

# Northwest Regional Office CLEAN WATER PROGRAM

Application Type
Renewal
NonFacility Type
Municipal
Major / Minor
Minor

# NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

 Application No.
 PA0103101

 APS ID
 980136

Authorization ID 1250537

Applicant Name	Wesle	ey Woods, Inc.	Facility Name	Wesley Woods Christian Ed Center
Applicant Address	1001 I	Fiddlersgreen Road	Facility Address	1001 Fiddlersgreen Road
	Grand	l Valley, PA 16420-4429		Grand Valley, PA 16420-4429
Applicant Contact	Natha	niel Greenway	Facility Contact	Scott Lewis
Applicant Phone	(814)	688-9019	Facility Phone	(814) 436-
Client ID	16390	7	Site ID	249335
Ch 94 Load Status	Not O	verloaded	Municipality	Eldred Township
Connection Status			County	Warren
Date Application Recei	ved	October 15, 2018	EPA Waived?	Yes
Date Application Accep	oted	November 8, 2018	If No, Reason	

### **Summary of Review**

No changes to discharge quantity or quality are being proposed as part of this permit amendment.

Sampling frequency for Total Residual Chlorine (TRC), Dissolved Oxygen (D.O.), and pH is being changed from 1/week to 1/day in accordance with the Department's SOP entitled "New and Reissuance Sewage Individual NPDES Permit Applications."

There are currently two open violations listed in EFACTS for this permittee under the NWRO Safe Drinking Water Program (8/13/2019). The Department will follow up on the status of these violations prior to making a final decision on the permit application.

#### **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
	V			
	X		Adam J. Pesek, E.I.T. / Environmental Engineering Specialist	
			,	
	X			
			Justin C. Dickey, P.E. / Environmental Engineer Manager	

scharge, Receiving	Waters and Water Supply Infor	mation			
Outfall No. 001		Design Flow (MGD)	0.0213 (16-hr runoff)		
·	23.00"	Longitude	79° 32' 37.00"		
Quad Name Gran		Quad Code	0509		
Wastewater Descript	ion: Sewage Effluent				
	Unnamed Tributary to Caldwell				
Receiving Waters _	Creek	Stream Code	54287		
NHD Com ID _	100469461	RMI	0.99		
Drainage Area	0.174 (dry), 0.45 (perennial)	Yield (cfs/mi²)	0.0454 (perennial)		
Q <sub>7-10</sub> Flow (cfs)	0 (dry), 0.02044 (perennial)	Q <sub>7-10</sub> Basis	USGS Streamstats regression evaluation 0.051 (dry), 0.021		
Elevation (ft)	1520	Slope (ft/ft)	(perennial)		
` '	16-E	Chapter 93 Class.	HQ-CWF		
Existing Use		Existing Use Qualifier			
Exceptions to Use		Exceptions to Criteria			
Assessment Status	Attaining Use(s)				
Cause(s) of Impairme	ent				
Source(s) of Impairm	ent				
TMDL Status		Name			
Background/Ambient Data pH (SU) 7.54		Data Source 8/7/17 sample on Caldwell Street by Emerson Hill Road Bridge			
Temperature (°C)	20	Default (CWF)			
Hardness (mg/L)					
Other:					
Nearest Downstream	n Public Water Supply Intake	Point of discharge			
PWS Waters		Flow at Intake (cfs)			
PWS RMI		Distance from Outfall (mi)			

Changes Since Last Permit Issuance:

Other Comments: Perennial reach on tributary starts at RMI 0.50

Use/Disposal

Other WWTP

**Biosolids Treatment** 

None

#### **Treatment Facility Summary** Treatment Facility Name: Wesley Woods Christian Ed Center **WQM Permit No. Issuance Date** 6274402 6/03/1974 Degree of Avg Annual Flow (MGD) Treatment **Waste Type Process Type** Disinfection Septic Tank / Sand Tertiary Filter **Tablet Chlorination** Sewage 0.0213 **Hydraulic Capacity** Organic Capacity Biosolids

**Load Status** 

Not Overloaded

Changes Since Last Permit Issuance:

(MGD)

0.0213

(lbs/day)

Other Comments:

# **Compliance History**

# **DMR Data for Outfall 001 (from July 1, 2018 to June 30, 2019)**

Parameter	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18	NOV-18	OCT-18	SEP-18	AUG-18	JUL-18
Flow (MGD)												
Average Monthly	0.007										0.008	0.005
pH (S.U.)												
Minimum	6.79										6.99	6.98
pH (S.U.)												
Maximum	7.01										7.14	7.09
DO (mg/L)												
Minimum	8.48										6.04	7.18
TRC (mg/L)												
Average Monthly	0.11										0.1	0.05
TRC (mg/L)												
Instantaneous												
Maximum	0.61										0.09	0.08
CBOD5 (mg/L)												
Average Monthly	< 1.0										< 3.00	< 16.5
TSS (mg/L)												
Average Monthly	< 1.0										6.5	9
Fecal Coliform												
(CFU/100 ml)												
Geometric Mean	< 1.0										345	2410
Fecal Coliform												
(CFU/100 ml)												
Instantaneous												
Maximum	< 1.0										345	2420
Total Nitrogen (mg/L)												
Average Quarterly	E									2.03		
Ammonia (mg/L)												
Average Monthly	< 1.0										1.16	0.60
Total Phosphorus												
(mg/L)												
Average Quarterly	E									0.725		

Development of Effluent Limitations							
Outfall No.	001	Design Flow (MGD)	0.0213				
Latitude	41° 44' 23.00"	Longitude	79° 32' 37.00"				
Wastewater Description: Sewage Effluent		<del>-</del>					

# **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-	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
CBOD₅	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
Solids	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)

# **Water Quality-Based Limitations**

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

Parameter	Limit (mg/l)	SBC	Model
Ammonia Nitrogen			
(5/01 – 10/31)	2.5	Average Monthly	WQAM63 (old modeling)
Ammonia Nitrogen			
(11/01 – 4/30)	2.5	Average Monthly	WQAM63 (old modeling)
Total Residual Chlorine	1.2	IMAX	TRC Guidance Document

Comments: The TRC IMAX limit was set based on the old sampling frequency of 1/week.

Water quality modeling was not conducted for Total Residual Chlorine (TRC) at the first point of perennial conditions because the distance between the outfall and the first point of perennial conditions is approximately 2,590 feet (0.49 miles) and any chlorine residual left in the effluent, if it reaches that perennial point, would be expected to have evaporated or been consumed by exposure to organic ground material.

# **Best Professional Judgment (BPJ) Limitations**

Comments: A dissolved oxygen limit of a daily minimum of 4.0 mg/l and monitoring for total nitrogen and total phosphorus will remain in the permit in accordance with the Department's SOP entitled "Establishing Effluent Limitations for Individual Sewage Permits."

#### **Anti-Backsliding**

N/A. Previous calculated WQBELS will be retained in the proposed renewed permit.

# **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.

		Monitoring Requirements						
Parameter	Mass Units	(lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Required
Farameter	Average	Average		Average	Instant.	Measurement	Sample	
	Monthly	Weekly	Minimum	Monthly	Maximum	Maximum	Frequency	Туре
		Report					., .	
Flow (MGD)	Report	Daily Max	XXX	XXX	XXX	XXX	1/week	Measured
11.6.11)	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2007	6.0	2007	9.0	1000	4/1	Grab-
pH (S.U.)	XXX	XXX	Daily Min	XXX	Daily Max	XXX	1/day	Composite
DO	xxx	XXX	4.0 Daily Min	XXX	XXX	XXX	1/day	Grab
BO	XXX	XXX	Daily Willi	XXX	XXX	XXX	17day	Orab
TRC	XXX	XXX	XXX	0.5	XXX	1.2	1/day	Grab
CBOD5	XXX	XXX	XXX	10.0	XXX	20	2/month	Grab
00000	7000	7001	7000	10.0	7001	20	2/11/01/01	0.00
TSS	XXX	XXX	XXX	10.0	XXX	20	2/month	Grab
Fecal Coliform (No./100 ml)				2000				
Oct 1 - Apr 30	XXX	XXX	XXX	Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml)				200				
May 1 - Sep 30	XXX	XXX	XXX	Geo Mean	XXX	1000	2/month	Grab
				Report				
Total Nitrogen	XXX	XXX	XXX	Avg Qrtly	XXX	XXX	1/quarter	Grab
Ammonia								_
Nov 1 - Apr 30	XXX	XXX	XXX	7.5	XXX	15	2/month	Grab
Ammonia								
May 1 - Oct 31	XXX	XXX	XXX	2.5	XXX	5	2/month	Grab
Total Blooming	V/V/	VVV	VVV	Report	VVV	VVV	4/	01
Total Phosphorus	XXX	XXX	XXX	Avg Qrtly	XXX	XXX	1/quarter	Grab

Compliance Sampling Location: Outfall 001 (after disinfection)

Comments: 1/day sampling frequency for pH, D.O. and TRC is in accordance with the Department's SOP entitled "New and Reissuance Sewage Individual NPDES Permit Applications."