pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0031330**
Facility Type	**Non-Municipal**	APS ID	**994134**
Major / Minor	**Minor**	Authorization ID	**1274813**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Calvary Chapel of Fredericktown**	Facility Name	**Cox Donahey Elementary School**
Applicant Address	112 Thornton Road	Facility Address	Republic Road (0.25 mi from Route 40)
	Brownsville, PA 15417		Brownsville, PA 15333
Applicant Contact	John Thomas	Facility Contact	Edgar Harris
Applicant Phone	724-377-2522	Facility Phone	(724) 966-2278
Client ID	337039	Site ID	241990
Ch 94 Load Status	Not Overloaded	Municipality	Redstone Township
Connection Status	No Limitations	County	Fayette
Date Application Received	May 28, 2019	EPA Waived?	Yes
Date Application Accepted	May 29, 2019	If No, Reason	

Purpose of Application: Renew NPDES application.

Summary of Review

The permittee has applied for a renewal of NPDES Permit No. PA0031330. NPDES Permit No. PA0031330 was previously issued by the PA Department of Environmental Protection (DEP) to the Brownsville Area School District on December 4, 2014. The NPDES permit and WQM Permit No 466S111 were transferred to the current permittee on January 24, 2019. The NPDES permit expired on December 31, 2019.

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		David R. Ponchione David R. Ponchione / Project Manager	April 21, 2020
x		Christopher Kriley Christopher Kriley, P.E. / Program Manager for Donald J. Leone, P.E. / Environmental Engineer Manager	April 21, 2020

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	.0088
Latitude	40º 00' 28"	Longitude	-79º 52' 24"
Quad Name	Fayette City	Quad Code	1807
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary of Dunlap Creek (WWF)	Stream Code	40140
NHD Com ID	99411744	RMI	0.28
Drainage Area	0.02	Yield (cfs/mi^2)	0
Q_{7-10} Flow (cfs)	0	Q_{7-10} Basis	No flow shown on USGS topographic map- appears to be a dry swale
Watershed No.	19-C	Chapter 93 Class.	WWF
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Attaining Use(s)		
Nearest Downstream Public Water Supply Intake	California Water Company on the Monongahela River		

Changes Since Last Permit Issuance: None

Treatment Facility Summary

Treatment Facility Name: Cox Donahey Elementary School WWTP

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary With Ammonia Reduction	Extended Aeration	Chlorine With Dechlorination	0.00004

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0088	14.7	Not Overloaded	Dewatering	Other WWTP

Changes Since Last Permit Issuance: None

Part II Permit No. 466S111 authorized construction of a treatment process consisting of extended aeration, final clarification, and chlorination.

Other Comments: Organic capacity listed in NPDES application is 1.47 lbs./day. This appears to be a typo error. An assumed influent BOD5 concentration of 200 mg/l x 0.0088 mgd x 8.345 = 14.7 lbs./day.

Compliance History

DMR Data for Outfall 001 (from March 1, 2019 to February 29, 2020)

Parameter	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19
Flow (MGD) Average Monthly	0.00004	0.00005	0.00004	0.00006	0.00005	0.00007	0.00004	0.00001	0.00002	0.00004	0.0004	0.00004
pH (S.U.) Instantaneous Minimum	6.1	6.3	6.6	6.0	6.2	6.3	6.4	6.8	6.6	6.6	6.4	6.2
pH (S.U.) Instantaneous Maximum	6.9	6.9	6.8	7.1	6.6	6.9	6.5	6.9	6.8	6.8	7.0	6.8
DO (mg/L) Instantaneous Minimum	8.3	8.0	4.2	7.0	6.2	4.8	5.4	5.4	6.4	6.5	6.0	8.4
TRC (mg/L) Average Monthly	0.25	0.27	0.20	0.25	0.23	0.23	0.25	0.24	0.26	0.24	0.29	0.26
TRC (mg/L) Instantaneous Maximum	0.30	0.31	0.29	0.29	0.28	0.31	0.28	0.25	0.30	0.30	0.36	0.35
CBOD5 (mg/L) Average Monthly	2.1	2.7	2.6	7.5	2.3	2.0	3.8	2.5	2.1	2.0	2.0	2.0
CBOD5 (mg/L) Instantaneous Maximum	2.2	3.4	3.0	9.3	2.6	2.0	5.5	2.7	2.2	2.0	2.0	2.0
TSS (mg/L) Average Monthly	5.0	6.5	5.5	13.0	11.5	10.0	7.5	6.0	5.0	5.0	5.0	5.0
TSS (mg/L) Instantaneous Maximum	5.0	8.0	6.0	16.0	15.0	13.0	8.0	7.0	5.0	5.0	5.0	5.0
Fecal Coliform (No./100 ml) Geometric Mean	1	1	2	4	1	1	1	1	2	10	1	1
Fecal Coliform (No./100 ml) Instantaneous Maximum	1	1	4	9	1	1	1	1	2	102	2	1
Total Nitrogen (mg/L) Daily Maximum			37.3									

Ammonia (mg/L) Average Monthly	0.9	0.9	2.4	0.7	0.5	0.8	0.4	0.7	0.7	0.8	3.8	2.1
Ammonia (mg/L) Instantaneous Maximum	1.0	1.3	3.0	0.7	0.5	0.9	0.5	1.2	1.9	0.9	5.6	2.6
Total Phosphorus (mg/L) Daily Maximum			9.0									

Compliance History

Operations Compliance Check Summary Report

Facility: Cox_Donahey_School_STP
NPDES Permit No.: PA0031330
Compliance Review Period: 04/15/2015 – 04/15/2020:
Open Violations by Client Summary: None.

Inspection Summary

INSP ID	INSPECTED DATE	INSP TYPE	AGENCY	INSPECTION RESULT DESC	# OF VIOLATIONS
2694536	02/14/2018	Administrative/File Review	PA Dept of Environmental Protection	Violation(s) Noted	1
2533121	11/01/2016	Administrative/File Review	PA Dept of Environmental Protection	Violation(s) Noted	1
2504154	06/09/2016	Compliance Evaluation	PA Dept of Environmental Protection	No Violations Noted	0

Violation Summary

VIOL ID	VIOLATION DATE	VIOLATION TYPE	VIOLATION TYPE DESC	RESOLVED DATE
808424	02/14/2018	92A.62	NPDES - Failure to pay annual fee	03/12/2018
771462	11/01/2016	302.202	Operator Certification - Failure to submit annual system fee	11/15/2016

Enforcement Summary

ENF ID	ENF TYPE DESC	EXECUTED DATE	ENF FINALSTATUS	ENF CLOSED DATE
361602	Notice of Violation	02/14/2018	Comply/Closed	03/12/2018
348337	Notice of Violation	11/01/2016	Comply/Closed	11/15/2016

DMR Violation Summary
Current eDMR user.
Effluent limit violation summary 4/15/2018 – 4/15/2020:
No violations reported in eDMR

Compliance Status:
Facility has no compliance issues.

Completed by: David Roote
Completed date: 4/15/2020

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .0088
Latitude 40º 00' 28.00" **Longitude** -79º 52' 24.00"
Wastewater Description: Sewage Effluent

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
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: The above effluent limitations are consistent with the previous NPDES permit.

The effluent limitations and monitoring requirements imposed in this renewal permit are consistent with the previous permit and are explained in the attached pollution report. Because there have been no changes to the discharge or the receiving stream, it was unnecessary to re-evaluate these parameters.

The previous limits take into consideration the discharge is to a dry stream and the area is accessible.

The Implementation Guidance for Evaluating Wastewater Discharges to Drainage Swales and Ditches (Revised May 1987) is the basis for the Ammonia-Nitrogen (NH3-N) limitations. That guidance considers BAT NH3-N limits to be 3.0/6.0 mg/l for the period of May 1 to Oct 31 and 9.0/18.0 mg/l for the period of Nov 1 to Apr 30. An NH3-N toxicity evaluation was conducted with an assumed point of first use (full flow) at the unnamed tributary and water quality-based limitations more stringent than BAT are not necessary.

A monthly average BOD_5 limitation of 10 mg/l is consistent with the above guidance, however it was previously changed to CBOD5 to be consistent with DEP policy. Although the guidance requires TSS limitations of 10/20 mg/l, it was procedure to re-impose an existing TSS effluent limit if the discharge was in existence prior to 1987, the date of the guidance. Therefore, an average monthly TSS limit of 25 mg/l will be re-imposed.

That guidance requires a minimum Dissolved Oxygen concentration in the effluent of 3.0 mg/l. A more stringent Dissolved Oxygen minimum limitation of 4.0 mg/L however, was previously implemented based on the standard in 25 PA Code Chapter 93 and best professional judgment for activated sludge plants and will be re-imposed.

The following are consistent with current DEP policy:

- A once per year Monitor and Report requirement for Total N and Total P was incorporated into the previous permit as per Chapter 92.a.61 and will be continued.
- Mass loading limits and influent monitoring are not applicable for non-publicly owned treatment works.
- The design flow of the sewage treatment plant is less than 0.1 mgd. For this reason, the permittee is not required to report influent and effluent concentrations for various parameters as listed in the NPDES application. Total Dissolved Solids and its major constituents are therefore not a concern at this time.

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	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	0.0088	XXX	XXX	XXX	XXX	XXX	1/week	Measured
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	XXX	XXX	XXX	10.0	XXX	20.0	2/month	Grab
TSS	XXX	XXX	XXX	25.0	XXX	50.0	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
Total Nitrogen	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	9.0	XXX	18.0	2/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	3.0	XXX	6.0	2/month	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001

Pollution Report