



LEMOYNE MUNICIPAL AUTHORITY WASTEWATER REPORT

APRIL 4, 2024

Dear Council / Authority Members:

- Reporting Month: **FEBRUARY 2024**
- Effluent violations: **NO**
- Monthly EDMR submittal date: **MARCH 21, 2024**
- Quarterly EDMR submittal date: **FEBRUARY 14, 2024**
- Annual EDMR submittal date: **NOVEMBER 6, 2023**

FEBRUARY 2024 DATA SUMMARY

PARAMETER	MAX	MIN	AVERAGE	PERMIT LIMIT
FLOW (Gal.)	.463	.318	.375	N/A
CBOD5 (mg/l)	2.3	<2.0	<2.0	25 AVG / 50 MAX
TSS (mg/l)	4.4	<4.0	<4.0	30 AVG / 60 MAX
PHOSPHORUS (mg/l)	0.57	0.22	0.34	2.0 AVG / 4.0 INSTANT
AMMONIA (mg/l)	9.47	<0.1	<1.15	REPORT
FECAL COLIFORM (cfu)	20	2	5	200 GEO MEAN / 1,000 MAX
UV INTENSITY (uw/cm2)	774.3	68.2	426.0	REPORT
PH (S.U.)	7.89	7.12	N/A	6.0 TO 9.0
DISSOLVED OXYGEN (mg/l)	11.09	7.94	10.55	>5.0

BIOSOLIDS

# OF LOADS	WET TONS	DRY TONS	% SOLIDS RANGE
3	42.03	8.53	20.0-20.7

PA 1 CALLS

ROUTINE PA 1 CALLS	EMERGENCY PA 1 CALLS
28	4

ROUTINE MAINTENANCE / EVENTS

- Daily operations ongoing including inspections, cleaning, testing and chemical replenishment.
- Continue to implement NPDES (National Pollution Discharge Elimination System) permit.
- Sampling and Lab Analysis. Process control adjustments as required.
- Ongoing preventative maintenance.

NON-ROUTINE MAINTENANCE / EVENTS

- Semi-Annual calibrations completed by Control Systems 21- **OCTOBER 25, 2023**
- Annual Backflow testing at Northside Station- **SEPTEMBER 21, 2023**
- Lowther Station Pump install- Completed **FEBRUARY 26, 2024**

COLLECTION SYSTEM

- Ongoing preventative maintenance of trouble spots. (solids, grit, grease, problem areas).
- Farhat Excavating starting Sanitary Sewer Repairs **MARCH 25, 2024**
- Soliciting pricing for Sanitary Sewer Lining for 2024.

WWTP PERSONNEL INFO, CLASSES, ACCOMPLISHMENTS

- 2 of 3 plant personnel are Licensed Operators.
- PA 1 Call recognized WWTP personnel for 100% response rate.
- Bob Oakes attended PELRAS training.
- Kyle Janny to attend Pump Repair class in April.

PENDING ISSUES

- Grit system is not functioning properly due to being oversized. Not enough flow or velocity to work correctly.
- Second stage oxic tanks are not getting the amount of mixing needed since lowering the amount of air to the tanks to meet our nutrient requirements.
- Would like to look into upgrading the Utility Water pumps and Screen.

If you have any questions, require more information, or wish to comment on the above information, please feel free to contact me.

Respectfully,
Robert Oakes
Wastewater Superintendent

**SUPPLEMENTAL REPORT
DAILY EFFLUENT MONITORING**

Facility Name: Borough of Lemoyne
Municipality: Lemoyne Borough County: Cumberland
Watershed: 7-C
Laboratories: Suburban Labs-Lemoyne Borough

Month: 2 (select number) Year: 2024
Permit No.: PA0026441 Outfall: 001
Renewal application due 180 days prior to expiration.
This permit will expire on: June 30, 2027

Parameter			Flow	Fecal Coliform	Dissolved Oxygen	pH	CBOD5	TSS	UV Intensity	Total Zinc	NH3-N	Total Phosphorus	E. Coli				
Stage			1	1	1	1	1	1	1	1	1	1	1				
Week	Day	Date	MGD	Q CFU/100 ml	Q mg/L	Q S.U.	Q mg/L	Q mg/L	Q µW/cm²	Q mg/L	Q mg/L	Q mg/L	Q CFU/100 ml	Q	Q	Q	Q
1	Thu	2/1/24	0.443	2.0	10.71	7.71	< 2.0	4.4	529.5		< 0.1	0.22					
	Fri	2/2/24	0.421		10.52	7.37			528.2								
	Sat	2/3/24	0.415		10.63	7.5			709.7								
	Sun	2/4/24	0.4		10.61	7.57			735.7								
	Mon	2/5/24	0.381		10.6	7.61			774.3								
	Tue	2/6/24	0.357	4.0	10.76	7.53	< 2.0	4.0	716.7		< 0.1	0.36					
	Wed	2/7/24	0.363		10.81	7.71			674.9								
2	Thu	2/8/24	0.356	2.0	10.72	7.53	< 2.0	4.0	640.7	0.129	< 0.1	0.57					
	Fri	2/9/24	0.361		10.73	7.54			606.3								
	Sat	2/10/24	0.36		10.52	7.54			611.2								
	Sun	2/11/24	0.344		10.35	7.89			434.4								
	Mon	2/12/24	0.357		10.44	7.47			223.3								
	Tue	2/13/24	0.463	20.0	10.26	7.6	< 2.0	4.0	68.2		< 0.1	0.37					
	Wed	2/14/24	0.379		10.61	7.46			70.9								
3	Thu	2/15/24	0.422	3.0	10.74	7.62	< 2.0	4.0	299.5		< 0.1	0.3					
	Fri	2/16/24	0.361		10.69	7.53			201.8								
	Sat	2/17/24	0.398		10.62	7.49			401.1								
	Sun	2/18/24	0.369		10.92	7.6			325.2								
	Mon	2/19/24	0.372		10.9	7.61			281.1								
	Tue	2/20/24	0.386	5.0	11.09	7.88	2.3	< 4.0	182.1		< 0.1	0.32					
	Wed	2/21/24	0.378		10.92	7.51			337.6								
4	Thu	2/22/24	0.367	5.0	10.73	7.55	< 2.0	4.0	349.9		< 0.1	0.29					
	Fri	2/23/24	0.365		10.46	7.57			341.4								
	Sat	2/24/24	0.365		10.48	7.49			329.1								
	Sun	2/25/24	0.329		10.88	7.52			307.0								
	Mon	2/26/24	0.327		10.64	7.56			385.1								
	Tue	2/27/24	0.318	8.0	10.38	7.73	< 2.0	4.0	404.7		9.47	0.37					
	Wed	2/28/24	0.373		10.17	7.36			425.2								
5	Thu	2/29/24	0.344	5.0	7.94	7.12	< 2.0	4.0	460.3		0.16	0.25					
	Fri	3/1/24															
	Sat	3/2/24															
Statistics for DMR																	
Daily Minimum (Conc.):				2	7.94	7.12	< 2	< 4	68.2	0.129	< 0.1	0.22					
Daily Maximum (Conc.):				20	11.09	7.89	< 2.3	< 4.4	774.3	0.129	< 9.47	0.57					
Max Avg Weekly (Conc.):					10.79		< 2.2	< 4.0	680	0.129	< 4.82	0.5					
Avg Monthly (Conc.):					10.55		< 2.0	< 4.0	426	0.129	< 1.15	0.34					
Geometric Mean (Conc.):				5													
Max Avg Weekly (Load):			0.389		34		< 7	< 15		0.4	13	1	###				
Avg Monthly (Load):			0.375		33		< 7	< 13		0.4	< 3	1					
Total Monthly (Load):			10.874		957		< 189	< 376		11	< 90	31					
Daily Minimum (Load):			0.318		23		< 5	< 11		0.4	< 0.3	0.7					
Daily Maximum (Load):			0.463		40		< 8	< 16		0.4	25	2					

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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, the information submitted is, 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 imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: Robert Oakes License No.: S17992
Title: Wastewater Superintendent Date: 3/21/2024



CHESAPEAKE BAY SUPPLEMENTAL REPORT NUTRIENT MONITORING

Facility Name: Borough of Lemoyne WWTP
Municipality: Lemoyne Borough
Watershed: 7-C

County: Cumberland

Month: 2 (Select number) Year: 2024
NPDES Permit No.: PA0026441 Outfall: 001
Renewal application due 180 days prior to expiration.
This permit will expire on: June 30, 2027

DAY	FLOW MGD	Total P				NH ₃ -N				TKN				NO ₂ +NO ₃ as N				Total N			
		Q	mg/l	Q	lbs/day	Q	mg/l	Q	lbs/day	Q	mg/l	Q	lbs/day	Q	mg/l	Q	lbs/day	Q	mg/l	Q	lbs/day
1	0.443		0.22		0.8	<	0.1	<	0.4		1.1		4.1		8.36		30.9		9.46		35.0
2	0.421																				
3	0.415																				
4	0.4																				
5	0.381																				
6	0.357		0.36		1.1	<	0.1	<	0.3		0.76		2.3		6.95		20.7		7.71		23.0
7	0.363																				
8	0.356		0.57		1.7	<	0.1	<	0.3		1.28		3.8		8.39		24.9		9.67		28.7
9	0.361																				
10	0.36																				
11	0.344																				
12	0.357																				
13	0.463		0.37		1.4	<	0.1	<	0.4		1.12		4.3		6.99		27.0		8.11		31.3
14	0.379																				
15	0.422		0.3		1.1	<	0.1	<	0.4		0.96		3.4		6.3		22.2		7.26		25.6
16	0.361																				
17	0.398																				
18	0.369																				
19	0.372																				
20	0.386		0.32		1.0	<	0.1	<	0.3		0.85		2.7		5.28		17.0		6.13		19.7
21	0.378																				
22	0.367		0.29		0.9	<	0.1	<	0.3		0.79		2.4		6.77		20.7		7.56		23.1
23	0.365																				
24	0.365																				
25	0.329																				
26	0.327																				
27	0.318		0.37		1.0		9.47		25.1		11.3		30.0		1.76		4.7		13.06		34.6
28	0.373																				
29	0.344		0.25		0.7		0.16		0.5		0.91		2.6		5.65		16.2		6.56		18.8
Avg	0.375		0.34		1	<	1.15	<	3		2.12		6		6.27		20		8.39		27
Monthly Total Loads (lbs):					31			<	90				179				594				773

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Prepared By: Robert Oakes
Title: Wastewater Superintendent

License No.: S17992
Date: 3/21/2024

SUPPLEMENTAL REPORT - INFLUENT & PROCESS CONTROL

3800-FM-BPNPSM0436 3/2012

Facility Name: Borough of Lemoyne WWTP
Municipality: Lemoyne Borough County: Cumberland
Watershed: 7-C

Month: February Year: 2024
NPDES Permit No.: PA0026441
Renewal application due 180 days prior to expiration.
This permit will expire on: June 30, 2027

Day	Influent					Process Control				
	Flow (MGD)	BOD ₅ (mg/l)	BOD ₅ (lbs)	TSS (mg/l)	TSS (lbs)	Aeration MLSS (mg/l)	Aeration DO (mg/l)	Sludge Wasted (gallons)		
1	0.439	132.0	483	71.4	261			2,117.0		
2	0.436							2,119.0		
3	0.441							2,129.0		
4	0.424							2,103.0		
5	0.399							1,504.0		
6	0.375	313.0	979	206.0	644	5,400.0	3.53	3,991.0		
7	0.385							4,391.0		
8	0.372	303.0	940	168.0	521			3,985.0		
9	0.379							4,108.0		
10	0.367							4,406.0		
11	0.351							4,395.0		
12	0.361							2,975.0		
13	0.461	221.0	850	118.0	454	6,100.0	1.57	2,929.0		
14	0.411							2,990.0		
15	0.397	184.0	609	56.0	185			2,961.0		
16	0.383							2,993.0		
17	0.398							2,946.0		
18	0.371							2,861.0		
19	0.367							2,935.0		
20	0.383	294.0	939	196.0	626	4,600.0	4.55	2,948.0		
21	0.391							2,941.0		
22	0.379	302.0	955	202.0	638			2,931.0		
23	0.393							2,951.0		
24	0.398							2,292.0		
25	0.378							2,969.0		
26	0.373							2,934.0		
27	0.347	186.0	538	69.0	200	4,900.0	4.22	2,964.0		
28	0.382							2,919.0		
29	0.359	156.0	467	68.0	204			2,945.0		
30										
31										
Avg	0.39	232	751	128	415	5,250	3	3,022		
Max	0.461	313	979	206	644	6,100	5	4,406		

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Prepared By: Robert Oakes
Title: Wastewater Superintendent

License No.: S17992
Date: 3/21/2024



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

SUPPLEMENTAL REPORT
SEWAGE SLUDGE / BIOSOLIDS PRODUCTION AND DISPOSAL

Facility Name: Borough of Lemoyne WWTP
Municipality: Lemoyne Borough County: Cumberland
Watershed: 7-C

Month: February Year: 2024
NPDES Permit No.: PA0026441
Renewal application due **180 days** prior to expiration
This permit will expire on June 30, 2027

SEWAGE SLUDGE/BIOSOLIDS PRODUCTION INFORMATION (Identify each off-site removal event and incineration event)

☐ Check here if there were no off-site removal events during the month

Date	Liquid Sewage Sludge/Biosolids Hauled Off-site			Dewatered Sewage Sludge/Biosolids Hauled Off-site			Sewage Sludge/Biosolids Dewatered and Incinerated On-site		
	Gallons	% Solids	Dry Tons	Tons Dewatered	% Solids	Dry Tons	Tons Dewatered	% Solids	Dry Tons
2/1				14.17	20.2	2.86			
2/15				13.86	20.7	2.87			
2/29				14.00	20.0	2.8			
TOTAL:				TOTAL:			8.53	TOTAL:	

SEWAGE SLUDGE/BIOSOLIDS AND INCINERATOR ASH DISPOSAL AND BENEFICIAL USE INFORMATION
(Identify all sites where sewage sludge/biosolids or ash were disposed or land applied)

Site Name	Blue Ridge Landfill	Cumberland County Landfill		
Municipality	Greene Township	North Newton Township		
County	Franklin	Cumberland		
DEP Permit No.	100934	265792		
Type of Material*	Sewage Sludge	Sewage Sludge		
Dry Tons Applied/Disposed	8.53			
Type of Disposal/Use*	Landfill	Landfill		
Hauler Name	Penn Waste	Penn Waste		

*See Instructions for explanation

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Prepared by: Robert Oakes
Title: Wastewater Superintendent

Signature: _____
Date: 3/21/2024

Lemoyne Borough WWTP PA1Calls Monthly Log

February	# Regular PA1Calls	# Emergency PA1Calls	Daily Total
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	1	0	1
6	0	0	0
7	0	0	0
8	1	1	2
9	3	0	3
10	0	0	0
11	0	0	0
12	1	0	1
13	1	0	1
14	5	1	6
15	0	1	1
16	2	0	2
17	0	0	0
18	0	0	0
19	1	0	1
20	1	1	2
21	2	0	2
22	1	0	1
23	0	0	0
24	1	0	1
25	0	0	0
26	3	0	3
27	1	0	1
28	4	0	4
29	0	0	0
30			0
31			0
Totals:	28	4	32