

WHITE MARSH
ENVIRONMENTAL SYSTEMS, INC.

A Middlesex Water Company Affiliate

February 12, 2020

Via electronic mail delivery

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

Subject: Monthly Report, January 2020

Dear Mr. Gordon:

Attached is a summary of the Operations and Maintenance activities at the Board's lift stations and wastewater treatment plant for the month of January, 2020. Please direct any questions to my attention. Thank you.

Sincerely,



Paul S. Peris
Director of Production and Maintenance
White Marsh Environmental Systems, Inc.

I. Effluent Quality and Compliance

January 2019 Effluent Testing

Sample Data	Total Nitrogen	Total Phosphorus	BOD	TSS	Enterococcus
Average:	7.74 mg/L	.15 mg/l	<2.40 mg/L	<0.68 mg/L	<1.0
Maximum:	N/A	N/A	<2.40mg/L	<0.68 mg/l	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: 0.8751 MGD

Monthly average flow: 0.6789 MGD

II. Activities – January 2020

Lift Stations

- 1/6/2020 - Station #11 pump #2 installed
- 1/15/2020 - Inspected pump stations #10 and #17
- 1/21/2020 – Pumped water from manhole #5.
- 1/24/2020 - Station #10 down due to contractors hitting electric main. Repairs completed and power restored.
- 1/29/2020 - Station #10 had high level alarm. A blown fuse on power line was identified as the cause. Repairs completed and power restored.
- 1/31/2020 - Inspected stations #2 and #10 for high amp draws. No issues with station. Discrepancy in Point Watch system fixed.
- Daily review of Point Watch system for lift stations.

Plant Activities

- 1/02/2020 - Wasted 10,000 gals from membrane #2 to anoxic tank. CDI hauled 8,000 gallons
- 1/10/2020 - Installed turbidity meter at membrane back pulse tank,
- 1/10/2020 - Drained train #2 membranes for inspection. Found air tubes installed under blanks. All cassettes pulled and inspected.
- 1/10/2020 - Began receiving SUSSEX COUNTY flow
- 1/12/2020 – Horney Industrial Electronics calibrated flow meters.
- 1/14/2020 - Pump down train #3 membrane tank for recovery clean per Suez instructions.

- 1/16/2020 - Ran mixer in EQ tank. Trash clogged the 2mm screen. EQ cleaning is being planned.
- 1/20/2020 - Automatic waste valve is not working on PLC HMI. Manually wasting until Suez provides new HMI equipment.
- 1/22/2020 - Maintenance replaced permeate pump in anoxic tank.
- 1/27/2020 - Swapped out blower B-87A with rebuilt unit.
- 1/27/2020 - Repaired eye wash station in process building.
- 1/29/2020 - Wasted 5,000 gallons of sludge.
- 1/29/2020 - CDI hauled 15,000 gallons sludge from digester

SAFETY INFORMATION

- No work place injuries.
- PPE inspected.
- Eyewash and fire extinguisher inspections conducted. Process building eye wash repaired and cleaned.

ADDITIONAL INFORMATION

- Operators are still having issues with the HMI. The replacement unit on order with Suez is needed as quickly as possible. Action: order needed from Suez as soon as possible.
- While the plant was offline in December 2019, the mixers were off and solids and trash settled to the bottom of EQ. There are no records of the EQ being drained and cleaned. The mixers are being run intermittently to keep the screens from clogging. Recommend cleaning prior to peak season. Action: Approval needed from BPW to proceed.
- Breakwater is scheduled to replace chemical lines in February.
- Sussex County is back on line and all three trains are working well.
- Critical parts inventory being evaluated. Results will be submitted to BPW. Action: WMES to submit to BPW by March 1, 2020.
- Bio solids hauler in works to renew permit with DNREC, liquid hauling required until permit given. ***Permit received 2/10/20**

Items Needed from BPW

- Update Zenon/Suez O&M Manual with recommended set points.

LEWES WWTF

NUTRIENT OFFSET REPORT

MONTH	Days	Average Monthly Flow MGD	Monthly Average TN mg/L	Total Monthly TN Discharged Lbs.	TN Based 11.8 lbs Manure Offset Required Lbs.	Poultry Manure Relocated Tons	Poultry Manure Relocated Lbs.	Poultry Manure Offset Balance Lbs.	Monthly Average TP mg/L	Total Monthly TP Discharged Lbs.	TP Based 11.8 lbs Manure Offset Required Lbs.
Carry Over								3,195,312.26			
January	31	0.6789	7.74	1358.55	16030.85		-	3,179,281.41	0.15	26.33	310.68
February	28			0.00	0.00		-	3,179,281.41		0.00	0.00
March	31			0.00	0.00		-	3,179,281.41		0.00	0.00
April	30			0.00	0.00		-	3,179,281.41		0.00	0.00
May	31			0.00	0.00		-	3,179,281.41		0.00	0.00
June	30			0.00	0.00		-	3,179,281.41		0.00	0.00
July	31			0.00	0.00		-	3,179,281.41		0.00	0.00
August	31			0.00	0.00		-	3,179,281.41		0.00	0.00
September	30			0.00	0.00		-	3,179,281.41		0.00	0.00
October	31			0.00	0.00		-	3,179,281.41		0.00	0.00
November	30			0.00	0.00		-	3,179,281.41		0.00	0.00
December	31			0.00	0.00		-	3,179,281.41		0.00	0.00
Year Balance								3,179,281.41			

Comments:


 Authorized Signatory

2/4/2020
 DATE



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

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)
 PERMIT NUMBER: DE0021512
 DISCHARGE NUMBER: 001
 MONITORING PERIOD: FROM 2020 01 01 TO 2020 01 31
 STATUS OF SUBMISSION: Not Submitted

REPORT DESIGNATOR: A
 DATA ENTRY COMPLETE
 REPORT SUBMITTED BY
 REPORT SUBMITTED BY

#	PARAMETER	NDI	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			UNITS	NO. EX. OF ANALYSIS	FREQUENCY OF ANALYSIS	SAMPLE TYPE
			AVERAGE	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM				
1/1	Flow	SAMPLE MEASUREMENT	0.6789	0.8751					0	99/99	RCOTOT	
	Gross Effluent (50030)	PERMIT REQUIREMENT	No Limit	No Limit	No Monitoring Required	No Monitoring Required	No Monitoring Required		0	99/99	RCOTOT	
1/2	Dissolved oxygen (DO)	SAMPLE MEASUREMENT			3.12				0	99/99	Imersion	
	Gross Effluent (00300)	PERMIT REQUIREMENT	No Monitoring Required	No Monitoring Required	No Limit	No Monitoring Required	No Limit		0	99/99	Imersion	
1/3	pH	SAMPLE MEASUREMENT			7.4				0	01/01	Grab	
	Gross Effluent (00400)	PERMIT REQUIREMENT	No Monitoring Required	No Monitoring Required	6	No Monitoring Required	9		0	01/01	Grab	
1/4	Enterococcus	SAMPLE MEASUREMENT							<1	<1	Grab	
	Gross Effluent (31639)	PERMIT REQUIREMENT	No Monitoring Required	No Monitoring Required	No Monitoring Required	10	104	CFU/100 ML	0	01/07	Grab	
1/5	BOD5	SAMPLE MEASUREMENT	<14.24	<15.34		<2.4	<2.4		0	01/07	Composite 24	
	Gross Effluent (00310)	PERMIT REQUIREMENT	188	288	No Monitoring Required	15	23	mg/l	0	01/07	Composite 24	
1/6	BOD5	SAMPLE MEASUREMENT							0	01/07	Composite 24	
	Raw Sewage (00310)	PERMIT REQUIREMENT	No Monitoring Required	No Monitoring Required	No Monitoring Required	144	164	mg/l	0	01/30	Composite 24	
1/7	TSS	SAMPLE MEASUREMENT	<4.07	<7.03		<0.68	<1.1		0	01/07	Composite 24	
	Gross Effluent (00530)	PERMIT REQUIREMENT	188	288	No Monitoring Required	15	23	mg/l	0	01/07	Composite 24	

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
 In January due to issues at plant as per DNEC we took a total of 15 enterococcus samples on the 001 discharge for the month to track compliance. The results were excellent and copies of results are available upon request.

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

ATTACH DIGITAL SIGNATURE RECEIPT FROM: _____

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT: _____

YEAR: _____ MO: _____ DAY: _____

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)



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
 MONITORING PERIOD FROM 2020 01 01 TO 2020 01 31
 REPORT DESIGNATOR: A
 DATA ENTRY COMPLETE
 REPORT SUBMITTED BY: Not Submitted
 STATUS OF SUBMISSION: Not Submitted

#	PARAMETER	NDI	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
			AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
2/1	TSS	SAMPLE MEASUREMENT PERMIT REQUIREMENT	No Monitoring Required	No Monitoring Required	-	No Monitoring Required	68.2	88.1	0	01/07	Composite 24
	Raw Sewage (00530)	PERMIT REQUIREMENT	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	SAMPLE MEASUREMENT PERMIT REQUIREMENT	41.34	41.34	lbs/Day	No Limit Monitoring Req'd	7.74	7.74	0	01/30	Composite 24
	Gross Effluent (00600)	PERMIT REQUIREMENT	100	No Limit Monitoring Req'd	lbs/Day	No Monitoring Required	8	No Limit Monitoring Req'd	-	01/30	Composite 24
2/3	Phosphorus, Total	SAMPLE MEASUREMENT PERMIT REQUIREMENT	0.8	0.8	lbs/Day	No Monitoring Required	0.15	0.15	0	01/30	Composite 24
	Gross Effluent (00655)	PERMIT REQUIREMENT	25	No Limit Monitoring Req'd	lbs/Day	No Monitoring Required	2	No Limit Monitoring Req'd	-	01/30	Composite 24

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
 In January due to issues at plant as per DNR/EC we took a total of 15 enterococcus samples on the 001 discharge for the month to track compliance. The results were excellent and copies of results are available upon request.

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER: _____

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 PREPARED THE DATA AND THAT I AM RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION SUBMITTED. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION AND COMPLETELY FAKING DATA THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF THE AND IMPROVEMENT FOR REMEDIATION VIOLATIONS.

ATTACH DIGITAL SIGNATURE RECEIPT FROM: _____ TELEPHONE: _____ DATE: _____

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

TYPED OR PRINTED

Submission Receipt

Copy of Record: 51058 Confirmation ID: d202021351058

Site: Howard Seymour Water Reclamation
Plant

Site ID: DE0021512

Submission: Discharge Monitoring Report for DE0021512 Howard Seymour
Water Reclamation Plant Outfall: 001, January, 2020

File Name: 20201-2227-60749445

File Type: .pdf

Report: DMR

Status: Signed

Hash of Data Document:

0e6f4cd5f95538a01ffa00affac89bf8cda2b13b073ab2b6ea37f51a1396969

Data Entry Completed: 2/13/2020
3:18 PM

By: David Weed (daveweed69)

E-Mail of Submitter: dweed@tuiwater.com

From: 208.87.234.202

Signed: 2/13/2020 3:21 PM

By: David Weed (daveweed69)

E-Mail of Signator: dweed@tuiwater.com

From: 208.87.234.202

Token Used When Signed: OqefP50FRXb21YkJYYLM2G3lrZN/sWZYwoowJInE1x8=