

Application Type Renewal
Facility Type Municipal
Major / Minor Minor

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application No. PA0057606
APS ID 1141248
Authorization ID 1533708

Applicant and Facility Information

Applicant Name	<u>Upper Salford Township Montgomery County</u>	Facility Name	<u>Upper Salford Township Bldg Properties</u>
Applicant Address	<u>1441 Salford Station Road</u> <u>Harleysville, PA 19438-1538</u>	Facility Address	<u>1441 Salford Station Road</u> <u>Salfordville, PA 18958</u>
Applicant Contact	<u>Amy Shafer</u>	Facility Contact	<u>Deborah Schumm</u>
Applicant Phone	<u>(610) 287-6160</u>	Facility Phone	<u>(484) 593-2989</u>
Client ID	<u>65117</u>	Site ID	<u>466053</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Upper Salford Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Montgomery</u>
Date Application Received	<u>July 14, 2025</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u></u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of SFTF permit.</u>		

Summary of Review

The PA Department of Environmental Protection (PADEP/Department) received an NPDES permit renewal application for Upper Salford Farmhouse STP (facility) from Upper Salford Township (permittee) on July 14, 2025. The facility is in Upper Salford Township, Montgomery County. This is a Small Flow Treatment Facility (SFTF) with a design flow of 0.0008 MGD. The treated effluent discharges through Outfall 001 into an UNT to Perkiomen Creek (TSF, MF) at RMI 0.12. The existing permit expires on January 31, 2026.

The facility was previously served by an on-lot septic system. In 1997, the PADEP approved a revision to the Upper Salford Township Official Sewage Facilities.

The treatment system consists of a goulds simplex ejector pump that lifts the wastewater from the Farmhouse to the first tank of the SFTF. The first tank is 1,500-gallon two compartment septic tank. The second tank is a 1,000-gallon dosing tank that distributes the septic tank effluent over the two free access intermittent sand filters. The final tank is a 250-gallons chlorine contact tank fitted in a Sanuril Model 100 Chlorinator. Final effluent is then discharged via gravity.

Changes in the permit: Fecal coliform changed to 1/month 200 Geo mean, TSS changed to 1/month 10 Avg Monthly 20 IMAX

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request

Approve	Deny	Signatures	Date
X		<i>Amy Boginsky</i> Amy Boginsky, MS, EIT / Environmental Engineering Specialist	December 19, 2025
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	12/31/2025

Summary of Review

or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	.0008
Latitude	40° 17' 24.66"	Longitude	-75° 27' 12.15"
Quad Name	Perkiomenville	Quad Code	1642
Wastewater Description: Sewage Effluent			
Receiving Waters	Unnamed Tributary to Perkiomen Creek (TSF, MF)	Stream Code	0.01352
NHD Com ID	25986888	RMI	0.12
Drainage Area	0.81	Yield (cfs/mi ²)	
Q ₇₋₁₀ Flow (cfs)	0.0474	Q ₇₋₁₀ Basis	StreamStats
Elevation (ft)		Slope (ft/ft)	
Watershed No.	3-E	Chapter 93 Class.	TSF, MF
Existing Use	Aquatic Life and Recreation	Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Aqua PA Main Division		
PWS Waters	Perkiomen Creek	Flow at Intake (cfs)	
PWS RMI	0.94	Distance from Outfall (mi)	13.76

Changes Since Last Permit Issuance: None

Treatment Facility Summary				
Treatment Facility Name: Upper Salford Township - Farmhouse STP				
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	Septic Tank Sand Filter W/Sol Removal	Hypochlorite	0.0008
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0008		Not Overloaded	Anaerobic Digestion	

Changes Since Last Permit Issuance: None

Compliance History

DMR Data for Outfall 001 (from November 1, 2024 to October 31, 2025)

Parameter	OCT-25	SEP-25	AUG-25	JUL-25	JUN-25	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24
Flow (GPD) Average Monthly	150	150	150	150	150	150	150	0.00015	0.00015	150	150	150
pH (S.U.) Instantaneous Minimum	7.59	7.22	7.81	7.33	7.01	7.82	7.44	6.92	8.21	6.78	7.71	7.9
pH (S.U.) Instantaneous Maximum	7.59	7.22	7.81	7.33	7.01	7.82	7.44	6.92	8.21	6.78	7.71	7.9
DO (mg/L) Instantaneous Minimum	6.82	6.89	8.34	7.07	8.14	8.37	8.09	8.97	11.61	10.71	7.37	6.34
TRC (mg/L) Average Monthly	0.1	0.4	0.2	0.4	0.2	0.4	0.5	0.3	0.2	0.3	0.1	0.03
CBOD5 (mg/L) Average Monthly	3.2	33.7	GG	GG	GG	GG	GG	2.4	GG	GG	GG	GG
TSS (mg/L) Semi-Annual Average					11.5						6.5	
Fecal Coliform (No./100 ml) Semi-Annual Average					< 1.0						< 1	
Ammonia (mg/L) Average Monthly	GG	< 0.1	GG	GG	GG	GG	GG	1.4	GG	GG	GG	GG

Compliance History

Effluent Violations for Outfall 001, from: December 1, 2024 To: October 31, 2025

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
CBOD5	09/30/25	Avg Mo	33.7	mg/L	15.0	mg/L

Summary of Inspection:

10/7/2025: The Small Flow Treatment Facility system continues to serve the onsite farmhouse office/residence and the bathrooms of the Township admin office and adjacent maintenance building. The farmhouse is currently vacant. There is anaerobic treatment but no active aerobic treatment in the system. The system consists of a baffled 1500 gal septic tank, a storage/pump pit, three accessible sand filters and a Chlorine contact tank. The pump pit, which has 2 pumps, was not opened. The pit alarm light and horn tested good. All sand filters were clean and well maintained. Tabs were present in the chlorinator and outfall dechlorinator. The outfall is located immediately downstream of the Salford Station Road Bridge. No effluent was discharging at the time of inspection. The stream below the tributary showed no obvious negative impact or increased algal growth

Development of Effluent Limitations

Outfall No.	001	Design Flow (MGD)	.0008
Latitude	40° 17' 25.00"	Longitude	-75° 27' 12.00"
Wastewater Description: Sewage Effluent			

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
CBOD ₅	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform (5/1 – 9/30)	200 / 100 ml	Geo Mean	-	92a.47(a)(4)
Fecal Coliform (5/1 – 9/30)	1,000 / 100 ml	IMAX	-	92a.47(a)(4)
Fecal Coliform (10/1 – 4/30)	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
Fecal Coliform (10/1 – 4/30)	10,000 / 100 ml	IMAX	-	92a.47(a)(5)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)

Comments: PADEP's SOP titled New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications (SOP No. BCW-PMT-003, revised May 17, 2019) indicates "Water Quality modeling using PENTOXSD (TMS) and/or WQM models will not be conducted, but TRC Spreadsheet will be used to determine TRC limits for non-SRSTPs, unless UV disinfection is used or proposed". Based on that, no WQM or TMS modeling was conducted. The existing NH₃-N and CBOD₅ limits will be carried over in this renewal due to federal anti-backsliding policy.

NH₃-N: Existing dry weather limit of 5.0 mg/l and wet weather limit of 15 mg/l will be carried over for 1/month. However, the permittee is not required to sample every month. A footnote will be added in the Part A of the permit that will read "For May 1-Oct 31, the permittee is required to collect one grab sample and report the result. For rest of the months, permittee may report appropriate No Discharge code. For Nov 1- Apr 30, the permittee is required to collect one grab sample and report the result. For rest of the months, permittee may report appropriate No Discharge code."

CBOD₅: Existing dry weather limit of 15 mg/l and wet weather limit of 25 mg/l will be carried over. As noted above for NH₃-N, the minimum measurement frequency is 1/month with above footnote clarifying only one sample for each period is necessary.

TRC: The attached computer printout utilizes the equation and calculations as presented in the Department's 2003 Implementation Guidance for Total Residual Chlorine (TRC) (ID#391-2000-015) for developing chlorine limitations. The attached printout indicates that a water quality limit of 0.5 mg/l would be needed to prevent toxicity concerns at the discharge point for Outfall 001. The Instantaneous Maximum (IMAX) limit is 1.6 mg/l. These limits are consistent with the current permit limits and thus will be carried over.

Fecal Coliform: Current permit has semi-annual average limit of 200 CFU/100 ml. The limit will be changed to Geo mean 200 CFU/100 mL with a sampling frequency of 1/month as consistent with the SOP.

D.O.: The existing permit has a minimum DO of 4.0 mg/l. Pa Code 25 Chapter 93.7 requires a minimum DO of 5.0 mg/l for TSF. However, septic tank sand filter system doesn't have a mechanism to control the DO in their effluent. Therefore, it is recommended that existing limits will be carried over in this renewal.

pH:

The TBEL for pH is above 6.0 and below 9.0 S.U. (40 CFR §133.102(c) and Pa Code 25 § 95.2(1)) which are existing limits and will be carried over.

Total Suspended Solids (TSS):

TSS will be changed to 1/month 10 mg/L Avg Monthly 20 mg/L IMAX to be consistent with the SOP.

Flow Monitoring Requirement:

The requirement to monitor the volume of effluent will remain in the draft permit per 40 CFR § 122.44(i)(1)(ii).

Toxics: SFTFs are exempted from submitting toxics results or WETT.

Anti-Backsliding

The proposed limits are at least as stringent as are in the existing permit, unless otherwise stated; therefore, anti-backsliding rule is not applicable.

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Average Monthly	Average Monthly	Maximum	Instant. Maximum		
Flow (GPD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
DO	XXX	XXX	4.0 Inst Min	XXX	XXX	XXX	1/month	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/month	Grab
CBOD5 Nov 1 - Apr 30	XXX	XXX	XXX	25.0	XXX	XXX	1/month	Grab
CBOD5 May 1 - Oct 31	XXX	XXX	XXX	15.0	XXX	XXX	1/month	Grab
TSS	XXX	XXX	10.0	XXX	XXX	20.0	1/month	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	1/month	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	15.0	XXX	XXX	1/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	5.0	XXX	XXX	1/month	Grab

Compliance Sampling Location: At Outfall 001

Other Comments:

* For May 1-Oct 31, the permittee is required to collect one grab sample and report the result. For rest of the months, permittee may report appropriate No Discharge code. For Nov 1- Apr 30, the permittee is required to collect one grab sample and report the result. For rest of the months, permittee may report appropriate No Discharge code

TRC EVALUATION				
Input appropriate values in A3:A9 and D3:D9				
0.0474	= Q stream (cfs)	0.5	= CV Daily	
0.0008	= Q discharge (MGD)	0.5	= CV Hourly	
30	= no. samples	1	= AFC_Partial Mix Factor	
0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor	
0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance Time (min)	
0.5	= BAT/BPJ Value	720	= CFC_Criteria Compliance Time (min)	
0	= % Factor of Safety (FOS)		=Decay Coefficient (K)	
Source	Reference	AFC Calculations		Reference CFC Calculations
TRC	1.3.2.iii	WLA afc = 12.237		1.3.2.iii WLA cfc = 11.922
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373		5.1c LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 4.560		5.1d LTA_cfc = 6.931
Source	Effluent Limit Calculations			
PENTOXSD TRG	5.1f	AML MULT = 1.231		
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.500		BAT/BPJ
		INST MAX LIMIT (mg/l) = 1.635		