

Application Type Amendment, Major
 Facility Type Municipal
 Major / Minor Major

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0091782 A-1
 APS ID 1007536
 Authorization ID 1298582

Applicant and Facility Information

Applicant Name	<u>West Hills Area Water Pollution Control Authority</u>	Facility Name	<u>West Hills Area Water Pollution Control Authority STP</u>
Applicant Address	<u>257 Linde Road</u> <u>Kittanning, PA 16201-4719</u>	Facility Address	<u>257 Linde Road</u> <u>Kittanning, PA 16201-4719</u>
Applicant Contact	<u>Tim Jordan</u>	Facility Contact	<u></u>
Applicant Phone	<u>(724) 545-9126</u>	Facility Phone	<u></u>
Client ID	<u>43725</u>	Site ID	<u>263588</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>North Buffalo Township</u>
Connection Status	<u>Dept. Imposed Connection Prohibitions</u>	County	<u>Armstrong</u>
Date Application Received	<u>November 12, 2019</u>	EPA Waived?	<u>No</u>
Date Application Accepted	<u>December 16, 2019</u>	If No, Reason	<u>Major Facility</u>
Purpose of Application	<u>Amendment to add UV disinfection equipment and effluent flow measurement equipment.</u>		

Summary of Review

The permittee is proposing to include a new UV disinfection system and flow measurement equipment in the west half of the existing chlorine contact tank and maintain the east half of the existing chlorine contact tank and chlorine feed equipment in the event it is needed. UV disinfection will be primary disinfection with chlorine disinfection only being used as an emergency backup.

WQM Permit No. 0379404 will be amended to address the proposed modifications to the treatment plant.

This permit is being amended to include UV (dosage) monitoring to the permit requirements. TRC limits will be retained upon start-up of the upgraded plant in the event the need to restart chlorine disinfection equipment is necessary. No other changes to the permit are being proposed as part of this permit amendment.

There are currently no open violations for the permittee listed in EFACTS (2/03/2020).

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.

Approve	Deny	Signatures	Date
X		Adam J. Pesek, E.I.T. / Environmental Engineering Specialist	
X		Justin C. Dickey, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>1.3</u>
Latitude	<u>40° 48' 3.12"</u>	Longitude	<u>-79° 30' 57.86"</u>
Quad Name	<u>Kittanning</u>	Quad Code	<u>1209</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Allegheny River</u>	Stream Code	<u>42122</u>
NHD Com ID	<u>134403860</u>	RMI	<u>44.2</u>
Drainage Area	<u>8590</u>	Yield (cfs/mi ²)	<u>0.2514</u>
Q ₇₋₁₀ Flow (cfs)	<u>2250</u>	Q ₇₋₁₀ Basis	<u>Previous pollution report</u>
Elevation (ft)	<u>770</u>	Slope (ft/ft)	<u>0.001</u>
Watershed No.	<u>17-E</u>	Chapter 93 Class.	<u>WWF</u>
Existing Use	<u>Add N</u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>POLYCHLORINATED BIPHENYLS (PCBs)</u>		
Source(s) of Impairment	<u>SOURCE UNKNOWN</u>		
TMDL Status	<u>Pending</u>	Name	<u></u>
Background/Ambient Data		Data Source	
pH (SU)	<u></u>	<u></u>	
Temperature (°C)	<u>25</u>	<u>Default (WWF)</u>	
Hardness (mg/L)	<u></u>	<u></u>	
Other:	<u></u>	<u></u>	
Nearest Downstream Public Water Supply Intake	<u>North Buffalo Township</u>		
PWS Waters	<u>Allegheny River</u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u>29.3</u>	Distance from Outfall (mi)	<u>15.0</u>

Changes Since Last Permit Issuance:

Other Comments:

Treatment Facility Summary				
Treatment Facility Name: West Hills Area Wpca STP				
WQM Permit No.		Issuance Date		
379404		3/12/1980		
379404 A-3		8/19/2015		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Activated Sludge	Hypochlorite	1.3
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
1.3	2210	Not Overloaded	Belt Filtration	Landfill

Changes Since Last Permit Issuance: None

Other Comments:

Compliance History

DMR Data for Outfall 001 (from December 1, 2018 to November 30, 2019)

Parameter	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18
Flow (MGD) Average Monthly	0.6597	0.5803	0.51	0.53	0.66	0.80	0.67	0.64	0.65	1.02	0.75	0.79
Flow (MGD) Daily Maximum	1.4363	1.8985	1.00	0.85	1.8	1.66	1.07	1.59	1.36	2.32	2.55	2.27
pH (S.U.) Instantaneous Minimum	6.29	6.34	6.6	6.09	7.21	7.00						
pH (S.U.) Minimum							7.05	7.20	7.20	7.00	6.80	6.90
pH (S.U.) Instantaneous Maximum	8.9	8.55	7.6	7.70	7.64	7.80						
pH (S.U.) Maximum							7.74	7.70	7.69	7.50	7.38	7.34
DO (mg/L) Instantaneous Minimum	5.57	5.85	6.92	7.06	6.3	7.95	7.31	8.10	8.40	7.90	7.20	7.60
TRC (mg/L) Average Monthly	0.33	0.31	0.43	0.32	0.38	0.24	0.43	0.38	0.31	< 0.27	0.38	0.43
TRC (mg/L) Instantaneous Maximum	0.78	1.19	1.08	0.75	1.57	0.39	0.85	0.62	1.80	0.71	0.60	0.95
CBOD5 (lbs/day) Average Monthly	32	26	33	28	51	50	48	41	155	68	75	33
CBOD5 (lbs/day) Raw Sewage Influent Average Monthly							688	777	1156	980	798	849
CBOD5 (lbs/day) Raw Sewage Influent Weekly Average							932	887	1191	1566	1809	1178
CBOD5 (lbs/day) Weekly Average	42	50	42	33	75	73	72	67	274	91	225	59
CBOD5 (mg/L) Average Monthly	5.93	4.49	7.11	6.0	8.81	6.0	8.0	10.0	26	7.00	6.0	5.0

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CBOD5 (mg/L) Raw Sewage Influent Average Monthly							120	183	192	111	113	127
CBOD5 (mg/L) Raw Sewage Influent Weekly Average							183	249	248	155	243	252
CBOD5 (mg/L) Weekly Average	7.3	5.5	9.9	7.0	12.0	6.00	15.0	19.0	64.0	8.00	8.0	10.0
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	613	809	618	660	751	802						
BOD5 (lbs/day) Raw Sewage Influent Weekly Average	895	1168	695	712	1197	1556						
BOD5 (mg/L) Raw Sewage Influent Average Monthly	115	143	136	136	129	98						
BOD5 (mg/L) Raw Sewage Influent Weekly Average	133	178	164	157	195	140						
TSS (lbs/day) Average Monthly	29.00	28	38	31	< 41	39.00	74.0	39.00	156.30	139.00	57.89	25.06
TSS (lbs/day) Raw Sewage Influent Average Monthly	375	790	550	709	639	6.75	1127	849.00	822.50	1437	724.26	588.95
TSS (lbs/day) Raw Sewage Influent Weekly Average	512	1202	973	1099	1284	809	1637	1007.00	876.43	2251.00	1000.01	659.12
TSS (lbs/day) Weekly Average	18.00	42	84	32	107	67.00	169.00	46.00	397.39	267.00	150.38	48.90
TSS (mg/L) Average Monthly	6.00	5.0	8.0	6.38	6.0	5.54	13.00	9.00	25.63	13.00	7.10	3.88
TSS (mg/L) Raw Sewage Influent Average Monthly	71	147	121	153	117	96.25	193.00	201.00	182.50	145.00	112.00	128.13
TSS (mg/L) Raw Sewage Influent Weekly Average	83	240	203	240	220	140.00	320.00	285.00	277.50	208.00	207.50	255.00

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TSS (mg/L) Weekly Average	7.00	8.0	19.0	6.52	12.0	12.00	35.00	13.00	58.00	20.00	10.0	6.00
Fecal Coliform (CFU/100 ml) Geometric Mean	28	< 25	< 34	39	< 107	29	< 12	14	44	< 33	16	6
Fecal Coliform (No./100 ml) Geometric Mean	28	< 25	< 34	39	< 107	29	< 12	14	44	< 33	16	6
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	385	600	490	262	651	353	1167	8550	2780	1025	644	2300
Fecal Coliform (No./100 ml) Instantaneous Maximum	385	600	490	262	651	353	1167	8550	2780	1025	644	2300
Total Nitrogen (lbs/day) Daily Maximum			18			430			99.87			6
Total Nitrogen (mg/L) Daily Maximum			3.83			31.00			17.60			23
Ammonia (lbs/day) Average Monthly	14.00	25	29	31	52	43	97.0	87.00	101.48	86.00	66.66	28.50
Ammonia (mg/L) Average Monthly	2.79	4.49	6.25	6.38	9.51	4.79	17.65	20.00	19.25	9.00	9.20	4.50
Total Phosphorus (lbs/day) Daily Maximum			108			55.00			12.03			2.26
Total Phosphorus (mg/L) Daily Maximum			23			3.95			2.12			9

Compliance History

Effluent Violations for Outfall 001, from: January 1, 2019 To: November 30, 2019

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
TRC	03/31/19	IMAX	1.80	mg/L	1.6	mg/L
CBOD5	03/31/19	Avg Mo	26	mg/L	25	mg/L
CBOD5	03/31/19	Wkly Avg	64.0	mg/L	37.5	mg/L
TSS	03/31/19	Wkly Avg	58.00	mg/L	45	mg/L
Fecal Coliform	05/31/19	IMAX	1167	CFU/100 ml	1000	CFU/100 ml

Summary of Inspections: None since the permit was renewed.

Other Comments: The Corrected Action Plan (CAP), that was approved by the Department on March 25, 2019 to address sanitary sewer overflows, was terminated on January 27, 2020.

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” (362-0400-001), 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	Weekly Average	Average Monthly	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Recorded
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
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	271	406	XXX	25.0	37.5	50	2/week	24-Hr Composite
BOD5 Raw Sewage Influent	Report	Report	Report	Report Wkly Avg	XXX	XXX	2/week	24-Hr Composite
TSS Raw Sewage Influent	Report	Report	XXX	Report	Report	XXX	2/week	24-Hr Composite
TSS	325	488	XXX	30.0	45.0	60	2/week	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/week	Grab
Total Nitrogen	XXX	Report Daily Max	XXX	XXX	Report Daily Max	XXX	1/quarter	24-Hr Composite
Ammonia	271	XXX	XXX	25.0	XXX	50	2/week	24-Hr Composite
Total Phosphorus	XXX	Report Daily Max	XXX	XXX	Report Daily Max	XXX	1/quarter	24-Hr Composite

Compliance Sampling Location: Outfall 001 (after disinfection)

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" (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Startup of New or Upgraded Facilities 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	Daily Minimum	Average Monthly	Maximum	Instant. Maximum		
UV Dosage (mJ/cm ²)	XXX	XXX	Report	Report	XXX	XXX	1/day	Visual

Compliance Sampling Location: Outfall 001 (after disinfection)

Other Comments: