

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

September 13, 2018

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

**Subject: Monthly Report, August 2018**

Attached is a summary of the Operations and Maintenance activities at the Board's lift stations and wastewater treatment plant for the month of August. Please direct any questions to my attention. Thank you.

Sincerely,



Mike Evans  
District Manager  
Tidewater Utilities, Inc.

**I. Effluent Quality and Compliance**

- Discharge Monitoring Report submitted to DNREC with 100% compliance for the month.

**August 2018 Effluent Testing**

Sample Data	Total Nitrogen	Total Phosphorus	BOD	TSS	Enterococcus
Average:	4.85 mg/L	1.34 mg/L	<2.40 mg/L	<0.88 mg/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 23 mg/L MAX	15 mg/L average 23 mg/l MAX	10 Col. average

Maximum daily flow 0.8136 MGD  
 Monthly average flow 0.7073 MGD

**II. Activities**

**STATION MAINTENANCE PERFORMED**

- A new mag meter was installed in station 8, American Legion Rd.
- Maintenance installed a new pump at station 17, Savannah Rd- Huling Cove.
- White Marsh continuing to evaluate pump stations.
- White Marsh started installing the Point Watch remote monitoring system in all pump stations.

**MAINTENANCE PERFORMED**

- Work continues on the rehabilitation of sludge drying vacuum drum unit.
- Maintenance in to complete the remaining from the digester to the Old E.Q.
- Headworks lipactor went down. The gearbox shaft was bad and the auger was damaged. It was necessary to bypass all screening equipment until the rebuilt auger was installed. The lipactor and screening system was put back into service.
- A caustic leak in the chemical room was repaired.
- A-1 in the haul liquid sludge six times in August totaling a removal of 36,000 gallons due to increased solids and wet weather. Liquid hauling will continue until solids reduction is accomplished.
- The Headworks grating replacement project has been completed.
- Dry bio solids hauling will begin again at the end of September.

**SAFETY INFORMATION**

No work place 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. TUI Maintenance is currently reevaluating.

**ADDITIONAL INFORMATION**

Tidewater is evaluating the bioreactor air diffuser replacement project.

Schneider Electric and E.D. Supply met with Maintenance and operations to discuss Headworks VFD MCC replacement.

Preliminary Board Document

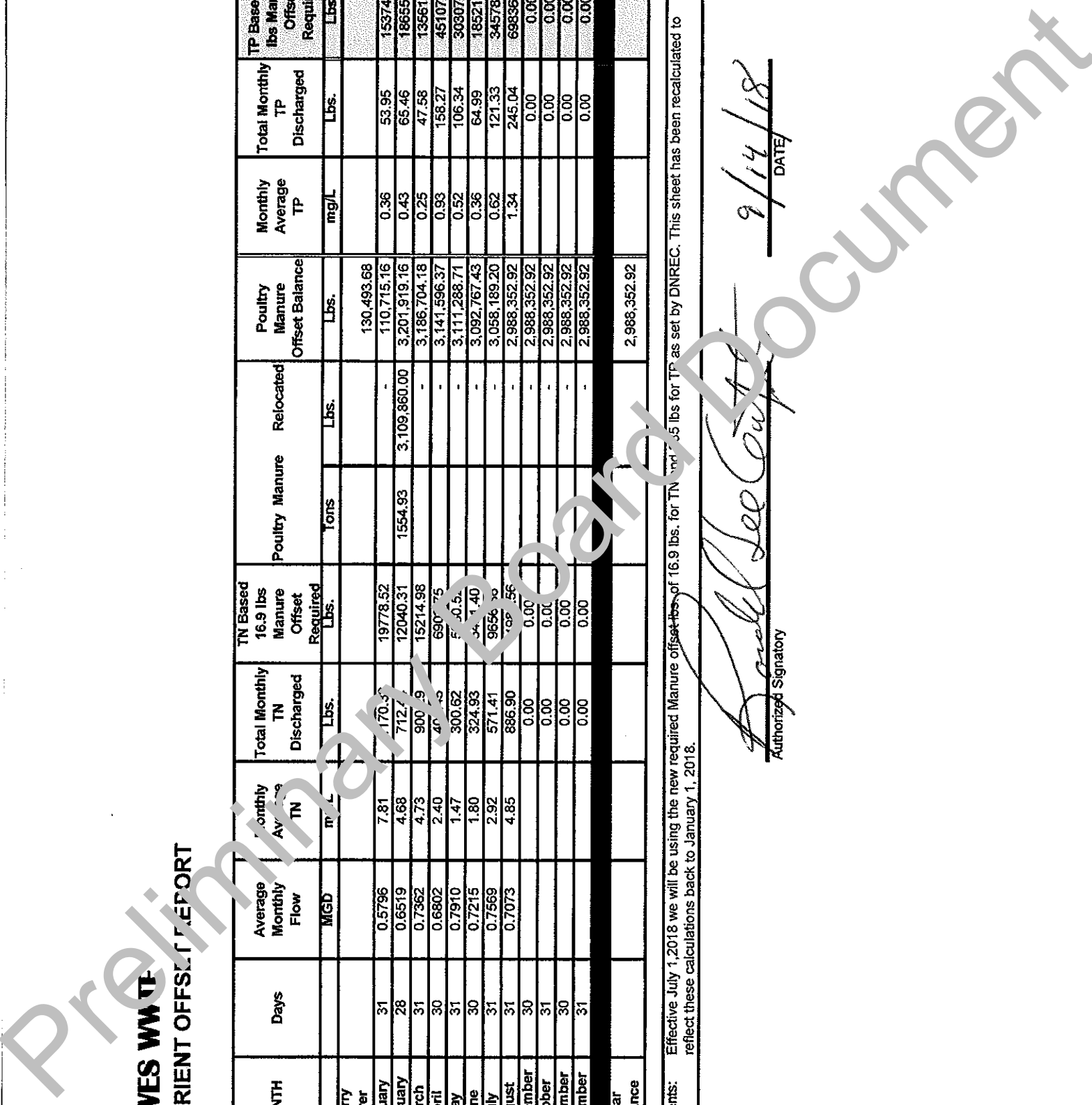
**LEWES WWTP**  
**NUTRIENT OFFSET REPORT**

MONTH	Days	Average Monthly Flow	Monthly Average TN	Total Monthly TN Discharged	TN Based 16.9 lbs Manure Offset		Poultry Manure Relocated	Poultry Manure Offset Balance		Monthly Average TP	Total Monthly TP Discharged	TP Based 285 lbs Manure Offset Required
					Tons	Lbs.		Tons	Lbs.			
Carry Over		MGD	mgl	Lbs.						mgl	Lbs.	Lbs.
January	31	0.5796	7.81	170.3		19778.52	-	130,493.68		0.36	53.95	15374.59
February	28	0.6519	4.68	712.7	1554.93	12040.31	3,109,860.00	3,201,919.16		0.43	65.46	18655.99
March	31	0.7362	4.73	900.9		15214.98	-	3,186,704.18		0.25	47.58	13561.52
April	30	0.6802	2.40	473.5		6907.75	-	3,141,596.37		0.93	156.27	45107.87
May	31	0.7910	1.47	300.62		505.0	-	3,111,288.71		0.52	106.34	30307.66
June	30	0.7215	1.80	324.93		541.40	-	3,092,767.43		0.36	64.99	18521.28
July	31	0.7569	2.92	571.41		9696.30	-	3,058,189.20		0.62	121.33	34578.23
August	31	0.7073	4.85	886.90		10956.56	-	2,988,352.92		1.34	245.04	69836.27
September	30			0.00		0.00	-	2,988,352.92			0.00	0.00
October	31			0.00		0.00	-	2,988,352.92			0.00	0.00
November	30			0.00		0.00	-	2,988,352.92			0.00	0.00
December	31			0.00		0.00	-	2,988,352.92			0.00	0.00
Year Balance								2,988,352.92				

Comments: Effective July 1, 2018 we will be using the new required Manure offset lbs. of 16.9 lbs. for TN and 285 lbs for TP as set by DNREC. This sheet has been recalculated to reflect these calculations back to January 1, 2018.

*[Signature]*  
 Authorized Signatory

9/14/18  
 DATE





NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different):  
 City of Lewes - Board of Public Works LBPW  
 116 American Legion Road, Lewes, DE 19958 US  
 Howard Seymour Water Pollution Plant

DE0021512  
 PERMIT NUMBER

001  
 DISCHARGE NUMBER

DE0021512  
 REPORT DESIGNATOR

9/13/2018  
 DATA ENTRY COMPLETE

gloria.jefchick@stservic  
 es.com  
 REPORT SUBMITTED BY

Submitted for Signature  
 STATUS OF SUBMISSION

2018 08 01  
 FROM

2018 08 31  
 TO

#	PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
1/1	Flow	7073	0-8136	Mill Gal/Day				0	99/99	Recorder
	Gross Effluent (00050)	No Monitoring Required	No Limit   Monitoring Req'd	Mill Gal/Day	No Monitoring Required	No Monitoring Required		-	99/99	Recorder
1/2	Dissolved oxygen (DO)				0.4	3.9	mg/l	0	99/99	Measured
	Gross Effluent (00300)	No Monitoring Required	No Monitoring Required		No Limit   Monitoring Req'd	No Limit   Monitoring Req'd		-	99/99	Measured
1/3	pH				7.2	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						CFU/100 ML	0		
	Gross Effluent (31639)	No Monitoring Required	No Monitoring Required		No Monitoring Required	No Monitoring Required		-	01/07	Grab
1/5	BOD5	<13.45	<14.65	lb /Day			mg/l	0	01/07	Comp 8
	Gross Effluent (00310)	188	288	lbs/Day	No Monitoring Required	No Monitoring Required		-	01/07	Comp 8
1/6	TSS	<4.95	<6.1	lbs/Day			mg/l	0	01/07	Comp 8
	Gross Effluent (00530)	188	288	lbs/Day	No Monitoring Required	No Monitoring Required		-	01/07	Comp 8
1/7	Total Nitrogen	28.61	29.61	lbs/Day			mg/l	0	01/30	Comp 8
	Gross Effluent (00600)	100	No Limit   Monitoring Req'd	lbs/Day	No Monitoring Required	No Limit   Monitoring Req'd		-	01/30	Comp 8

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

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

(ATTACH DIGITAL SIGNATURE RECEIVED FROM CROMBERRY)

TELEPHONE

DATE

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

YEAR MO DAY

TYPED OR PRINTED

MDI (No Data Indicator) Reason: 8 - No Sample (Chem); 9 - No Sample (Monitoring Not Required this Monitoring Period); B - Not Detected; C - No Sample (No Discharge)

DMREC DISCHARGE MONITORING REPORT - DMRT (EPA FORM 3320-1 (Rev. 10-96) USED AS TEMPLATE), 2016.

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NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

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

NAME: City of Lewes - Board of Public Works LBPW  
 ADDRESS: 116 American Legion Road, Lewes, DE 19958 US  
 FACILITY: Howard Seymour Water Pollution Treatment Plant

DE0021512  
 PERMIT NUMBER

001  
 DISCHARGE NUMBER

REPORT DESIGNATOR: A  
 DATA ENTRY COMPLETE  
 REPORT SUBMITTED BY: gloria.lefchick@stservic.es.com

2018 08 01  
 FROM

2018 08 31  
 TO

STATUS OF SUBMISSION: Submitted for Signature

#	PARAMETER	SAMPLE MEASUREMENT PERMIT REQUIREMENT	QUALITY OR CONCENTRATION			UNITS	NO. EX. OF ANALYSIS	FREQUENCY OF ANALYSIS	SAMPLE TYPE
			AVERAGE	MINIMUM	MAXIMUM				
2/1	Phosphorus, Total	7.9	8.18	1.34	1.34	mg/l	0	01/30	Comp 8
	Gross Effluent (00665)	No Limit   Monitoring Req'd	No Limit   Monitoring Req'd	2	No Limit   Monitoring Req'd	mg/l	-	01/30	Comp 8

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

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

(ATTACH DIGITAL SIGNATURE RECEIPT FROM GROMERY)

TELEPHONE

DATE

TYPED OR PRINTED

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

YEAR

MO

DAY

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)

DMREG DISCHARGE MONITORING REPORT - DMRT (EPA FORM 3320-1 (Rev. 10-06) USED AS TEMPLATE), 2016.

PRINTED:

9/13/2018 3:39

PAGE 2 OF 2

# Submission Receipt

**Copy of Record: 39153 Confirmation ID: r201891439153**

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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, August, 2018

File Name: 20188-1513-60660265      File Type: .pdf

Report: DMR      Status: Signed

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Hash of Data Document:  
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Data Entry Completed: 9/13/2018 3:39 PM      By: Gloria Lefchick  
(gloria.lefchick@stservices.com)  
E-Mail of Submitter: Gloria.Lefchick@STServices.com      From: 64.235.154.12

Signed: 9/14/2018 12:09 PM      By: Ronald Griffith  
(rgriffith@tuiwater.com)  
E-Mail of Signator: rgriffith@tuiwater.com      From: 203.172.234.202

Token Used When Signed: V7wl75o3b0JbSkj1ICPpN4h4b1xyTIMh1TeTLd0OUc0=

Preliminary Board Document