

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

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application No. PA0051675
APS ID 595119
Authorization ID 1419252

Applicant and Facility Information

Applicant Name <u>Northampton Area School District</u>	Facility Name <u>Moore Elementary School</u>
Applicant Address <u>100 Held Drive</u> <u>Northampton, PA 18067-1144</u>	Facility Address <u>2835 Mountain View Drive</u> <u>Bath, PA 18014-9333</u>
Applicant Contact <u>Daniel Rodrigues</u>	Facility Contact <u>Daniel Rodrigues</u>
Applicant Phone <u>(610) 261-0585</u>	Facility Phone <u>(610) 261-0585</u>
Client ID <u>34390</u>	Site ID <u>447726</u>
Ch 94 Load Status <u>Not Overloaded</u>	Municipality <u>Moore Township</u>
Connection Status <u></u>	County <u>Northampton</u>
Date Application Received <u>December 1, 2022</u>	EPA Waived? <u>Yes</u>
Date Application Accepted <u>December 1, 2022</u>	If No, Reason <u></u>
Purpose of Application <u>Renewal of existing NPDES permit to discharge treated sewage effluent.</u>	

Summary of Review

The applicant is requesting to renew an existing NPDES permit to discharge .0064MGD of treated sewage effluent to Tributary 3690 to Hokendauqua Creek, a Cold-Water Fishes, Migratory Fishes (CWF, MF) receiving water in state water plan basin 2C (Lower Lehigh River). 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. This stream segment is not designated as a naturally reproducing trout stream as per PA Fish & Boat Commission. This discharge is not expected to affect public water supplies.

The system for this facility is flow equalization, treatment by use of extended aeration and a secondary clarifier, and disinfection with contact chlorine. Water treatment chemicals introduced in the process are Soda Ash for pH adjustment, Sodium Disulfate for dechlorination, and Trichloro-s-triazinetriene for disinfection.

The state-wide default low flow yield (LFY) of 0.1 cfs/mi² was used to model the discharge. There are no representative stream gages in the vicinity of the outfall. RMI values were obtained using the Department's eMapPA, drainage areas were delineated using USGS's StreamStats interactive map, and elevations were obtained using the elevation profile tool on StreamStats.

E. Coli monitoring requirements will be introduced into the new permit according to PA DEP policy for individual sewage effluent limitations. E. Coli requirements for a treatment plant with less than .05mgd discharge is found in the SOP for establishing effluent limitations for individual sewage.

Limitations for pH, CBOD₅, Total Suspended Solids (TSS), and Fecal Coliform are technology-based and carried over from the previous permit. Annual monitoring and reporting for Total Nitrogen, Total Kjeldahl Nitrogen, and Nitrate-Nitrite as N have been maintained in this permit. Limitations for Ammonia-Nitrogen and D.O. are water-quality based effluent limits and are carried over from the previous permit.

Approve	Deny	Signatures	Date
X		<i>William Hon</i> William Hon / Environmental Engineer Specialist	May 22, 2025
X		<i>Edward Dudick</i> Edward Dudick, P.E. / Environmental Engineer Manager	May 22, 2025

Summary of Review

Modeling performed for this facility recommended more stringent limitations for Total Residual Chloride. The current existing limits are 0.5mg/L average monthly and an IMAx of 1.6mg/L. TRC modeling recommended an average monthly of .363mg/L and an IMAx of 1.188mg/L. These new effluent limits will go into effect three (3) years after permit issuance. The applicant may conduct site-specific TRC studies in follow-up to these new limits and will be addressed in the permit.

All monitoring & sampling requirements have been updated to recommendations based on Table 6-3 of the Permit Writer's Manual and the SOP for Establishing Effluent Limits in Individual Sewage Treatment Facilities.

There is no DRBC docket associated with this facility.

Application reports an annual average of 1.898 dry tons of sludge are transported offsite via independent contractor to Lehigh County Pre-Treatment.

Special Conditions that will be added to this permit are as follows:

- Chlorine Minimization
- Dry Streams
- DRBC May have other Requirements
- Solids Management
- TRC Schedule

The application for this renewal was received by DEP in November of 2022. Contact information for client and consultant was verified as of May 2025. The last inspection performed at this facility occurred on 4/18/2024 and resulted in zero (0) violations. There are no open violations in the Clean Water Program that would warrant the withholding of the issuance of this permit. Recommend Approval.

Modeling Inputs:

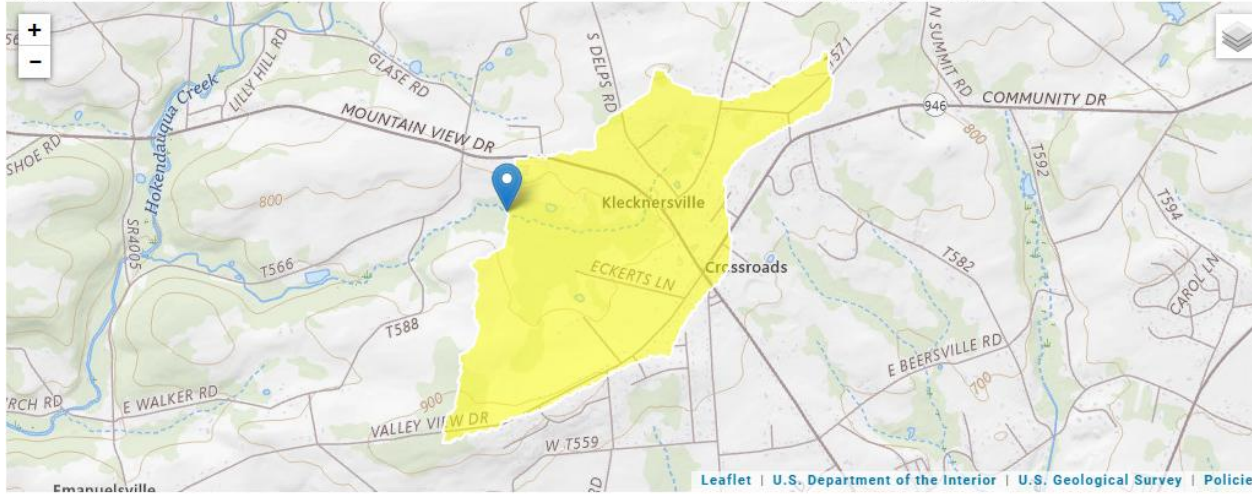
Moore Township School Modeling
PT @ Outfall 001, Tributary 3690 to Hokendauqua Creek, 2C Lower Lehigh River, CWF, MF
RMI: 1.8 (for modeling purposes)

Clicked Point (Latitude, Longitude):

40.77570, -75.43380

Time:

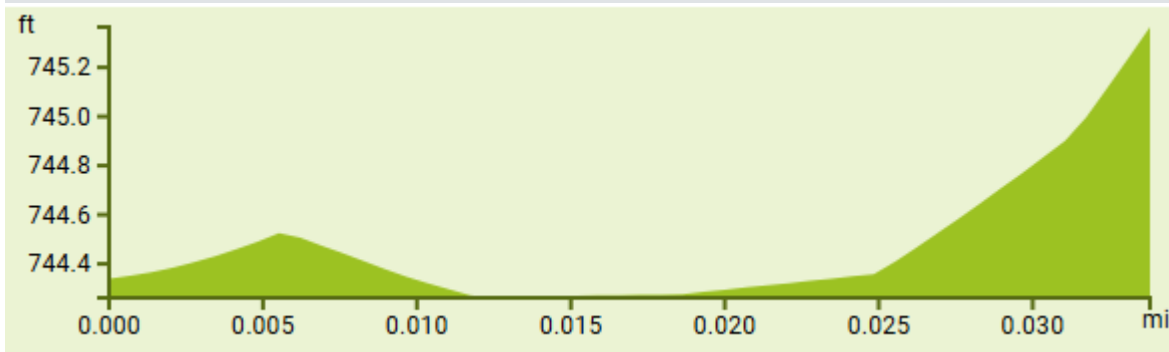
2025-05-22 10:39:25 -0400



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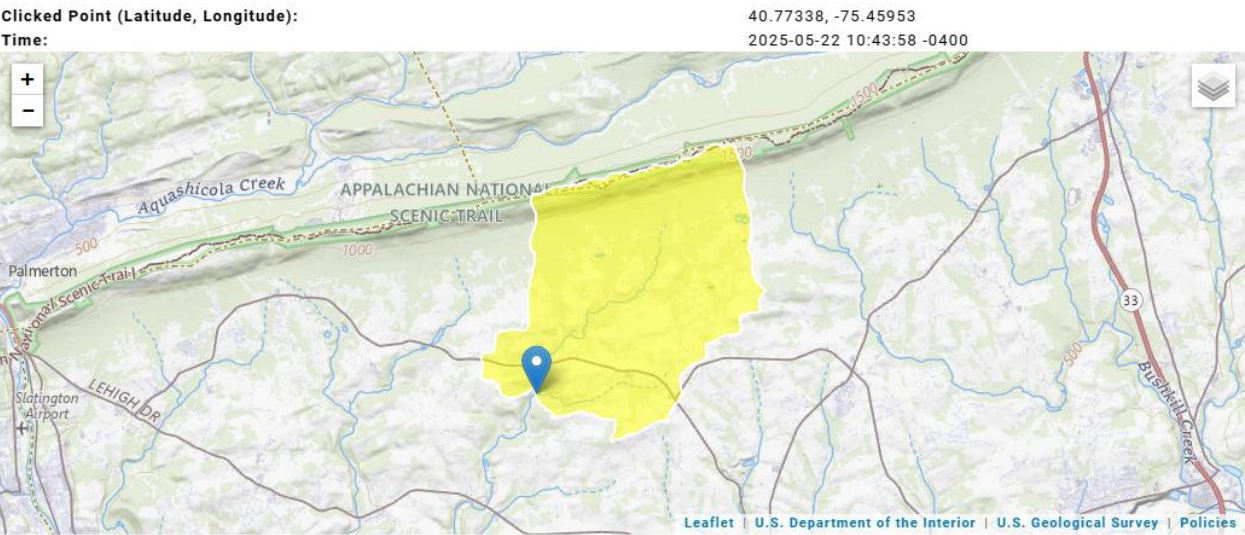
Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	0	percent
DRNAREA	Area that drains to a point on a stream	0.9	square miles

7 Day 10 Year Low Flow	0.024	ft ³ /s
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PT 2 @ Conflux w/ Hokendauqua Creek. RMI: .01 (for modeling purposes)

Summary of Review

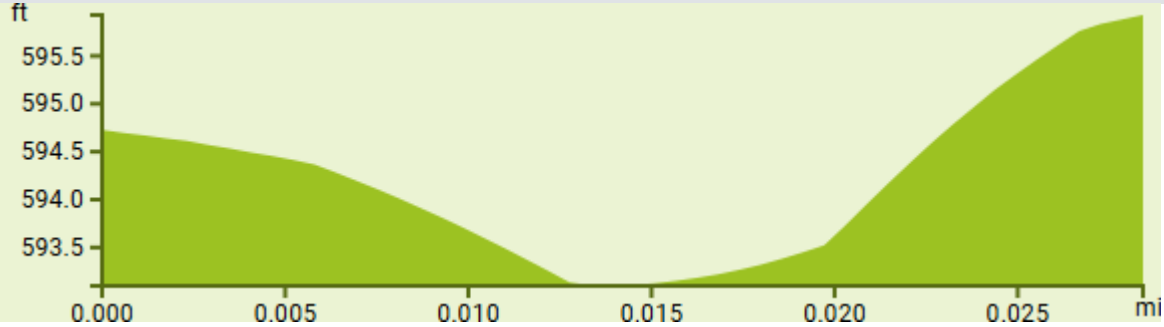


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Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	0	percent
DRNAREA	Area that drains to a point on a stream	11.5	square miles

7 Day 10 Year Low Flow 0.769 ft³/s



Summary of Review

Analysis Results WQM 7.0

Hydrodynamics
NH3-N Allocations
D.O. Allocations
D.O. Simulation
Effluent Limitations

RMI	Discharge Name	Permit Number	Disc Flow (mgd)
1.80	Moore Elem.	PA0051675	0.0064

Parameter	Effluent Limit 30 Day Average (mg/L)	Effluent Limit Maximum (mg/L)	Effluent Limit Minimum (mg/L)
CBOD5	25		
NH3-N	7.52	15.04	
Dissolved Oxygen			4

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TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

0.024 = Q stream (cfs)	0.5 = CV Daily
0.0064 = Q discharge (MGD)	0.5 = CV Hourly
30 = no. samples	1 = AFC_Partial Mix Factor
0.3 = Chlorine Demand of Stream	1 = CFC_Partial Mix Factor
0 = Chlorine Demand of Discharge	15 = AFC_Criteria Compliance Time (min)
0.5 = BAT/BPJ Value	720 = CFC_Criteria Compliance Time (min)
0 = % Factor of Safety (FOS)	=Decay Coefficient (K)

Source	Reference	AFC Calculations	Reference	CFC Calculations
TRC	1.3.2.iii	WLA afc = 0.792	1.3.2.iii	WLA cfc = 0.765
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc = 0.295	5.1d	LTA_cfc = 0.445

Source	Effluent Limit Calculations
PENTOXSD TRG 5.1f	AML MULT = 1.231
PENTOXSD TRG 5.1g	AVG MON LIMIT (mg/l) = 0.363
	INST MAX LIMIT (mg/l) = 1.188
	AFC

Summary of Review

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.



Pennsylvania
**Department of
Environmental Protection**