

Application Type New
Facility Type Municipal
Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0272469
APS ID 998283
Authorization ID 1281932

Applicant and Facility Information

Applicant Name	<u>Marion Township</u>	Facility Name	<u>Boyers STP</u>
Applicant Address	<u>P.O. Box 141, 2275 West Sunbury Road Suite B Boyers, PA 16020-0141</u>	Facility Address	<u>Clay Street Boyers, PA 16020</u>
Applicant Contact	<u>Michele Burd</u>	Facility Contact	<u></u>
Applicant Phone	<u>(724) 735-2637</u>	Facility Phone	<u></u>
Client ID	<u>134852</u>	Site ID	<u>811373</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Marion Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Butler</u>
Date Application Received	<u>July 19, 2019</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>August 12, 2019</u>	If No, Reason	<u></u>
Purpose of Application	<u>New NPDES Permit for a new discharge from a new POTW.</u>		

Summary of Review

Marion Township plans to construct a new POTW to service the Village of Boyers and parts of Marion Township. Planning was done based on a projected population of 296 EDUs. The planned service area is currently served by an unpermitted lagoon system and onlot systems.

537 Planning was approved on July 6, 2017.

Proposed treatment consists of septic tanks, recirculating sand filter, and tablet chlorination.

There are currently no open violations listed in EFACTS for this permittee (3/05/2020).

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>0.037</u>
Latitude	<u>41° 6' 33.9"</u>	Longitude	<u>-79° 54' 27.4"</u>
Quad Name	<u>West Sunbury</u>	Quad Code	<u>1006</u>
Wastewater Description: <u>Treated Sewage Effluent</u>			
Receiving Waters	<u>Slippery Rock Creek</u>	Stream Code	<u>34032</u>
NHD Com ID	<u>126222934</u>	RMI	<u>42.94</u>
Drainage Area	<u>28.5</u>	Yield (cfs/mi ²)	<u>0.1105</u>
Q ₇₋₁₀ Flow (cfs)	<u>3.15</u>	Q ₇₋₁₀ Basis	<u>Slippery Rock Crk @ Wurtemberg (DFLOW '86-'11)</u>
Elevation (ft)	<u>1189</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>20-C</u>	Chapter 93 Class.	<u>CWF</u>
Existing Use	<u></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>METALS</u>		
Source(s) of Impairment	<u>ACID MINE DRAINAGE</u>		
TMDL Status	<u></u>	Name	<u></u>
Background/Ambient Data		Data Source	
pH (SU)	<u>8.1</u>	USGS 03106500 (2006-2018)(June-Sept.)(mean)	<u></u>
Temperature (°C)	<u>20.0</u>	Default (CWF)	<u></u>
Hardness (mg/L)	<u></u>		<u></u>
Other: NH ₃ -N	<u>0.03</u>	WQN 922 (2006-2018)(June-Sept.)(median)	<u></u>
Nearest Downstream Public Water Supply Intake	<u>PA American Water Company</u>		
PWS Waters	<u>Connoquenessing Creek</u>	Flow at Intake (cfs)	<u>67</u>
PWS RMI	<u>0.2</u>	Distance from Outfall (mi)	<u>48.1 (approx.)</u>

Changes Since Last Permit Issuance:

Other Comments:

Development of Effluent Limitations

Outfall No. 001 Design Flow (MGD) 0.037
 Latitude 41° 6' 33.90" Longitude -79° 54' 27.40"
 Wastewater Description: Treated domestic sewage

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:

Water Quality-Based Limitations

The following limitations were determined through water quality modeling (output files attached):

Parameter	Limit (mg/l)	SBC	Model
Total Residual Chlorine	1.6	IMAX	TRC Evaluation Spreadsheet

Comments:

Best Professional Judgment (BPJ) Limitations

Comments: Monitoring for influent TSS and BOD₅ were placed in the permit in accordance with the Department's SOP entitled "New and Reissuance Sewage Individual NPDES Permit Applications."

The ammonia nitrogen summertime limit and wintertime monitoring, monitoring for total nitrogen and total phosphorus, and monitoring of AMD parameters (total aluminum, total iron, total manganese due to the stream impairment were placed in the permit in accordance with the Department's SOP entitled "Establishing Effluent Limitations for Individual Sewage Permits."

Anti-Backsliding

N/A

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	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	1/day	Grab
DO	XXX	XXX	4.0 Daily Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	7.7	12.3	XXX	25.0	40.0	50	2/month	Grab
BOD5 Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	2/month	Grab
TSS	9.2	13.8	XXX	30.0	45.0	60	2/month	Grab
TSS Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	2/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Total Nitrogen	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	Grab
Ammonia Nov 1 - Apr 30	Report	XXX	XXX	Report	XXX	XXX	1/month	Grab
Ammonia May 1 - Oct 31	7.7	XXX	XXX	25.0	XXX	50	1/month	Grab

Outfall 001 , Continued (from 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	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Total Phosphorus	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	Grab
Total Aluminum	Report Annual Avg	XXX	XXX	Report Annual Avg	XXX	XXX	1/quarter	Grab
Total Iron	Report Annual Avg	XXX	XXX	Report Annual Avg	XXX	XXX	1/quarter	Grab
Total Manganese	Report Annual Avg	XXX	XXX	Report Annual Avg	XXX	XXX	1/quarter	Grab

Compliance Sampling Location: Outfall 001 (after disinfection)

ATTACHMENT A



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Figure 1 - WQM 7.0 Modeling



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Figure 2 - TRC Evaluation Spreadsheet