

Application Type Renewal  
 Facility Type Non-Municipal  
 Major / Minor Minor

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0029190  
 APS ID 581410  
 Authorization ID 1157232

**Applicant and Facility Information**

Applicant Name	<u>Monsignor McHugh School</u>	Facility Name	<u>Monsignor McHugh School WWTP</u>
Applicant Address	<u>212 Route 390</u> <u>Cresco, PA 18326-7370</u>	Facility Address	<u>Route 390</u> <u>Cresco, PA 18326</u>
Applicant Contact	<u>Kenneth Calemno</u>	Facility Contact	<u>Kenneth Calemno</u>
Applicant Phone	<u>(570) 839-8530</u>	Facility Phone	<u>(570) 839-8530</u>
Client ID	<u>54470</u>	Site ID	<u>240741</u>
Ch 94 Load Status	<u>N/A</u>	Municipality	<u>Paradise Township</u>
Connection Status	<u>N/A</u>	County	<u>Monroe</u>
Date Application Received	<u>October 17, 2016</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>October 28, 2016</u>	If No, Reason	<u>-</u>
Purpose of Application	<u>Renewal of existing NPDES permit.</u>		

**Summary of Review**

A draft permit was originally issued on May 30, 2017 for this facility. There was an open violation for the applicant holding up issuance of the final permit that was just recently resolved. As a result, the permit is being re-drafted and posted for another comment period.

The applicant is requesting renewal of their NPDES permit to discharge up to 0.022 MGD of treated sewage to an unnamed tributary to Paradise Creek (stream code 4977), a HQ-CWF/MF receiving stream in state water plan basin 01-E (Brodhead Creek). As per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than its designated use. The Pennsylvania Fish and Boat Commission classifies Paradise Creek as a stream section that supports natural reproduction of trout (from the headwaters downstream to the mouth).

The 0.235 cfs/mi<sup>2</sup> LFY estimated in the USGS Scientific Investigation Report 2005-5162 ("Streamflow Statistics for the Paradise and Pocono Creek Watersheds and Selected Streamflow-Gaging Stations in Monroe County, Pennsylvania" by Ronald E. Thompson and Gregory J. Cavallo) was used to model the discharge. The LFY was derived using data from historical gage 01440500 (Paradise Creek at Henryville, PA). More stringent limitations were not recommended in water quality modeling. RMI values were obtained using the "PA Historic Streams" feature of eMapPA as well as the "measure" tool. Elevations were obtained using the spot elevation feature of USGS's National Map Viewer (see Watershed Info attachment). Drainage areas were estimated using USGS's StreamStats interactive map. Acute and chronic partial mixing factors were obtained from PENTOX.

Limits for pH, CBOD<sub>5</sub>, TSS and Fecal Coliform are technology-based and carried over from the previous permit. Ammonia-Nitrogen, Total Phosphorus and Dissolved Oxygen limitations are water quality based and carried over from the previous permit. A 30.0 mg/L IMAX for Ammonia-Nitrogen in the winter months is added to the permit.

Approve	Deny	Signatures	Date
X		/s/ Brian Burden, E.I.T. / Project Manager	June 24, 2019
X		/s/ Amy M. Bellanca, P.E. / Environmental Engineer Manager	June 24, 2019

### Summary of Review

The monitoring frequencies for all parameters have been updated to conform with the monitoring frequencies recommended in the Department's Technical Guidance for the Development and Specification of Effluent Limitations (doc. no. 362-0400-001). CBOD<sub>5</sub>, TSS, Fecal Coliform, Ammonia-N and Total Phosphorus are to be monitored 2/month and pH, DO and TRC are to be monitored daily.

The 1.2 mg/L monthly average and 2.8 mg/L IMAX limitations for Total Residual Chlorine (TRC) in the previously issued permit were technology-based limitations. As per PA Code 92a.47(a)(8) (which refers to PA Code 92a.48(b)(2)), a monthly average TRC facility-specific BAT effluent limit of 0.5 mg/L and an IMAX limit of 1.6 mg/L is applied to this permit renewal. The TRC Calculation Spreadsheet (attached) did not recommend more stringent water quality-based limitations. The permittee will be required to meet the new technology-based limits for TRC starting one year after the effective date of the permit (see Part C.III.).

Quarterly monitoring and reporting for Total Nitrogen is added to the permit to monitor nutrient loadings. Quarterly monitoring and reporting requirements for Total Kjeldahl Nitrogen and Nitrate+Nitrite-Nitrogen are added to the permit to calculate Total Nitrogen.

Submitted DMRs indicate that this facility has not discharged from Outfall 001 since October 2017. From the period of October 2015 through October 2017, the following limitation exceedances were reported:

September 2017 - Ammonia-N 9.99 mg/L monthly average  
January 2017 – Ammonia-N 16 mg/L monthly average  
June 2016 – Total P 1.37 mg/L monthly average  
June 2016 – TRC 1.5 mg/L monthly average  
May 2016 – TRC 1.5 mg/L monthly average  
May 2016 – Total P 1.45 mg/L monthly average  
April 2016 – TRC 6.1 mg/L monthly average, 7.5 mg/L IMAX  
October 2015 – Ammonia-N 11.6 mg/L monthly average

Submitted DMRs on file indicate that this facility has not disposed of sludge since at least December 2011. The permittee had been required to submit the "Sewage Sludge / Biosolids Production and Disposal" supplemental report in their previous permit cycle.

The previously issued permit expired on February 28, 2017 and the application for renewal was not submitted in a timely manner. There are no open violations for this client that would warrant withholding the issuance of this permit. There is no DRBC docket for this facility. EPA waiver is in effect.



WQM  
Modeling.pdf



TRC Calculation.pdf



PENTOX.pdf



Watershed  
Information.pdf

### 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.

**Discharge, Receiving Waters and Water Supply Information**

Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.022</u>
Latitude	<u>41° 7' 48"</u>	Longitude	<u>-75° 18' 6"</u>
Quad Name	<u>Buck Hill Falls</u>	Quad Code	<u>0943</u>
Wastewater Description: <u>Sewage Effluent</u>			

Receiving Waters	<u>Unnamed Tributary to Paradise Creek</u>	Stream Code	<u>04977</u>
NHD Com ID	<u>26137960</u>	RMI	<u>0.2</u>
Drainage Area	<u>1.03 mi<sup>2</sup></u>	Yield (cfs/mi <sup>2</sup> )	<u>0.1</u>
Q <sub>7-10</sub> Flow (cfs)	<u>0.103</u>	Q <sub>7-10</sub> Basis	<u>Default LFY</u>
Elevation (ft)	<u>1119</u>	Slope (ft/ft)	<u>0.06</u>
Watershed No.	<u>1-E</u>	Chapter 93 Class.	<u>HQ-CWF</u>
Existing Use	<u>-</u>	Existing Use Qualifier	<u>-</u>
Exceptions to Use	<u>-</u>	Exceptions to Criteria	<u>-</u>

Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	<u>-</u>		
Source(s) of Impairment	<u>-</u>		
TMDL Status	<u>-</u>	Name	<u>-</u>

Background/Ambient Data		Data Source
pH (SU)	<u>-</u>	<u>-</u>
Temperature (°F)	<u>-</u>	<u>-</u>
Hardness (mg/L)	<u>-</u>	<u>-</u>
Other:	<u>-</u>	<u>-</u>

Nearest Downstream Public Water Supply Intake	<u>Brodhead Creek Regional Water Authority</u>		
PWS Waters	<u>Brodhead Creek</u>	Flow at Intake (cfs)	<u>~13 (based on 0.1 cfs/mi<sup>2</sup>)</u>
PWS RMI	<u>7.1</u>	Distance from Outfall (mi)	<u>~12.3</u>

**Development of Effluent Limitations**

Outfall No. 001  
Latitude 41° 7' 48"  
Wastewater Description: Sewage Effluent

Design Flow (MGD) 0.022  
Longitude -75° 18' 6"

**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 <sub>5</sub>	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	50	IMAX	-	-
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	60	IMAX	-	-
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)
	1.6	IMAX	-	-

Comments: TRC limitations effective one year after permit effective date.

**Water Quality-Based Limitations**

The following limitations were determined through water quality modeling:

Parameter	Limit (mg/l)	SBC	Model
Ammonia Nitrogen (5/1 – 10/31)	5.0	Average Monthly	Previous modeling
	10.0	IMAX	
Ammonia Nitrogen (11/1 – 4/30)	15.0	Average Monthly	Previous modeling
	30.0	IMAX	Previous modeling, new requirement
Dissolved Oxygen	5.0	Minimum	Previous modeling
Total Phosphorus	1.0	Average Monthly	Previous modeling
	2.0	IMAX	