2025 CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT ANNUAL REPORT

for

POSSUM VALLEY MUNICIPAL AUTHORITY
609 CLEARVIEW ROAD
ASPERS, PA 17304
MENALLEN TOWNSHIP
ADAMS COUNTY

prepared by

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February, 2026

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ANNUAL REPORT FORM

Terrence L. Sheldon, P.E., RLA

ATTACHMENT A:
DEP CHAPTER 94 SPREADSHEET

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PADEP Chapter 94 Spreadsheet
Sewage Treatment Plants

Reporting Year: 2025

Facility Name: Possum Valley Municipal Authority | **Permit No.:** PA0081582 | **Persons/EDU:** 3.5

Existing Hydraulic Design Capacity:	0.12	MGD	**Existing Organic Design Capacity:**	325	lbs BOD5/day
Upgrade Planned in Next 5 Years?	NO	**Year:**	**Upgrade Planned in Next 5 Years?**	NO	**Year:**
Future Hydraulic Design Capacity:		MGD	**Future Organic Design Capacity:**		lbs BOD5/day

Monthly Average Flows for Past Five Years (MGD)

Month	2021	2022	2023	2024	2025
January	0.073	0.082	0.119	0.111	0.07
February	0.088	0.104	0.075	0.132	0.087
March	0.088	0.089	0.086	0.101	0.079
April	0.082	0.105	0.072	0.126	0.074
May	0.068	0.111	0.076	0.073	0.085
June	0.067	0.069	0.069	0.066	0.093
July	0.065	0.068	0.071	0.062	0.071
August	0.066	0.07	0.071	0.079	0.061
September	0.097	0.068	0.074	0.073	0.06
October	0.077	0.071	0.072	0.072	0.061
November	0.083	0.077	0.071	0.067	0.06
December	0.07	0.095	0.088	0.083	0.061
Annual Avg	0.077	0.084	0.079	0.087	0.072
Max 3-Mo Avg	0.086	0.102	0.097	0.12	0.084
Max : Avg Ratio	1.12	1.21	1.23	1.38	1.17
Existing EDUs	740.0	743.0	745.0	742.0	746.0
Flow/EDU (GPD)	104.1	113.1	106.0	117.3	96.5
Flow/Capita (GPD)	29.7	32.3	30.3	33.5	27.6
Exist. Overload?	**NO**	**NO**	**NO**	**NO**	**NO**

Monthly Average BOD5 Loads for Past Five Years (lbs/day)

Month	2021	2022	2023	2024	2025
January	92	92	131	76	142
February	164	91	46	88	111
March	110	101	88	96	116
April	104	125	177	140	87
May	117	96	172	84	92
June	109	106	128	74	77
July	124	103	100	64	90
August	101	86	80	66	61
September	99	113	77	100	82
October	112	103	68	183	91
November	102	113	109	118	90
December	101	79	77	144	104
Annual Avg	111	101	104	103	95
Max Mo Avg	164	125	177	183	142
Max : Avg Ratio	1.47	1.24	1.70	1.78	1.49
Existing EDUs	740	743	745	742	746
Load/EDU	0.150	0.135	0.140	0.138	0.128
Load/Capita	0.043	0.039	0.040	0.040	0.036
Exist. Overload?	**NO**	**NO**	**NO**	**NO**	**NO**

Projected Flows for Next Five Years (MGD)

	2026	2027	2028	2029	2030
New EDUs	10.0	10.0	10.0	10.0	10.0
New EDU Flow	0.0011	0.0011	0.0011	0.0011	0.0035
Proj. Annual Avg	0.081	0.0821	0.0832	0.0843	0.0878
Proj. Max 3-Mo Avg	0.099	0.1	0.102	0.103	0.107
Proj. Overload?	**NO**	**NO**	**NO**	**NO**	**NO**

Projected BOD5 Loads for Next Five Years (lbs/day)

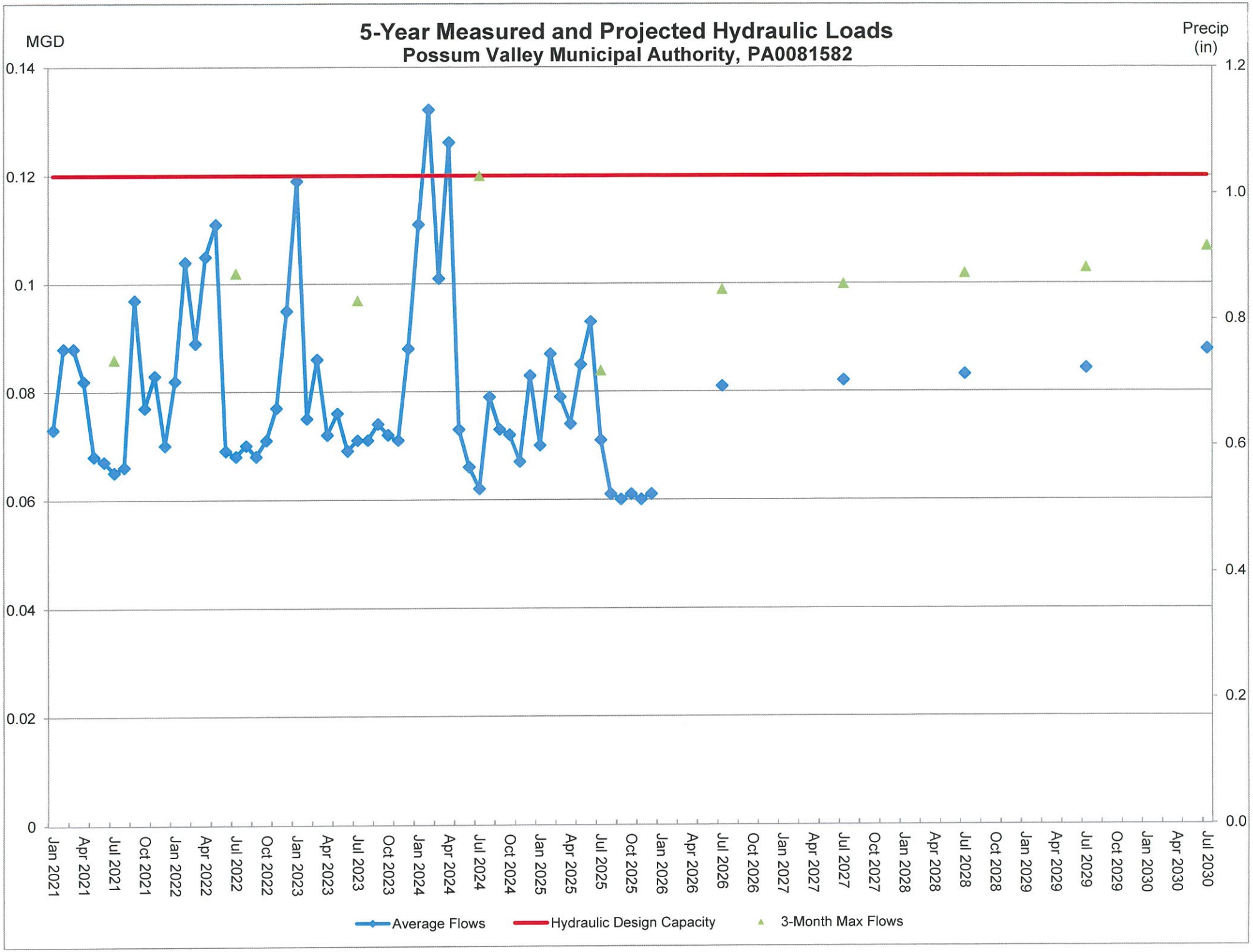
	2026	2027	2028	2029	2030
New EDUs	10	10	10	10	10
New EDU Load	1.384	1.384	1.384	1.384	5.840
Proj. Annual Avg	104	106	107	108	114
Proj. Max Avg	160	162	164	167	176
Proj. Overload?	**NO**	**NO**	**NO**	**NO**	**NO**

Show Precipitation Data on Hydraulic Graph?

Total Monthly Precipitation for Past Five Years (Inches)

Month	2021	2022	2023	2024	2025
January	2.5	1.45	2.6	7.95	0.8
February	4.8	3.9	1.4	3.55	2.4
March	2.5	1.9	3.1	4.25	2.1
April	3.0	4.5	5.4	5.2	2.9
May	4.95	8.7	0.5	4.55	10.5
June	2.65	3.5	3.5	4.2	7.2
July	3.6	1.0	5.4	1.2	5.3
August	6.1	4.6	1.9	9.5	1.45
September	11.75	3.8	4.1	5.4	1.9
October	4.55	3.9	2.1	0.6	3.8
November	2.1	3.1	2.95	2.5	1.5
December	1.25	6.9	5.4	4.2	1.8

ATTACHMENT B:
HYDRAULIC LOADS GRAPH


5-Year Measured and Projected Hydraulic Loads
Possum Valley Municipal Authority, PA0081582
MGD
Precip (in)
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Jan 2021
Apr 2021
Jul 2021
Oct 2021
Jan 2022
Apr 2022
Jul 2022
Oct 2022
Jan 2023
Apr 2023
Jul 2023
Oct 2023
Jan 2024
Apr 2024
Jul 2024
Oct 2024
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Jan 2027
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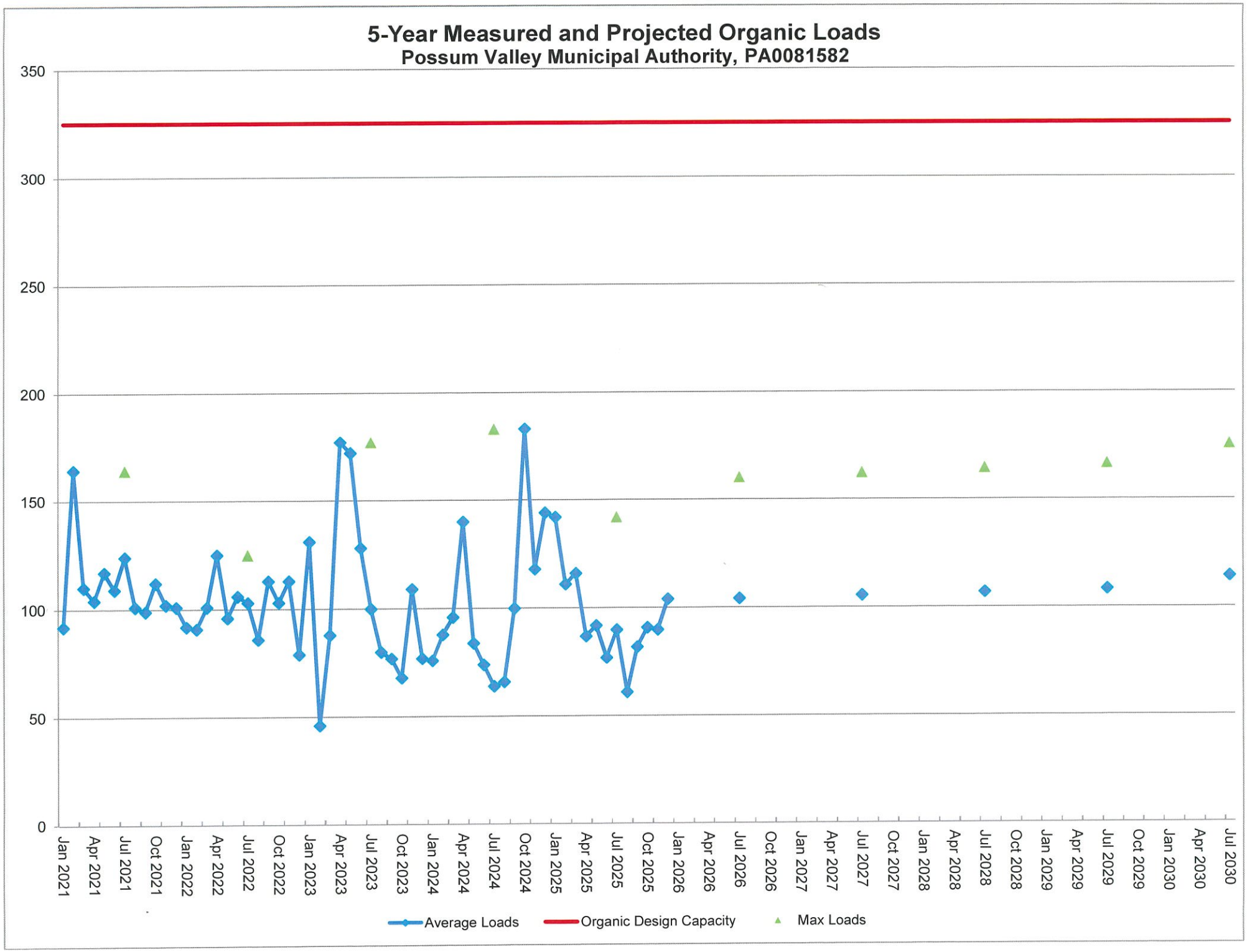
Jul 2027
Oct 2027
Jan 2028
Apr 2028
Jul 2028
Oct 2028
Jan 2029
Apr 2029
Jul 2029
Oct 2029
Jan 2030
Apr 2030
Jul 2030
Average Flows
Hydraulic Design Capacity
3-Month Max Flows

ATTACHMENT C:
ORGANIC LOADS GRAPH


5-Year Measured and Projected Organic Loads
Possum Valley Municipal Authority, PA0081582
350
300
250
200
150
100
50
0
Jan 2021
Apr 2021
Jul 2021
Oct 2021
Jan 2022
Apr 2022
Jul 2022
Oct 2022
Jan 2023
Apr 2023
Jul 2023
Oct 2023
Jan 2024
Apr 2024
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Jul 2027
Oct 2027
Jan 2028
Apr 2028
Jul 2028
Oct 2028
Jan 2029
Apr 2029
Jul 2029
Oct 2029
Jan 2030
Apr 2030
Jul 2030
Average Loads
Organic Design Capacity
Max Loads

ATTACHMENT D:
SEWER CONNECTIONS MAP

ATTACHMENT E:
SEWER SYSTEM MONITORING, MAINTENANCE AND REPAIRS

SEWER SYSTEM MONITORING, MAINTENANCE AND REPAIRS

Monitoring of the sewer system parameters during 2025 was conducted in compliance with the requirements of the facility's NPDES permit. Flow, pH, dissolved oxygen and total chlorine residual are sampled and recorded on a daily basis. Influent BOD and suspended solids are monitored and recorded twice per month. Effluent BOD, suspended solids, total phosphorus, ammonia and fecal coliforms are sampled and recorded twice per month.

Routine maintenance of the sewer system and pump stations is conducted regularly and as deemed necessary by the operators. The following is a list of repairs and maintenance performed on the PVMA sewer system during 2025:

- Pumped (44) sewer tanks as part of the STEP system;
- (7) repairs to STEP pump stations;
- (3) repairs to waste tanks at treatment plant;

ATTACHMENT F:
CONDITION OF PUMPING STATIONS

CONDITION OF PUMPING STATIONS

The existing sewage collection and conveyance system includes three (3) pumping stations. Table 1 (below) displays the number and power of pumps at each station, rated capacity of each station, rated capacity at each station with one pump out of service, presently connected EDUs (with average and peak flow rates) and projected EDUs for 2027 (with average and peak flow rates). All of these pumping stations are considered to be in good overall condition.

Table 1 shows that each pumping station in the Possum Valley system contains sufficient capacity to meet existing and projected needs over the next two (2) years. Each pumping station also contains sufficient capacity to operate under normal conditions with one pump out of service.

TABLE 1: CONDITION OF POSSUM VALLEY MUNICIPAL AUTHORITY PUMPING STATIONS

Pumping Station	Number of Pumps at Station	Rated Power of Each Pump	Rated Capacity (MGD)	Rated Capacity with one pump out of service (MGD)
Clearview Road	2	2.0 HP	0.19	0.095
Center Mills	2	5 HP	0.576	0.288
Sewage Treatment Plant	2	7.5 HP	0.792	0.396

	Estimated Present Condition (through 2025)			Estimated Projected Condition (through 2027)		
Pumping Station	EDUs	Average Flow (MGD)	Peak Flow (MGD)	EDUs	Average Flow (MGD)	Peak Flow (MGD)
Clearview Road	24	0.002	0.006	24	0.002	0.006
Center Mills	177	0.018	0.044	177	0.018	0.044
Sewage Treatment Plant	746	0.072	0.176	766	0.083	0.22

ATTACHMENT G:
INDUSTRIAL WASTE REPORT

INDUSTRIAL WASTE

The sewage use ordinances for PVMA require submission of detailed operating information from any industry required to pre-treat their discharge. Copies of the applicable parts of the rules and regulations have been included in past Chapter 94 report submissions and should be referenced for industrial waste management rules and regulations.

PVMA applies a flow based surcharge to dischargers of non-sanitary wastes that exceed certain threshold concentrations.

Dr. Pepper Snapple Group (formerly Cadbury Beverages) contributes only sanitary waste from their restroom facilities.

Kimes Cider Mills total annual discharge for 2025 was determined to be 131,031 gallons. Effluent samples are taken, analyzed and reported every two weeks to assure compliance.

Knouse Foods total annual discharge for 2025 was determined to be 183,569 gallons. Prior to discharge, samples are taken and split with the Authority to determine compliance.

There are currently no known problems as a result of these documented industrial discharges received at the plant. However, there are intermittent issues with acid being discharged to the system, which is believed to be associated with a nearby tannery business. PVMA is currently seeking proof of discharge from this facility as the property owner has indicated that the business is not responsible for the acidic discharges.

	KIMES	KNOUSE
JAN	n/a	n/a
FEB	n/a	n/a
MAR	n/a	n/a
APR	n/a	0
MAY	35410	34840
JUNE	92020	43810
JULY	0	n/a
AUG	0	0
SEPT	104490	39760
OCT	154290	46710
NOV	151760	54770
DEC	87240	38350
TOTAL	625,210.00	253,240.00

	KIMES	KNOUSE
JAN	n/a	27570
FEB	17620	23540
MAR	n/a	23540
APR	42040	0
MAY	12220	14350
JUNE	55870	3880
JULY	0	14860
AUG	17580	18490
SEPT	54040	27160
OCT	151750	79641
NOV	132280	12339
DEC	102480	24620
TOTAL	585,890.00	269,730.00

	KIMES	KNOUSE
JAN	67180	14490
FEB	47250	10
MAR	n/a	n/a
APR	n/a	n/a
MAY	23615	48780
JUNE	95530	1700
JULY	0	32350
AUG	47420	37740
SEPT	n/a	n/a
OCT	161010	0
NOV	141960	0
DEC	140260	0
TOTAL	724,225.00	135,070.00

2009

	KIMES	KNOUSE
JAN	40180	19130
FEB	36850	182778
MAR	37470	0
APR	21910	27680
MAY	95120	10
JUNE	0	0
JULY	0	24700
AUG	62940	0
SEPT	54410	0
OCT	138010	0
NOV	12210	21710
DEC	18100	0
TOTAL	517,200.00	196,008.00

2010

	KIMES	KNOUSE
JAN	11960	23470
FEB	n/a	n/a
MAR	12170	28850
APR	33260	6950
MAY	6330	7910
JUNE	52630	2000
JULY	0	5890
AUG	112660	0
SEPT	102250	62750
OCT	100180	17990
NOV	130630	24180
DEC	112000	22050
TOTAL	674,070.00	202,040.00

2011

	KIMES	KNOUSE
JAN	22000	23760
FEB	13618	46680
MAR	19750	24520
APR	22200	32420
MAY	23422	19190
JUNE	73609	24710
JULY	0	9040
AUG	26261	33850
SEPT	78890	66090
OCT	94609	59780
NOV	56015	18200
DEC	54635	28160
TOTAL	485,009.00	386,400.00

2012

	KIMES	KNOUSE
JAN	54635	25170
FEB	10020	0
MAR	17084	35380
APR	14036	10
MAY	96708	20470
JUNE	0	27030
JULY	9	22560
AUG	33305	0
SEPT	87998	27250
OCT	146431	33350
NOV	69946	19230
DEC	35658	41610
TOTAL	565,830.00	252,060.00

2013

	KIMES	KNOUSE
JAN	6631	12390
FEB	5760	42620
MAR	27555	25630
APR	25820	24120
MAY	87553	48890
JUNE	0	68990
JULY	18	23630
AUG	26631	71100
SEPT	79525	70110
OCT	111830	35430
NOV	85800	38690
DEC	26301	19420
TOTAL	483,424.00	481,020.00

2014

	KIMES	KNOUSE
JAN	2757	24430
FEB	914	20920
MAR	15503	37720
APR	708	31230
MAY	670	93190
JUNE	0	63660
JULY	8	58280
AUG	28120	39260
SEPT	47148	79800
OCT	51796	65010
NOV	46640	38100
DEC	7139	32150
TOTAL	202,398.00	583,750.00

2015

	KIMES	KNOUSE
JAN	832	56960
FEB	296	32680
MAR	1098	53150
APR	637	58600
MAY	1310	99710
JUNE	0	115000
JULY	0	93000
AUG	40877	21000
SEPT	110549	35000
OCT	113174	35000
NOV	69125	0
DEC	51736	23582
TOTAL	389,634.00	621,682.00

2016

	KIMES	KNOUSE
JAN	2,088	18,780
FEB	25,662	97
MAR	43,093	50,300
APR	22,846	41,241
MAY	28,449	36,010
JUNE	0	54,963
JULY	0	29,027
AUG	72,579	37,735
SEPT	82,624	27,760
OCT	140,698	29,366
NOV	49,182	29,148
DEC	14,472	22,183
TOTAL	481,693	376,610

2017

	KIMES	KNOUSE
JAN	10	0
FEB	48	11505
MAR	0	46,858
APR	0	28,890
MAY	0	28,716
JUNE	0	50,248
JULY	0	19,218
AUG	73,385	32,433
SEPT	75,493	10,737
OCT	94,852	32,634
NOV	53,574	56,951
DEC	33,560	11,267
TOTAL	330,932	329,457

2018		
	KIMES	KNOUSE
JAN	9	52,302
FEB	8,912	0
MAR	28,025	18,571
APR	10,243	30,307
MAY	22,873	33,530
JUNE	5744	17,365
JULY	4	27,894
AUG	44,469	47,619
SEPT	114,601	34,543
OCT	52,488	72,651
NOV	44,516	45,038
DEC	8,512	1,278
TOTAL	340,396	381,098

2019		
	KIMES	KNOUSE
JAN	12,986	28,084
FEB	9,295	9233
MAR	16,758	9,617
APR	25,439	27,673
MAY	36,850	1
JUNE	1011	9,332
JULY	0	21,921
AUG	30,338	23,409
SEPT	68,309	22,524
OCT	92,502	0
NOV	60,957	24,545
DEC	32,571	26,565
TOTAL	387,016	202,904

2020		
	KIMES	KNOUSE
JAN	14,867	0
FEB	14,209	22774
MAR	20,238	0
APR	156	30,049
MAY	1	30,428
JUNE	0	0
JULY	2	42,771
AUG	0	46,190
SEPT	25,447	33,996
OCT	62,064	48,824
NOV	22,108	64,729
DEC	10,343	28,037
TOTAL	169,435	347,798

	[illegible]	[illegible]
JAN	12,714	29,639
FEB	10,593	32,992
MAR	31,803	23,753
APR	20,476	44,865
MAY	4,396	24,921
JUNE	56	48,897
JULY	0	24,776
AUG	8	30,374
SEPT	19,576	37,424
OCT	69,108	36,784
NOV	40,676	26,775
DEC	19,005	3
TOTAL	[illegible]	[illegible]

	KIMES	KNOUSE
JAN	10,567	38,159
FEB	11,183	29,541
MAR	28,195	14
APR	24,637	51,186
MAY	26,819	41,911
JUNE	18	16,238
JULY	276	61,928
AUG	25	33,179
SEPT	69	27,433
OCT	44,709	44,333
NOV	27,995	39,919
DEC	18,624	38,624
TOTAL	193,117	422,465

2023		
	KIMES	KNOUSE
JAN	32,561	17,053
FEB	12,112	23,277
MAR	19,420	69,490
APR	30,018	11,352
MAY	9,845	28,806
JUNE	3,826	43,225
JULY	63	38,686
AUG	57	65,235
SEPT	3,804	34,413
OCT	54,810	96,002
NOV	25,163	64,102
DEC	12,928	0
TOTAL	204,607	491,641

	[illegible]	[illegible]
JAN	8,084	33,422
FEB	8,947	0
MAR	11,103	24,783
APR	18,737	0
MAY	40,464	30,280
JUNE	5	0
JULY	1175	59,230
AUG	1,095	0
SEPT	12,065	42,437
OCT	46,625	32,212
NOV	6,645	34,249
DEC	2,143	19,993
TOTAL	[illegible]	[illegible]

2025		
	KIMES	KNOUSE
JAN	1,529	39,786
FEB	7,683	31,654
MAR	13,293	35,329
APR	94	46,828
MAY	14,294	29,972
JUNE	0	0
JULY	0	0 ~~6000~~
AUG	0	0
SEPT	0	0
OCT	50,306	0
NOV	26,320	0
DEC	17,512	26,320
TOTAL	131,031	183,569

ATTACHMENT H:
BIOSOLIDS REPORT

BIOSOLIDS

During 2025, the PVMA Sewage Treatment Plant processed approximately 16.378 dry tons of biosolids. Solids from the pumping of the STEP system septic tanks are not included in this report. Pumping records are kept, but not incorporated into the management of biosolids. The Sewage Sludge/Biosolids Production and Disposal Supplemental Reports from the treatment plant provided this information. All biosolids processed at the plant were utilized in agricultural application at the Donald Bream Farm II, located in South Middleton Township, Cumberland County.

Facility Name: **POSSUM VALLEY MUNICIPAL AUTHORITY**
Municipality: **MENALLEN TOWNSHIP** County: **ADAMS**
Watershed: **7-F**

Date	Liquid Sewage Sludge/Biosolids Hauled Off Site		
	Gallons	% Solids	Dry Tons
1/17/25	13,500	2.80	1.576
2/3/25	5,000	2.00	0.417
3/13/25	14,000	3.60	2.102
3/24/25	8,000	2.00	0.667
4/30/25	14,000	3.10	1.810
5/23/25	6,400	2.20	0.587
6/30/25	14,800	3.30	2.037
8/4/25	17,600	3.50	2.569
9/12/25	14,000	3.30	1.927
10/20/25	5,500	1.90	0.436
12/1/25	14,200	3.80	2.250
Averages	11,545	2.86	1.489
		TOTAL	**16.378**

ATTACHMENT I:
SEWAGE SLUDGE MANAGEMENT INVENTORY

Solids Management (Sludge) Calculator

This worksheet calculates the expected sludge volume that should be produced by various treatment processes over a one-year period. Enter data into green cells - hit the Tab key to move between cells. Red cells are calculated.

Facility Name: **Possum Valley Municipal Authority** Permit No.: **PA0081582**

Enter Date *Enter Date*

Evaluation Period: **1/1/2025** to **12/31/2025**

Design Flow: **0.12** MGD Actual Annual Average Flow: **0.072** MGD

Type of Biological Treatment Process: **Extended Aeration** Treatment Factor: **0.65**

Type of Digestion Process: **Aerobic Digestion, HDT = 10 Days** Digestion Factor: **0.9**

Total Population Served by Treatment Plant: **746**

Average Annual Influent BOD5 Load (per Ch. 94 Report): **95.0** lbs/day

Average Annual Influent BOD5 Load (Expected based on Population): **126.8** lbs/day *(Population x 0.17)*

% of Influent BOD5 Load per Ch. 94 Report / Influent Load Expected: **74.9%** *(Influent Load per Ch. 94 Report / Influent Load based on Population)*

Average Annual Effluent Concentration of **CBOD5** : **3** mg/L ***Assume 3.6 mg/L BOD5***

Average Annual Pounds (lbs) of BOD5 Discharged: **2.16** lbs/day *(Actual Flow x Effluent BOD5 Concentration x 8.34)*

Influent BOD5 Load per Person per Day (based on Ch. 94): **0.127** *(Influent BOD5 Load per Ch. 94 Report / Population - 0.17 to 0.22 is typical)*

Pounds of BOD5 Removed (based on Ch. 94): **92.8** lbs/day *(Influent BOD5 Load per Ch. 94 Report - BOD5 Discharged)*

Pounds of BOD5 Removed (based on Population): **124.7** lbs/day *(Influent BOD5 Load Expected based on Population - BOD5*

Sludge Removed from Treatment Plant (Previous Year): **16.4** Dry Tons = **32,756** Dry lbs

Sludge Production and Wasting Calculations

	Based on Chapter 94 Report		*Based on Population*	
	92.8	BOD5 Removed / Day (lbs)	124.7	BOD5 Removed / Day (lbs)
X	0.65	Treatment Factor	0.65	Treatment Factor
	60.34	Daily Solids Production (lbs)	81.03	Daily Solids Production (lbs)
X	0.9	Digestion Factor	0.9	Digestion Factor
	54.31	Daily Digested Solids (lbs)	72.93	Daily Digested Solids (lbs)
X	365	Days per Year	365	Days per Year
	19,823	Solids Generated / Year (lbs)	26,618	Solids Generated / Year (lbs)
-	32,756	Solids Actually Wasted / Year (lbs)	32,756	Solids Actually Wasted / Year (lbs)
	-12,933	Difference (lbs)	*-6,138*	Difference (lbs)
	165%	% of Expected Volume Wasted	123%	% of Expected Volume Wasted
		(85 - 115% is generally acceptable)		*(85 - 115% is generally acceptable)*
	2.9%	Percent Solids of Wasted Solids	2.9%	Percent Solids of Removed Solids
	83,108	Volume of Solids to Remove Annually (gallons)	111,593	Volume of Solids to Remove Annually (gallons)
-	137,328	Volume of Solids Actually Removed Annually (gallons)	137,328	Volume of Solids Actually Removed Annually (gallons)
	-54,220	Difference (gallons)	*-25,735*	Difference (gallons)

ATTACHMENT J:
FLOW CALIBRATION REPORT

Control Systems 21

"Your Process Control Specialists"

CERTIFICATE of CALIBRATION

Cal Certificate # 91657

Company Name Possum Valley Sewer Authority
P.O. Box
Benderville, PA 17306

Instrument ID PV-02

Description	Effluent Flowmeter	**Status**	Active
Manufacturer	Siemens	**Temp °F**	70
Model Number		**Cal Proc**	4.8
Serial Number		**Adjusted To Improve**	No
Location	N/A	**Calibration Frequency**	6 Months
Building	N/A	**Calibrated**	04/21/2025
Department	N/A	**Next Due Date**	10/31/2025

Calibration Specifications

Group Name Flowmeter (PB 6 in) (Z=17.75)

Test Point	Ref Standard	Tol	UUT As Found	P/F	UUT As Left	P/F	Dev
1	48.73 GPM	+/-2.44	47.99 GPM	P	47.99 GPM	P	-0.74

Calibration Standards Used

Test Instrument ID	Manufacturer	Model Number	Serial Number	Next Cal Date
ISCO	Isco Flow Book	N/A	N/A	

Equipment listed on this cert is certified in reference to our current work instructions as part of our quality system.

Where applicable and noted calibrations were performed using standards whose calibration is traceable through NIST or another National Metrology Institute to the International System of Units (SI units).

Control Systems 21 utilizes the comparison method of calibration. Results are reviewed, when applicable, and any results exceeding the agreed upon specifications are indicated by red and/or bold print

All results with this certification relate only to the item(s) calibrated. This certificate shall not be reproduced except in full and with written consent of Control Systems 21. Unless otherwise noted all calibrations were performed in the field at the customers location.

Please note: *any number of factors may cause the calibration item to drift out of tolerance before the calibration interval has expired.*

Remarks or Special Requirements:

Calibration Result: Calibration Successful

Calibrated By: David Cummins

Finalized By: Mike Cherewka 28 April 2025 10:26:10AM
Calibration Manager

Control Systems 21
713 Range End Rd. • Dillsburg, PA 17019 • Voice: 717 432-5511 • Fax: 717 432-7550
email@controlsystems21.com

Control Systems 21

"Your Process Control Specialists"

CERTIFICATE of CALIBRATION

Cal Certificate # 96004

Company Name Possum Valley Sewer Authority
P.O. Box
Benderville, PA 17306

Instrument ID **PV-02**

Description Effluent Flowmeter
Manufacturer Siemens
Model Number
Serial Number
Location N/A
Building N/A
Department N/A

Status Active
Temp °F 55
Cal Proc 4.8
Adjusted To Improve No
Calibration Frequency 6 Months
Calibrated 10/21/2025
Next Due Date 04/30/2026

Calibration Specifications

Group Name Flowmeter (PB 6 in) (Z=17.75)

Test Point	Ref Standard	Tol	UUT As Found	P/F	UUT As Left	P/F	Dev
1	48.70 GPM	+2.44/-2.43	46.83 GPM	P	46.83 GPM	P	-1.87

Calibration Standards Used

Test Instrument ID	Manufacturer	Model Number	Serial Number	Next Cal Date
ISCO	Isco Flow Book	N/A	N/A	
TAPE MEASURE	N/A	N/A	N/A	

Equipment listed on this cert is certified in reference to our current work instructions as part of our quality system.

Where applicable and noted calibrations were performed using standards whose calibration is traceable through NIST or another National Metrology Institute to the International System of Units (SI units).

Control Systems 21 utilizes the comparison method of calibration. Results are reviewed, when applicable, and any results exceeding the agreed upon specifications are indicated by red and/or bold print

All results with this certification relate only to the item(s) calibrated. This certificate shall not be reproduced except in full and with written consent of Control Systems 21. Unless otherwise noted all calibrations were performed in the field at the customers location.

Please note: *any number of factors may cause the calibration item to drift out of tolerance before the calibration interval has expired.*

Remarks or Special Requirements:

Calibration Result: Calibration Successful

Calibrated By: Matthew DeVere

Finalized By: Matthew DeVere 21 October 2025 10:28:02AM

Print Date: 10/21/2025

Control Systems 21
713 Range End Rd. • Dillsburg, PA 17019 • Voice: 717 432-5511 • Fax: 717 432-7550
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