

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

January 10, 2019

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

Subject: Monthly Report, December 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 December. Please direct any questions to my attention. Thank you.

Sincerely,



Mike Evans
District Manager
Tidewater Utilities, Inc.

I. Effluent Quality and Compliance

Note: The new Lewes NPDES Permit is now in effect as of December 1, 2018.

Below are the reportable results from December permit required testing.

December 2018 Effluent Testing

Sample Data	Total Nitrogen	Total Phosphorus	BOD	TSS	Enterococci
Average:	1.21 mg/L	0.24 mg/L	<2.40 mg/L	<0.78 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 1.2292 MGD
Monthly average flow 0.8883 MGD

II. Activities

STATION MAINTENANCE PERFORMED

- Pump station #12, (Market Street-Devon Inn) call out. Pump #1 was clogged with sand that washed in from a broken sewer lateral. The BPW assisted with cleaning out the station and the pump was placed back into operation.

MAINTENANCE PERFORMED

- Train #4 module #2 completely de-sludged and fibrous material removed.
- A water leak was discovered near the solids shed fire hydrant. BPW was informed and the Street department repaired the broken line.
- BPW and Teal Construction met to discuss the Outfall project.
- The grit grate in headworks was removed to divert flow from the Grit system while out of service. The grit system was repaired and the grate and put back in place.
- Piston Grind Vacuum Fail reset.
- 5min low wash pressure alarm.
- Digester membrane trouble.
- Non-potable water fault.
- CDI continues to haul liquid sludge from digester.

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.

ADDITIONAL INFORMATION

Whitemarsh is evaluating hydrogen sulfide in the Cormier Rupp E.Q. pump cabinets.

Whitemarsh is evaluating the bioreactor air diffuser replacement project.

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

Whitemarsh is evaluating the caustic line replacement project.

Whitemarsh is also evaluating the odor complaints at station #4 to assist the BPW with developing a solution.

High influent daily max flows and the monthly average flow significantly increased to station #4. Significant sludge production expected to coincide with additional flows.



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

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

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

DE021512 PERMIT NUMBER
 001 DISCHARGE NUMBER
 A REPORT DESIGNATOR
 1/15/2019 DATA ENTRY COMPLETE
 gloria.lefchick@stservic.es.com REPORT SUBMITTED BY
 Submitted for: Signature STATUS OF SUBMISSION

MONITORING PERIOD FROM 2018 12 01 TO 2018 12 31

#	PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
1/1	Flow	1,888.3	1,229.2	Mill Gal/Day				0	99/99	RCOTOT
	Gross Effluent (00050)	No Limit Monitoring Req'd	No Limit Monitoring Req'd	Mill Gal/Day	No Monitoring Required	No Monitoring Required		-	99/99	RCOTOT
1/2	Dissolved oxygen (DO)				2.1	6.1	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				7.3	7.6	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	01/07	Grab
	Gross Effluent (31639)	No Monitoring Required	No Monitoring Required		<1	<1	CFU/100 ML	-	01/07	Grab
1/5	BOD5	<17.47	<18.68	lbs/Day			mg/l	0	01/07	Composite 24
	Gross Effluent (00310)	188	288	lbs/Day	No Monitoring Required	104	mg/l	-	01/07	Composite 24
1/6	BOD5						mg/l	0	01/07	Composite 24
	Raw Sewage (00310)	No Monitoring Required	No Monitoring Required		<2.4	<2.4	mg/l	-	01/30	Composite 24
1/7	TSS	<5.62	<7.78	lbs/Day			mg/l	0	01/07	Composite 24
	Gross Effluent (00530)	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 THE DOCUMENT AND ALL ATTACHMENTS WERE PREPARED BY ME OR UNDER MY SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PERSONNEL HAVE REVIEWED AND VALIDATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MADE AND VALIDATED THE INFORMATION SUBMITTED, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPROBATION FOR KNOWING VIOLATIONS.

TYPED OR PRINTED

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

TELEPHONE DATE
 YEAR MO DAY

NDI (No Data Indicated) Reason: S - No Sample (Other); 3 - 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)
DISCHARGE MONITORING REPORT (DMR)

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

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

DE0021512 PERMIT NUMBER
 001 DISCHARGE NUMBER
 REPORT DESIGNATOR: A
 DATA ENTRY COMPLETE: 1/15/2019
 REPORT SUBMITTED BY: gloria.lefchick@stservic.es.com
 STATUS OF SUBMISSION: Submitted for Signature

#	PARAMETER	SAMPLE MEASUREMENT PERMIT REQUIREMENT	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
			AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				UNITS
2/1	TSS	SAMPLE MEASUREMENT PERMIT REQUIREMENT (00530)	-	No Monitoring Required	-	No Monitoring Required	140.48	No Limit Monitoring Req'd	169	0	01/07	Composite 24
2/2	Total Nitrogen	SAMPLE MEASUREMENT PERMIT REQUIREMENT (00600)	8.9b	10	lbs/Day	No Monitoring Required	1.21	No Limit Monitoring Req'd	1.21	0	01/30	Composite 24
2/3	Phosphorus, Total	SAMPLE MEASUREMENT PERMIT REQUIREMENT (00665)	1.78	25	lbs/Day	No Limit Monitoring Req'd	0.24	No Limit Monitoring Req'd	0.24	0	01/30	Composite 24

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

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER: _____ TELEPHONE: _____ DATE: _____

ATTACH DIGITAL SIGNATURE (REFER TO SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT: _____ YEAR: _____ MO: _____ DAY: _____

LEWES WWT 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 285 lbs Manure Offset Required
						Tons	Lbs.				
Carry Over		MGD	mg/L	Lbs.	Lbs.		Lbs.				Lbs.
January	31	0.5796	7.81	170.33	19778.52			130,493.68			
February	28	0.6519	4.68	712.74	12040.31		-	110,715.16	0.36	53.95	15374.59
March	31	0.7362	4.73	907.29	15214.98	1554.93	3,109,860.00	3,201,919.16	0.43	65.46	18655.99
April	30	0.6802	2.40	465.33	6907.75		-	3,186,704.18	0.25	47.58	13561.52
May	31	0.7910	1.47	300.62	5130.53		-	3,141,596.37	0.93	158.27	45107.81
June	30	0.7215	1.80	324.93	5371.40		-	3,092,767.43	0.36	64.99	18521.28
July	31	0.7569	2.92	571.41	9653.00		-	3,058,189.20	0.62	121.33	34578.23
August	31	0.7073	4.85	886.90	14075.56		-	2,988,352.92	1.34	245.04	69836.27
September	30	0.7499	1.83	343.35	5802.73		-	2,896,379.16	1.72	322.71	91973.77
October	31	0.7454	1.35	260.17	4396.11		-	2,801,909.92	1.72	331.47	94469.24
November	30	0.9282	3.95	917.33	15502.81		-	2,728,442.17	1.11	257.78	73467.74
December	31	0.8883	1.21	277.89	4696.34		-	2,712,733.35	0.24	55.12	15708.82
Year Balance								2,712,733.35			

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.



 Authorized Signatory

1/15/19

 DATE

