitoring Req'd	Mil Gal/Day	No Monitoring Required	No Monitoring Required	No Monitoring Required	-	98/99	RCOTOT
1/2	Dissolved oxygen (DO)				--	0.32	5.6	mg/l	0	99/99	Imersion
	Gross Effluent (00300)	-	No Monitoring Required	No Monitoring Required	--	No Limit   Monitoring Req'd	No Limit   Monitoring Req'd	mg/l	-	99/99	Imersion
1/3	pH				--	7.51	7.8	Std pH Units	0	01/01	Grab
	Gross Effluent (00400)	-	No Monitoring Required	No Monitoring Required	--	6	9	Std pH Units	-	01/01	Grab
1/4	Enterococcus				--		<1	CFU/100 ML	0	01/07	Grab
	Gross Effluent (31639)	-	No Monitoring Required	No Monitoring Required	--	No Monitoring Required	104	CFU/100 ML	-	01/07	Grab
1/5	BOD5		<12.62	<15.3	lbs/Day		<2.4	mg/l	0	01/07	Composite 24
	Gross Effluent (00310)	-	188	288	lbs/Day	No Monitoring Required	23	mg/l	-	01/07	Composite 24
1/6	BOD5				--		177	mg/l	0	01/07	Composite 24
	Raw Sewage (00310)	-	No Monitoring Required	No Monitoring Required	--	No Monitoring Required	No Limit   Monitoring Req'd	mg/l	-	01/30	Composite 24
1/7	TSS		<3.94	<6.38	lbs/Day		<0.75	mg/l	0	01/07	Composite 24
	Gross Effluent (00630)	-	188	288	lbs/Day	No Monitoring Required	23	mg/l	-	01/07	Composite 24

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY PERSONAL SUPERVISION AND CONTROL AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT ANY FALSIFICATION OF THIS INFORMATION IS A VIOLATION OF FEDERAL AND STATE LAWS AND MAY BE PROSECUTED. I AM ALSO AWARE THAT ANY FALSIFICATION OF THIS INFORMATION IS A VIOLATION OF FEDERAL AND STATE LAWS AND MAY BE PROSECUTED. I AM ALSO AWARE THAT ANY FALSIFICATION OF THIS INFORMATION IS A VIOLATION OF FEDERAL AND STATE LAWS AND MAY BE PROSECUTED.

(ATTACH DIGITAL SIGNATURE RECEIPT FROM CROMERR)  
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE  
 YEAR MO DAY

TYPED OR PRINTED



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

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

NAME: Howard Seymour Water Reclamation Plant  
 ADDRESS: 116 American Legion Road, Lewes, DE 19958 US  
 FACILITY: Howard Seymour Water Reclamation Plant  
 LOCATION: 116 American Legion Road, Lewes, DE 19958 US

DE0021512  
 PERMIT NUMBER

001  
 DISCHARGE NUMBER

REPORT DESIGNATOR: A  
 DATA ENTRY COMPLETE: 10/8/2019  
 REPORT SUBMITTED BY: daveweed69  
 STATUS OF SUBMISSION: Submitted for Signature

MONITORING PERIOD

FROM: 2019 09 01 TO: 2019 09 30

#	PARAMETER	NDI	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
			AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
2/1	TSS				--		185	432	0	01/07	Composite 24
	Raw Sewage (00630)	-	No Monitoring Required	No Monitoring Required	--	No Monitoring Required	No Limit   Monitoring Req'd	No Limit   Monitoring Req'd	--	01/30	Composite 24
2/2	Total Nitrogen		13.1	14.95	lbs/Day		2.41	2.41	0	01/30	Composite 24
	Gross Effluent (00600)	-	100	No Limit   Monitoring Req'd	lbs/Day		8	No Limit   Monitoring Req'd	--	01/30	Composite 24
2/3	Phosphorus, Total		4.78	5.46	lbs/Day		0.88	0.88	0	01/30	Composite 24
	Gross Effluent (00665)	-	25	No Limit   Monitoring Req'd	lbs/Day		2	No Limit   Monitoring Req'd	--	01/30	Composite 24

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TYPED OR PRINTED

(ATTACH DIGITAL SIGNATURE RECEIPT FROM CROWTERRY)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

YEAR MONTH DAY

MONTHLY OPERATIONS REPORT

Tidewater Utilities

SITE: LEWES WWTF

Page 2 of 2

September

2019

SITE: LEWES

2019.0000

September

September

FINAL EFFLUENT OUTFALL 001										2019				INFLUENT						
DATE	DAY	BOD5 mg/l	BOD5 lbs/day	TSS mg/l	TSS lbs/day	ENTEROC. Col/100 ml	TOTAL P mg/l	TOTAL P lbs/day	TOTAL N mg/l	TOTAL N lbs/day	AMMONIA AS N mg/l	NITRATE+NITRITE AS N mg/l	TKN mg/l	TKN lbs/day	DATE	DAY	EFF FLOW MGD	BOD5 mg/l	TSS mg/l	
1	S														1	S	0.7808			
2	M														2	M	0.7209			
3	T	< 2.40	< 14.89	< 0.50	< 3.10		0.88	5.46	2.41	14.95	1.07	6.64	1.88	11.66	3	T	0.7147	322	432.0	2575
4	W					< 1									4	W	0.7564			
5	T														5	T	0.7372			
6	F														6	F	0.8234			
7	S														7	S	0.7120			
8	S														8	S	0.6468			
9	M														9	M	0.6756			
10	T	< 2.40	< 15.30	< 1.00	< 6.38										10	T	0.7340	100	70.0	429
11	W					< 1									11	W	0.7446			
12	T														12	T	0.7717			
13	F														13	F	0.5684			
14	S														14	S	0.5308			
15	S														15	S	0.5118			
16	M														16	M	0.4943			
17	T	< 2.40	< 9.89	< 1.00	< 4.12										17	T	0.4918	95	58.0	238
18	W					< 1									18	W	0.4829			
19	T														19	T	0.4969			
20	F														20	F	0.5140			
21	S														21	S	0.5141			
22	S														22	S	0.4908			
23	M														23	M	0.4769			
24	T	< 2.40	< 10.39	< 0.50	< 2.16										24	T	0.4579	192	180.0	687
25	W					< 1									25	W	0.4613			
26	T														26	T	0.4777			
27	F														27	F	0.4885			
28	S														28	S	0.5076			
29	S														29	S	0.4971			
30	M														30	M	0.4595			
TOTAL															TOTAL		17.7404			
AVERAGE		< 2.40	< 12.62	< 0.75	< 3.94	< 1.0	0.88	4.78	2.41	13.10	1.07	6.64	1.88	11.66	AVERAGE		0.5913	177	185.0	982
MAXIMUM		< 2.40	< 15.30	< 1.00	< 6.38	< 1.0	0.88	5.46	2.41	14.95	1.07	6.64	1.88	11.66	MAXIMUM		0.8234	322	432.0	2575
MINIMUM		< 2.40	< 9.89	< 0.50	< 2.16	< 1.0	0.88	5.46	2.41	14.95	1.07	6.64	1.88	11.66	MINIMUM		0.4579	95	58.0	238

# Submission Receipt

**Copy of Record: 48105 Confirmation ID: r201910848105**

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Site: Howard Seymour Water Reclamation Plant

Site ID: DE0021512

Submission: Discharge Monitoring Report for DE0021512 Howard Seymour Water Reclamation Plant Outfall: 001, September, 2019

File Name: 20199-2046-60749445

File Type: .pdf

Report: DMR

Status: Signed

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Hash of Data Document:

6316bbca383ac4d403970bff642b00afc74d0dea3574db943f1b68dacf8c4bfe

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Data Entry Completed: 10/8/2019 8:51 AM

By: David Weed (daveweed69)

E-Mail of Submitter: dweed@tuiwater.com

From: 208.87.234.202

Signed: 10/8/2019 8:52 AM

By: Ronald Griffith  
(rgriffith@tuiwater.com)

E-Mail of Signator: rgriffith@tuiwater.com

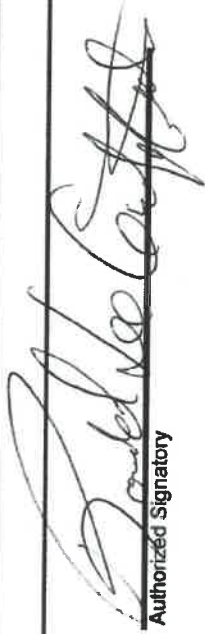
From: 208.87.236.201

Token Used When Signed: GJC/96NFSaN4Li0FEtRrq9wRX3/oL2D+p1shH3mm0KM=

# LEWES WWTF NUTRIENT OFFSET REPORT

MONTH	Days	Average Monthly Flow	Monthly Average TN	Total Monthly TN Discharged	TN Based 16.9 lbs Manure Offset Required		Poultry Manure Relocated		Poultry Manure Offset Balance	Monthly Average TP	Total Monthly TP Discharged	TP Based 286 lbs Manure Offset Required
					MGD	mg/L	Lbs.	Tons				
Carry Over												
January	31	0.8809	7.05	1605.62	27135.02	-	2,712,733.35	2,712,733.35	0.42	95.65	27261.42	
February	28	0.9414	2.01	441.87	7467.60	-	2,985,471.93	2,985,471.93	0.17	37.37	10651.04	
March	31	1.0188	6.26	1645.65	27811.49	-	2,674,820.89	2,674,820.89	0.39	102.52	28219.50	
April	30	0.8032	3.35	673.22	11377.39	-	2,645,601.39	2,645,601.39	0.54	108.52	30927.84	
May	31	0.7462	5.21	1005.13	16986.64	-	2,614,673.55	2,614,673.55	1.46	281.67	80275.07	
June	30	0.7242	3.15	570.76	9645.91	-	2,534,398.47	2,534,398.47	0.73	132.27	37697.59	
July	31	0.8390	4.05	878.51	14846.75	-	2,496,700.89	2,496,700.89	1.87	405.63	115604.88	
August	31	0.8460	2.86	625.55	10571.85	-	2,381,096.01	2,381,096.01	0.75	164.92	47001.78	
September	30	0.6518	2.41	393.05	6642.55	-	2,334,094.23	2,334,094.23	0.88	143.52	40903.20	
October	31			0.00	0.00	-	2,293,191.03	2,293,191.03		0.00	0.00	
November	30			0.00	0.00	-	2,293,191.03	2,293,191.03		0.00	0.00	
December	31			0.00	0.00	-	2,293,191.03	2,293,191.03		0.00	0.00	
<b>Year Balance</b>								<b>2,293,191.03</b>				

Comments:

  
 Authorized Signatory

10/1/19  
 DATE