

WHITE MARSH

ENVIRONMENTAL SYSTEMS, INC.

A Middlesex Water Company Affiliate

June 14, 2018

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

Subject: Monthly Report, May 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 May. 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.

May 2018 Effluent Testing

Sample Data	Total Nitrogen	Total Phosphorus	BOD	TSS	Enterococcus
Average:	1.47 mg/L	0.52 mg/L	<2.40 mg/L	<0.50 mg/L	<1.0 Col.
Maximum:	N/A	N/A	<2.40 mg/L	<0.50 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 1.2295 MGD

Monthly average flow 0.7910 MGD

II. Activities

STATION MAINTENANCE PERFORMED

- Station #3 lost power, causing a sewer back up. The telemetry unit lost phase and was unable to call out. Harry Caswell's plumber on site removed the clean out cap and caused an overflow of wastewater in the parking lot adjacent to the station. Lewes Operators stopped the overflow, applied lime, and replaced the telemetry unit.
- Heavy rainfall mid-month sent high level callouts from station #4. Operator adjusted wet well levels to accommodate incoming flows.
- BPW assisted Operators in vacuuming out grease from lift station #17.

MAINTENANCE PERFORMED

- Trojan U.V. specialist trained operators and maintenance on repairing the U.V. unit. The Trojan Ultra Violet disinfection unit was rebuilt.
- New digester blower and new motor installed on digester blower #1.
- Rebuilt permeate pump returned from Hill's Electric and installed on membrane train #2
- Maintenance temporarily fixed VFD #1 on flow equalization pump. Further work pending entire replacement of existing cabinets with corrosion resistant cabinets.
- Plant generator failed to run. Low coolant alarm. Added 15 gallons of coolant. Currently investigating where the loss is. No obvious leak indications.
- Plant generator trouble, low DC voltage alarm. Generator batteries were cleaned, and one battery was replaced.
- Installed D.O. probe controller at bioreactors.
- Sludge hauled twice in May. BPW staff assisted.

- Continued permeate low flow train shut downs. Resetting the permeate pumps seems to have minimized the alarms.

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 deteriorating. Crystallization is occurring causing a safety hazard. Leaking Caustic is seeping through the retaining wall in the process building as well. The leaks are currently being repaired.

ADDITIONAL INFORMATION

Several SCADA call out system failures through out the month. BPW's IT worked with Tieder to correct programming. The Lewes Wastewater staff provided a facility tour for the Concord High School AP biology class.



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

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 Reclamation Plant
 PERMIT NUMBER: DE021512
 DISCHARGE NUMBER: 001
 REPORT DESIGNATOR: A
 DATA ENTRY COMPLETE: 6/14/2018
 REPORT SUBMITTED BY: gloria.lefchick@steervic.es.com
 STATUS OF SUBMISSION: Submitted for Signature

LOCATION: 116 American Legion Road, Lewes, DE 19958 US FROM: 2018 05 01 TO: 2018 05 31

#	PARAMETER	NDI	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
			AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
1/1	Flow		0.791	1.2295	Mill Gal/Day				0	99/99	Recorder
	Gross Effluent (50050)	-	No Monitoring Required	No Limit Monitoring Req'd	Mill Gal/Day	No Monitoring Required	No Monitoring Required	No Monitoring Required	--	99/99	Recorder
1/2	Dissolved oxygen (DO)				--	3.6	7.1		0	99/99	Measured
	Gross Effluent (00300)	-	No Monitoring Required	No Monitoring Required	--	No Limit Monitoring Req'd	No Limit Monitoring Req'd	No Limit Monitoring Req'd	--	99/99	Measured
1/3	pH				--	7.2	7.6		0	01/01	Grab
	Gross Effluent (00400)	-	No Monitoring Required	No Monitoring Required	--	No Monitoring Required	No Monitoring Required	No Monitoring Required	--	01/01	Grab
1/4	Enterococcus				--				0	01/07	Grab
	Gross Effluent (31639)	-	No Monitoring Required	No Monitoring Required	--	No Monitoring Required	No Monitoring Required	No Monitoring Required	--	01/07	Grab
1/5	BOD5		<14.68	<17.95	lbs/Day				0	01/07	Comp 8
	Gross Effluent (00310)	-	188	288	lbs/Day	No Monitoring Required	15	23	--	01/07	Comp 8
1/6	TSS		<3.06	<3.74	lbs/Day				0	01/07	Comp 8
	Gross Effluent (00530)	-	188	288	lbs/Day	No Monitoring Required	15	23	--	01/07	Comp 8
1/7	Total Nitrogen		9.7	8.75	lbs/Day				0	01/30	Comp 8
	Gross Effluent (00600)	-	100	No Limit Monitoring Req'd	lbs/Day	No Monitoring Required	8	No Limit Monitoring Req'd	--	01/30	Comp 8

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

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER: _____ TELEPHONE: _____ DATE: _____
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT: _____ YEAR: _____ MO: _____ DAY: _____
 (ATTACH DIGITAL SIGNATURE RECEIPT FROM CROMERRY)



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

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 Reclamation Plant
 LOCATION: 116 American Legion Road, Lewes, DE 19958 US
 PERMIT NUMBER: DE0021512
 DISCHARGE NUMBER: 001
 REPORT DESIGNATOR: A
 DATA ENTRY COMPLETE: 6/14/2018
 REPORT SUBMITTED BY: gloria.lefchick@stservic.es.com
 STATUS OF SUBMISSION: Submitted for Signature

#	PARAMETER	NDI	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
			AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				UNITS
2/1	Phosphorus, Total		3.43	3.09	lbs/Day		0.52	0.52	mg/l	0	01/30	Comp 8
	Gross Effluent (00665)		25	No Limit Monitoring Req	lbs/Day		2	No Limit Monitoring Req	mg/l	--	01/30	Comp 8

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

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER: _____ TELEPHONE: _____ DATE: _____
I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT: _____ YEAR: _____ MO: _____ DAY: _____
 (ATTACH DIGITAL SIGNATURE RECEIPT FROM CROMERRY)

Submission Receipt

Copy of Record: 37159 Confirmation ID: r201861437159

Site: Howard Seymour Water Reclamation
Plant

Site ID: DE0021512

Submission: Discharge Monitoring Report for DE0021512 Howard Seymour
Water Reclamation Plant Outfall: 001, May, 2018

File Name: 20185-1384-60660265

File Type: .pdf

Report: DMR

Status: Signed

Hash of Data Document:

333fae04a4945840b373c46db82459ddc8530b0ba696c15c791a46092c7e0884

Data Entry Completed: 6/14/2018
11:26 AM

By: Gloria Lefchick
(gloria.lefchick@stservices.com)

E-Mail of Submitter:
Gloria.Lefchick@STServices.com

From: 64.235.154.42

Signed: 6/14/2018 1:35 PM

By: Ronald Griffith
(rgriffith@tuiwater.com)

E-Mail of Signator: rgriffith@tuiwater.com

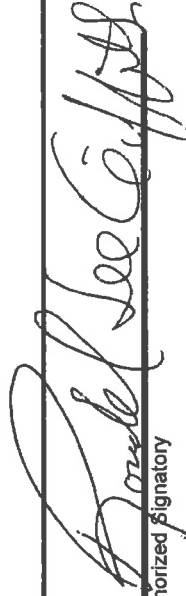
From: 208.87.234.202

Token Used When Signed: ODINYDLBESUPP8DdR7i7fhUNFkJWWgT6/1ZHQI4BAZQ=

LEWES WWTF NUTRIENT OFFSET REPORT

MONTH	Days	Average Monthly Flow	Monthly Average TN	Total Monthly TN Discharged	TN Based 11.8 lbs Manure Offset Required		Poultry Manure Relocated		Poultry Manure Offset Balance	Monthly Average TP	Total Monthly TP Discharged	TP Based 11.8 lbs Manure Offset Required
					Lbs.	Lbs.	Tons	Lbs.				
Carry Over		MGD										
January	31	0.5796	7.81	1170.33	13809.86	-	130,493.68	130,493.68				
February	28	0.6519	4.68	712.44	8406.84	1554.93	116,683.82	116,683.82		0.36	53.95	636.56
March	31	0.7362	4.73	900.29	10623.48	-	3,207,513.50	3,218,136.98		0.43	65.46	772.42
April	30	0.6802	2.40	408.45	4819.67	-	3,202,693.84	3,202,693.84		0.93	47.58	561.49
May	31	0.7910	1.47	300.62	3547.35	-	3,199,146.49	3,199,146.49		0.52	106.34	1264.84
June	30			0.00	0.00	-	3,199,146.49	3,199,146.49			0.00	0.00
July	31			0.00	0.00	-	3,199,146.49	3,199,146.49			0.00	0.00
August	31			0.00	0.00	-	3,199,146.49	3,199,146.49			0.00	0.00
September	30			0.00	0.00	-	3,199,146.49	3,199,146.49			0.00	0.00
October	31			0.00	0.00	-	3,199,146.49	3,199,146.49			0.00	0.00
November	30			0.00	0.00	-	3,199,146.49	3,199,146.49			0.00	0.00
December	31			0.00	0.00	-	3,199,146.49	3,199,146.49			0.00	0.00
Year Balance								3,199,146.49				

Comments:


 Authorized Signatory

6/14/18
 DATE