

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

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0095729  
 APS ID 1028066  
 Authorization ID 1335430

**Applicant and Facility Information**

Applicant Name	<u>Eastern Orthodox Foundation</u>	Facility Name	<u>Eastern Orthodox Foundation</u>
Applicant Address	<u>170 Fr Martin Telenson Road</u> <u>Penn Run, PA 15765-7336</u>	Facility Address	<u>170 Fr Martin Telenson Road</u> <u>Penn Run, PA 15765-7336</u>
Applicant Contact	<u>Lou Wagner</u>	Facility Contact	<u>Andrew Meloy</u>
Applicant Phone	<u>(724) 465-2165</u>	Facility Phone	<u>(814) 329-8811</u>
Client ID	<u>39014</u>	Site ID	<u>250081</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Cherryhill Township</u>
Connection Status		County	<u>Indiana</u>
Date Application Received	<u>November 17, 2020</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>December 10, 2020</u>	If No, Reason	
Purpose of Application	<u>NPDES renewal application for the discharge of treated sewage.</u>		

**Summary of Review**

Act 14 – Proof of notification were submitted and received.

There are no open violations for subject client no. 39014 as of 1/13/2022. *JCD 2/2/2022*

This facility is currently submitting eDMR reports.

There has been no change to the discharge or receiving stream since the last permit issuance.

A part 2 WQM permit is not required at this time.

Sludge use and disposal description and location(s): Septage must be pumped and hauled off-site by a septage hauler for land application under a general permit authorized by DEP or disposal at an STP.

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		Jon F. Bucha Jonathan F. Bucha / Civil Engineer General	January 13, 2022
X		Justin C. Dickey Justin C. Dickey, P.E. / Environmental Engineer Manager	February 2, 2022

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

Outfall No.	<u>001</u>	Design Flow (MGD)	<u>.018</u>
Latitude	<u>40° 35' 43"</u>	Longitude	<u>-79° 0' 18"</u>
Quad Name	<u>Brush Valley</u>	Quad Code	<u>1413</u>
Wastewater Description: <u>Sewage Effluent</u>			

Receiving Waters	<u>Unnamed Tributary of Yellow Creek (CWF)</u>	Stream Code	<u>44190</u>
NHD Com ID	<u>134395937</u>	RMI	<u>0.75</u>
Drainage Area	<u>0.38 mi<sup>2</sup></u>	Yield (cfs/mi <sup>2</sup> )	<u>0.04</u>
Q <sub>7-10</sub> Flow (cfs)	<u>0.0152</u>	Q <sub>7-10</sub> Basis	<u>USGS# 03042200 ('61 - '87)</u>
Elevation (ft)	<u>1445 (Google Earth)</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>18-D</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>SILTATION, SILTATION, SILTATION, SILTATION</u>		
Source(s) of Impairment	<u>DAM OR IMPOUNDMENT, DAM OR IMPOUNDMENT, DAM OR IMPOUNDMENT, DAM OR IMPOUNDMENT</u>		
TMDL Status	<u>Final</u>	Name	<u>Kiskiminetas-Conemaugh River Watersheds TMDL</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>Central Indiana Co Water Authority</u>		
PWS Waters	<u>Yellow Creek</u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u>4.58</u>	Distance from Outfall (mi)	<u>9.63</u>

Changes Since Last Permit Issuance: None

Other Comments: The discharge is to an Unnamed intermittent stream just upstream of Lake Margus eventually entering Yellow Creek Lake approximately 1 mile from the discharge point.

Treatment Facility Summary				
<b>Treatment Facility Name:</b> Eastern Orthodox Foundation STP				
<b>WQM Permit No.</b>		<b>Issuance Date</b>		
3273406		September 10, 1973		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	Extended aeration with sand filtration	Tablet chlorination	0.00723
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.018	30.04	Not Overloaded	N/A	N/A

Changes Since Last Permit Issuance: None

Other Comments: Treatment consists of a wet well, comminutor, aeration tank, settling tank, dosing tank, 4 intermittent sand filters, chlorinator, chlorine contact tank, and sludge holding tank.

Compliance History

DMR Data for Outfall 001 (from December 1, 2020 to November 30, 2021)

Parameter	NOV-21	OCT-21	SEP-21	AUG-21	JUL-21	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20
Flow (MGD) Average Monthly	0.007253	0.007827 1	0.010487	0.008714	0.010595	0.009642	0.009836	0.008336	0.006943	0.005878	0.00642	0.007572
pH (S.U.) Minimum	7.4	7.62	7.42	7.69	7.45	7.47	7.10	7.06	7.0	7.04	7.06	6.87
pH (S.U.) Maximum	7.9	8.17	8.25	8.39	8.51	8.21	8.06	7.85	7.74	7.76	8.24	8.28
DO (mg/L) Minimum	9.88	9.0	7.02	7.51	7.63	8.29	8.55	8.81	8.24	11.92	10.87	10.01
TRC (mg/L) Average Monthly	< 0.01	< 0.1	0.01	< 0.1	< 0.05	< 0.1	< 0.02	< 0.04	< 0.04	< 0.1	< 0.03	< 0.03
TRC (mg/L) Instantaneous Maximum	0.14	0.24	0.25	0.24	0.49	0.6	0.15	0.41	0.54	0.2	0.25	0.16
CBOD5 (mg/L) Average Monthly	3.0	< 3.0	3.0	5.0	< 10.0	< 3.0	< 3.0	< 3.0	< 3.0	6.0	< 3.0	< 3.0
CBOD5 (mg/L) Instantaneous Maximum	3.0	3.0	3.0	4.57	16.3	< 3.0	< 3.0	< 3.0	< 3.0	5.67	< 3.0	< 3.0
TSS (mg/L) Average Monthly	< 2.0	< 3.0	2.0	2.0	11.0	2.0	10.0	3.0	< 3.0	< 2.0	< 2.0	< 1.0
TSS (mg/L) Instantaneous Maximum	< 1.6	4.0	3.6	3.2	19.2	2.2	12.0	3.2	4.4	< 2.0	2.2	< 1.6
Fecal Coliform (No./100 ml) Average Monthly	< 1	< 1	1	< 1	< 1	< 1.0	< 1	< 1	< 1.0	< 1.0	2	< 1.0
Fecal Coliform (No./100 ml) Instantaneous Maximum	< 1	< 1	1	< 1	< 1	< 1	< 1	< 1	< 1.0	< 1	< 4.0	< 1.0
Total Nitrogen (mg/L) Daily Maximum												< 37.4
Ammonia (mg/L) Average Monthly	0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 4.2	< 0.1	2.2
Ammonia (mg/L) Instantaneous Maximum	0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	8.204	< 0.1	2.43
Total Phosphorus (mg/L) Daily Maximum												0.51
Total Aluminum (mg/L) Daily Maximum												< 0.1
Total Iron (mg/L) Daily Maximum												< 0.200
Total Manganese (mg/L) Daily Maximum												< 0.0200

**Compliance History**

**Effluent Violations for Outfall 001, from: January, 2019 To: January, 2022**

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
TSS	07/31/21	Avg Mo	11.0	mg/L	10.0	mg/L
Ammonia	03/31/21	Avg Mo	< 4.2	mg/L	1.5	mg/L
Ammonia	03/31/21	IMAX	8.204	mg/L	3.0	mg/L
Ammonia	12/31/2020	Avg Mo	2.2	mg/L	1.5	mg/L
CBOD5	12/31/2019	Avg Mo	15	mg/L	10	mg/L
TSS	03/31/19	IMAX	26	mg/L	20	mg/L
TSS	03/31/19	Avg Mo	14	mg/L	10	mg/L

Summary of Inspections: An inspection occurred on 6/4/2019 where no violations were noted.

Other Comments: The past 3 years of eDMR data was reviewed and effluent violations are listed above. A beaver dam was removed, and an air supply blower was replaced to address the effluent violations. This facility is in general compliance and submitting regular eDMR reports. It is recommended that this permit be renewed.

**Development of Effluent Limitations**

<b>Outfall No.</b> <u>001</u>	<b>Design Flow (MGD)</b> <u>.018</u>
<b>Latitude</b> <u>40° 35' 43.00"</u>	<b>Longitude</b> <u>-79° 0' 21.00"</u>
<b>Wastewater Description:</b> <u>Sewage Effluent</u>	

**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)
	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: TRC average monthly and imax will remain at 0.5 mg/L and 1.6 mg/L respectively from the previous renewal. A review of eDMR data shows that this facility should be able to continue achieving these limits.

**Water Quality-Based Limitations**

Comments: The treated effluent discharges to an intermittent stream just above Lake Margus, to Yellow Creek just above Yellow Creek Lake, where significant dilution exists (view Attachment A for visual reference). Water quality modeling was not conducted for this permit renewal due to treatment limits for intermittent streams being applied to this facility for CBOD<sub>5</sub>, TSS, DO, and Ammonia Nitrogen. These limitations were developed in 1990 and based on available treatment at that time, the intermittent stream, and close proximity to Yellow Creek Lake, and should continue to protect stream quality. The applied limits are listed in the following table:

Pollutant	Limit (mg/L)	Instantaneous Maximum (mg/L)
CBOD <sub>5</sub>	10	20
TSS	10	20
DO	5	N/A
Ammonia Nitrogen	1.5	3.0

**Best Professional Judgment (BPJ) Limitations**

Comments: A SWRO Biologist study conducted in January 1991 determined that no phosphorus limit was required for Yellow Creek Lake. Based on this study and recent eDMR data, 1/year monitoring for total phosphorus and total nitrogen will be continued on this permit renewal.

E. Coli monitoring is a new parameter incorporated into this permit renewal at a frequency of 1/year, based on the SOP titled "Establishing Effluent Limitations for Individual Sewage Permits" for sewage facilities with design flows of 0.002 – 0.05 MGD.

**Kiskiminetas River Basin**

The Kiskiminetas River Watershed has a final TMDL for metals resulting from acid mine drainage (AMD). This facility is considered a "Negligible Discharge Facility" as identified in Appendix C of the Kiskiminetas-Conemaugh River Watershed TMDL, and the aggregate WLAs were based on the sum of the available information regarding flow from each facility multiplied by the applicable numeric water quality criterion. There is no reason to believe the Eastern Orthodox Foundation STP will be discharging at concentrations higher than assumed to develop the aggregate waste load allocation that was inclusive in the TMDL for minor sewage treatment facilities. The contribution for metals from a sewage plant of this nature is expected to continue being less than water quality criteria and therefore not contributing to stream impairment. The proposed permit requires monitoring of these pollutants. 1/year monitoring will remain in this renewal for the parameters Total Iron, Total Manganese and Total Aluminum for plants rated between 0.002 mgd up to 0.499 mgd.

**Appendix G TMDL Allocated Concentration**

	<b>Allocated Concentration (mg/L)</b>	<b>eDMR Data (mg/L)</b>
Total Aluminum	0.75	< 0.1
Total Iron	1.5	< 0.2
Total Manganese	1.0	< 0.02

Comments: The table above shows the allocated concentrations listed in Appendix G of the Kiskiminetas-Conemaugh River Watershed TMDL for this facility (NPDES Permit No. PA0095729), and the treated effluent concentrations from eDMR data.

**Anti-Backsliding**

Anti-backsliding does not apply since limits are not being relaxed.

**Proposed Effluent Limitations and Monitoring Requirements**

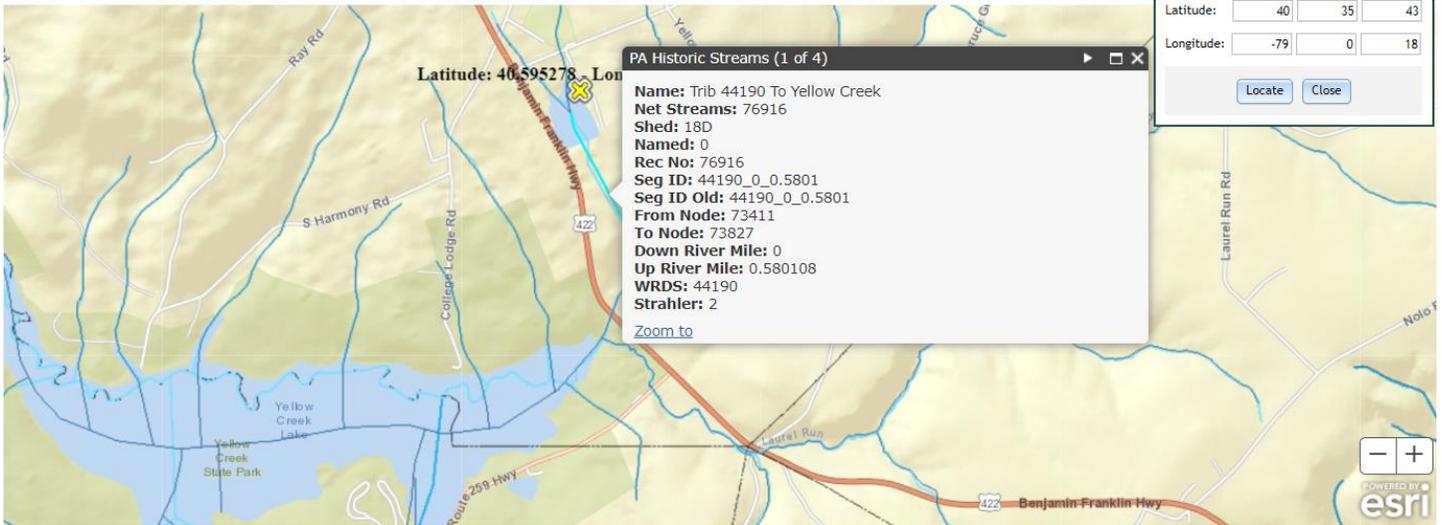
The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). 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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	2/month	Measured
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	XXX	XXX	XXX	10.0	XXX	20.0	2/month	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20.0	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
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Total Nitrogen	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	Grab
Total Phosphorus	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	Grab
Ammonia	XXX	XXX	XXX	1.5	XXX	3.0	2/month	Grab
Total Aluminum	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	Grab
Total Iron	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	Grab
Total Manganese	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001 after disinfection.

## Attachment A – eMAP Stream Designation



### ATTACHMENT B

## StreamStats REPORT – Discharge Point at RMI = 0.75 On Unnamed Trib 44190 to Yellow Creek

Region ID: PA  
 Workspace ID: PA20220113193147491000  
 Clicked Point (Latitude, Longitude): 40.59628, -79.00597  
 Time: 2022-01-13 14:32:07 -0500

PA  
 PA20220113193147491000  
 40.59628, -79.00597  
 2022-01-13 14:32:07 -0500



Basin Characteristics			
Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.38	square miles
ELEV	Mean Basin Elevation	1552	feet
PRECIP	Mean Annual Precipitation	47	inches