

# Southwest Regional Office CLEAN WATER PROGRAM

Application Type

Facility Type

Major

Municipal

Major

Major

# NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application No. PA0026255 A-1

APS ID 1095674

Authorization ID 1452312

Applicant and Facility Information						
Applicant Name	Allegheny Valley Joint Sewer Authority	Facility Name	Allegheny Valley Joint Sewer Authority STP			
Applicant Address	2400 Freeport Road	Facility Address	2400 Freeport Road			
	Cheswick, PA 15024-0158		Pittsburgh, PA 15238-1408			
Applicant Contact	Tim Kephart	Facility Contact	Same as Applicant			
Applicant Phone	(412) 828-7227	Facility Phone	(412) 828-7227			
Client ID	82759	Site ID	714426			
Ch 94 Load Status	Not Overloaded	Municipality	Harmar Township			
Connection Status	No Limitations	County	Allegheny			
Date Application Rece	eived August 24, 2023	EPA Waived?	No			
Date Application Acce	epted August 30, 2023	If No, Reason	Major Facility, Pretreatment			

# **Summary of Review**

Allegheny Valley Joint Sewer Authority (AVJSA) has applied for an amendment to NPDES Permit No. PA0026255. NPDES Permit No. PA0026255 was previously issued by the Department of Environmental Protection (DEP) on February 7, 2022 and expires February 28, 2027.

WQM Permit No. 0276461 A-3, issued March 9, 2020, approved improvements to AVJSA's collection and treatment plant including Ultraviolet (UV) disinfection installation. The UV disinfection installation has been completed; therefore, the permit is being amended to remove the TRC limit and impose daily UV transmittance reporting.

Part C.I.D of the original permit, which was a condition requiring chlorine minimization has been removed from the draft permit and has been replaced by what was previously Part C.I.E.

No other changes are being made to the permit.

There are no open violations for AVJSA (Client ID 82759).

#### Anti-Backsliding

Section 402(o) of the Clean Water Act (CWA), enacted in the Water Quality Act of 1987, establishes anti-backsliding rules governing two situations. The first situation occurs when a permittee seeks to revise a Technology-Based effluent limitation based on BPJ to reflect a subsequently promulgated effluent guideline which is less stringent. The second situation addressed by Section 402(o) arises when a permittee seeks relaxation of an effluent limitation which is based upon a State treatment standard of water quality standard.

Approve	Deny	Signatures	Date
Х		It al	
		Stephanie Conrad / Environmental Engineering Specialist	September 22, 2023
х		Mahbuba lasmin, Ph.D., P.E. / Environmental Engineering Manager	October 30, 2023

### **Summary of Review**

Previous limits can be used pursuant to EPA's anti-backsliding regulation 40 CFR 122.44 (I) Reissued permits. (1) Except as provided in paragraph (I)(2) of this section when a permit is renewed or reissued. Interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under §122.62). (2) In the case of effluent limitations established on the basis of Section 402(a)(1)(B) of the CWA, a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under section 304(b) subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit.

The facility is not seeking to revise the previously permitted effluent limits.

#### **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 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.

scharge, Receiving Wa	ters and Water Supply Infor	mation				
Outfall No. 001		Design Flow (MGD)	5.5			
Latitude 40° 31' 48	 !	Longitude	-79º 50' 53"			
Quad Name New Ke		Quad Code	1407			
Wastewater Description:		Quad Codo	1107			
Receiving Waters Alle	gheny River	Stream Code	42122			
	3972840	RMI	12.9			
Drainage Area 116	500	Yield (cfs/mi²)	0.206			
Q <sub>7-10</sub> Flow (cfs) 2,3	90	Q <sub>7-10</sub> Basis	US Army Corp of Engineers			
Elevation (ft) 72	1	Slope (ft/ft)	0.001			
Watershed No. 18-	A	Chapter 93 Class.	WWF			
Existing Use		Existing Use Qualifier				
Exceptions to Use		Exceptions to Criteria				
Assessment Status  Cause(s) of Impairment  Source(s) of Impairment	DISSOLVED SOLIDS (TI ACID MINE DRAINAGE, CONSTRUCTION, CONSTRUCTION, CON	CATION, METALS, NUTRIENTS DS), TOTAL DISSOLVED SOLID ACID MINE DRAINAGE, CONS STRUCTION, SOURCE UNKNO	OS (TDS), TURBIDITY TRUCTION,			
TMDL Status		Name				
Background/Ambient Da pH (SU) Temperature (°F) Hardness (mg/L) Other:	ta 	Data Source				
Nearest Downstream Pu PWS WatersAllegh	blic Water Supply Intake neny River	Wilkingsburg-Penn Joint Wate	er Authority			
PWS RMI 8.72		Distance from Outfall (mi)	4.18			

Changes Since Last Permit Issuance: None

Treatment Facility Summary								
Treatment Facility Nar	<b>ne:</b> Allegheny Valley Joint	Sewer Authority STP						
Degree of Avg Annual								
Waste Type	Treatment	Process Type	Disinfection	Flow (MGD)				
		Activated Sludge With						
Sewage	Tertiary	Solids Removal	Ultraviolet	5.5				
Hydraulic Capacity	Organic Capacity			Biosolids				
(MGD)	(lbs/day)	Load Status	Biosolids Treatment	Use/Disposal				
•				Disposed of in				
			Anaerobic and Aerobic	Monroeville				
5.5	12100	Not Overloaded	Digestion	Landfill				

Changes Since Last Permit Issuance: Since the last NPDES renewal in February 2022, no new WQM permits for the STP upgrades have been issued. WQM permit no. 0276461 A-3 was issued March 9, 2020 and approved upgrades to the treatment plant including switching from Chlorine disinfection to UV disinfection installed.

General permit WQG02022202 was issued September 14, 2022 and approved a grinder pump and pressure sewer system serving a new development with 52 EDUs.

Development of Effluent Limitations							
Outfall No.	001	Design Flow (MGD)	5.5				
Latitude	40° 31' 48.00"	Longitude \( \)	-79º 50' 53.00"				
Wastewater D	Description: Effluent						

# **UV Monitoring**

In accordance with Section I.A. DEP's SOP for *Establishing Effluent Limitations for Individual Sewage Permits* [SOP No. BCW-PMT-033 Version 1.9], when UV disinfection is used, TRC limits are not applicable. Routine UV transmittance (%) monitoring is being imposed at the same monitoring frequency that would be used for TRC.



# **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.

	Effluent Limitations					Monitoring Requirements		
Doromotor	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2)	Required
Parameter	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum	Measurement Frequency	Sample Type
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/day	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	xxx	XXX	9.0	1/day	Grab
DO	XXX	XXX	4.0 Inst Min	XXX	XXX	XXX	1/day	Grab
Ultraviolet light transmittance (%)	XXX	XXX	Report	XXX	XXX	XXX	1/day	Measured
Carbonaceous CBOD₅	1145	1830	XXX	25.0	40.0	50	1/day	24-Hr Composite
BOD₅ Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	+1/day	24-Hr Composite
TSS Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	1/day	24-Hr Composite
TSS	1375	2060	XXX	30.0	45.0	60	1/day	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/day	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/day	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/month	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/quarter	24-Hr Composite
Ammonia	XXX	XXX	XXX	Report	XXX	XXX	1/day	24-Hr Composite

# Outfall 001, Continued (from Permit Effective Date through Permit Expiration Date)

	Effluent Limitations					Monitoring Requirements		
Parameter	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2)	Required
Farameter	Average	Weekly		Average	Weekly	Instant.	Measurement	Sample
	Monthly	Average	Minimum	Monthly	Average	Maximum	Frequency	Type
					Report			24-Hr
Total Phosphorus	XXX	XXX	XXX	XXX	Daily Max	XXX	1/quarter	Composite

Compliance Sampling Location:

Other Comments: