

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

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0029530
 APS ID 1028164
 Authorization ID 1335642

Applicant and Facility Information

| | | | |
|---------------------------|---|------------------|---|
| Applicant Name | <u>Palisades School District</u> | Facility Name | <u>Palisades Sr High School</u> |
| Applicant Address | <u>Palisades School District 39 Thomas Free Drive</u> <u>Kintnersville, PA 18930</u> | Facility Address | <u>Palisades High School 39 Thomas Free Drive</u> <u>Kintnersville, PA 18930</u> |
| Applicant Contact | <u>Alan Crouthamel</u> | Facility Contact | <u>Alan Crouthamel</u> |
| Applicant Phone | <u>(610) 847-5131</u> | Facility Phone | <u>(610) 847-5131</u> |
| Client ID | <u>7149</u> | Site ID | <u>256624</u> |
| Ch 94 Load Status | <u>Not Overloaded</u> | Municipality | <u>Nockamixon Township</u> |
| Connection Status | <u></u> | County | <u>Bucks</u> |
| Date Application Received | <u>November 30, 2020</u> | EPA Waived? | <u>Yes</u> |
| Date Application Accepted | <u></u> | If No, Reason | <u></u> |
| Purpose of Application | <u>Permit Renewal.</u> | | |

Summary of Review

The applicant requests approval for renewal of a National Pollutant Discharge Elimination System (NPDES) permit to discharge 21,500 GPD of treated sewage from the sewage treatment plant serving Palisades High School into an unnamed tributary to Gallows Run. The stream classification is CWF. It is located in the watershed 2D – Three Mile Run which is classified as Special Protection Waters (SPW) of Delaware River.

Treatment plant consists of bar screen, comminutor, equalization tank, aeration tank, settling tank, chlorine contact tank, sludge holding tank. During summer months when school is not in season the flows are low, therefore, Effluent limit monitoring frequency is different compared to other season for DO, TRC & pH. Monitoring requirements for Total Phosphorus and Total Nitrogen were added in the last renewal and will remain same in this permit renewal. The discharge is generally in compliance with the permit limits except for couple of violation for TSS and Fecal.

Dissolved Oxygen limit is changed from 4.0 to 5.0 mg/l per Chapter 93.7(a) Table 3 requirements in this renewal. This change is done since the facility is in compliance with the permit limit and the permittee is able to achieve per the last five years of eDMR data.

Influent monitoring for Total Suspended Solids and CBOD₅ is added to this permit renewal at a frequency of twice per month and sample type of 8-Hour Composite. This is done per Standard Operating Procedure (SOP) for Clean Water Program, New and Reissuance Sewage Individual NPDES Permit Applications, IV.E.8.

The permit is located in Nockamixon Township, Bucks County within the drainage area of the non-tidal portion of the Delaware River known as Lower Delaware, which is classified as Special Protection Water (SPW). Since, the original permit was issued before the SPW designation of the stream, the existing permit was grandfathered to SPW requirements for all parameters but Fecal Coliform as was done in previous permit renewals.

| Approve | Deny | Signatures | Date |
|---------|------|---|------------------|
| X | | <i>Vasantha</i> Vasantha Palakurti / Environmental Engineering Specialist | January 12, 2021 |
| X | | <i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager | 01/15/2021 |

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.

| Discharge, Receiving Waters and Water Supply Information | | | |
|--|---|------------------------------|------------------------|
| Outfall No. | <u>001</u> | Design Flow (MGD) | <u>.0215</u> |
| Latitude | <u>40° 32' 1.44"</u> | Longitude | <u>-75° 10' 48.63"</u> |
| Quad Name | <u></u> | Quad Code | <u></u> |
| Wastewater Description: <u>Effluent</u> | | | |
| Receiving Waters | <u>Unnamed Tributary of Gallows Run (CWF, MF)</u> | Stream Code | <u>03238</u> |
| NHD Com ID | <u>26054324</u> | RMI | <u></u> |
| Drainage Area | <u>8.72</u> | Yield (cfs/mi ²) | <u></u> |
| Q ₇₋₁₀ Flow (cfs) | <u></u> | Q ₇₋₁₀ Basis | <u></u> |
| Elevation (ft) | <u></u> | Slope (ft/ft) | <u></u> |
| Watershed No. | <u>2-D</u> | Chapter 93 Class. | <u>CWF, MF</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> | | |

Compliance History

DMR Data for Outfall 001 (from December 1, 2019 to November 30, 2020)

| Parameter | NOV-20 | OCT-20 | SEP-20 | AUG-20 | JUL-20 | JUN-20 | MAY-20 | APR-20 | MAR-20 | FEB-20 | JAN-20 | DEC-19 |
|--|--------------|---------|-----------------|---------------|--------------|---------|--------------|---------|---------|---------|--------------|---------------|
| Flow (MGD) Average Monthly | 0.01611 9 | 0.01205 | 0.00837 6 | 0.01059 4 | 0.00537 3 | 0.00282 | 0.00503 | 0.01087 | 0.0122 | 0.51990 | 0.01761 | 0.02969 |
| pH (S.U.) Instantaneous Minimum | 7.43 | 7.02 | 7.75 | 7.26 | 7.09 | 7.76 | 7.59 | 7.22 | 6.09 | 6.17 | 6.37 | 6.65 |
| pH (S.U.) Instantaneous Maximum | 8.08 | 8.11 | 8.73 | 8.32 | 8.20 | 8.12 | 8.42 | 8.24 | 8.03 | 7.82 | 8.29 | 8.13 |
| DO (mg/L) Instantaneous Minimum | 6.89 | 7.7 | 7.43 | 7.99 | 7.68 | 7.21 | 8.37 | 9.81 | 8.45 | 9.31 | 9.86 | 9.82 |
| TRC (mg/L) Average Monthly | 0.19666 7 | 0.2 | 0.17666 7 | 0.16774 2 | 0.23871 | 0.019 | 0.23225 8 | 0.223 | 0.20 | 0.25 | 0.20645 2 | 0.02483 87 |
| TRC (mg/L) Instantaneous Maximum | 0.4 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.6 | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 |
| CBOD5 (lbs/day) Average Monthly | 1.97 | 0.84 | 0.00080 1149 | 0.00076 63 | 0.17 | 0.03255 | 0.02765 | 2.38966 | 0.91325 | 0.61822 | 0.56 | 1.07108 9 |
| CBOD5 (mg/L) Average Monthly | 8.75 | 5.05 | 10.15 | 1.05 | 2.15 | 1.95 | 0.02765 | 3.94 | 11.435 | 1.13 | 3.48 | 2.32 |
| TSS (lbs/day) Average Monthly | 4.635 | 2.6 | 2.41525 | 1.9817 | 0.19 | 0.05139 | 1.10784 | 10.62 | 6.3 | 2.03871 | 1.06 | 3.87761 |
| TSS (mg/L) Average Monthly | 22.50 | 11.0 | 23.5 | 15.5 | 3.65 | 3.58 | 26.25 | 29.35 | 33.6 | 10.075 | 6.42 | 11.645 |
| Fecal Coliform (CFU/100 ml) Geometric Mean | 103.15 | 73.4 | 600.0 | 1.0 | 2.0 | 1.0 | 14.1421 3 | 1.0 | 34.641 | 6.4807 | 5.38516 | 14.4913 76 |
| Fecal Coliform (CFU/100 ml) Instantaneous Maximum | 280.0 | 600.0 | 600.0 | 1.0 | 1 | 1.0 | 200.0 | 1.0 | 600 | 21.0 | 29.0 | 21.0 |
| Total Nitrogen (lbs/day) Average Monthly | 3.70 | 6.8 | 0.76106 4 | 0.23764 | 0.17 | 0.08038 | 0.01 | 3.04 | 4.356 | 4.48621 | 6.32 | 6.71 |
| Total Nitrogen (mg/L) Average Monthly | 37.0 | 39.0 | 16.0 | 2.9 | 3.4 | 5.6 | 0.01 | 4.69 | 48.7 | 16.4 | 42.1 | 18.1 |

**NPDES Permit Fact Sheet
Palisades Sr High School**

NPDES Permit No. PA0029530

| | | | | | | | | | | | | |
|--|------|------|--------------|---------------|------|---------|---------|--------|---------|---------|---------|------|
| Ammonia (lbs/day) Average Monthly | 0.14 | 0.01 | 0.10772 5 | 0.1 | 0.01 | 0.00613 | 0.00042 | 0.0236 | 0.01342 | 0.00316 | 0.00165 | 0.01 |
| Ammonia (mg/L) Average Monthly | 0.65 | 0.01 | 1.9 | 0.1 | 0.01 | 0.405 | 0.155 | 0.22 | 0.15 | 0.015 | 0.01 | 0.01 |
| Total Phosphorus (lbs/day) Average Monthly | 0.29 | 0.63 | 0.11891 6 | 0.07785 05 | 0.06 | 0.03014 | 0.01 | 0.97 | 0.23 | 0.43768 | 0.41 | 0.52 |
| Total Phosphorus (mg/L) Average Monthly | 2.9 | 3.6 | 2.5 | 0.95 | 1.2 | 2.1 | 0.001 | 1.5 | 2.6 | 1.6 | 2.7 | 1.4 |

Compliance History

Effluent Violations for Outfall 001, from: January 1, 2020 To: November 30, 2020

| Parameter | Date | SBC | DMR Value | Units | Limit Value | Units |
|----------------|----------|----------|-----------|------------|-------------|------------|
| TSS | 03/31/20 | Avg Mo | 6.3 | lbs/day | 5.4 | lbs/day |
| TSS | 04/30/20 | Avg Mo | 10.62 | lbs/day | 5.4 | lbs/day |
| TSS | 03/31/20 | Avg Mo | 33.6 | mg/L | 30.0 | mg/L |
| Fecal Coliform | 09/30/20 | Geo Mean | 600.0 | CFU/100 ml | 200.0 | CFU/100 ml |

Development of Effluent Limitations

| | | | |
|--------------------------------|----------------------|--------------------------|------------------------|
| Outfall No. | <u>001</u> | Design Flow (MGD) | <u>.0215</u> |
| Latitude | <u>40° 32' 1.00"</u> | Longitude | <u>-75° 10' 49.00"</u> |
| Wastewater Description: | <u>Effluent</u> | | |

Dissolved Oxygen (DO)

DO limit was changed from 4.0 to 5.0 mg/l per Chapter 93.7(a) Table 3 requirements. This change was done since the facility is in compliance with the permit limit and the permittee is able to achieve per the last five years of eDMR data.

Raw Sewage Influent

Influent monitoring for Total Suspended Solids and CBOD₅ was added to this permit renewal at a frequency of twice per month and sample type of 8-Hour Composite. This is done per Standard Operating Procedure (SOP) for Clean Water Program, New and Reissuance Sewage Individual NPDES Permit Applications, IV.E.8.

Total Phosphorus and Total Nitrogen

Total Phosphorus and Total Nitrogen were added in the last renewal based on the SOP and will remain same in this permit renewal

Ammonia

Ammonia limits were determined during previous permit issuance and will remain same for this renewal.

Measurement Frequency

Monitoring for pH, DO, and TRC shall be performed as follows:

- Daily during the school year except weekends and holidays unless public events are scheduled.
- Weekly during the summer.

Water Quality-Based Limitations

A "Reasonable Potential Analysis" was not conducted as this is a Minor Facility.
Comments: None.

Best Professional Judgment (BPJ) Limitations

Comments: None

Anti-Backsliding

None

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) | Report | XXX | XXX | XXX | XXX | XXX | Continuous | Recorded |
| pH (S.U.) Sep 1 - Jun 30 | XXX | XXX | 6.0 Inst Min | XXX | XXX | 9.0 | 1/day | Grab |
| pH (S.U.) Jul 1 - Aug 31 | XXX | XXX | 6.0 Inst Min | XXX | XXX | 9.0 | 1/week | Grab |
| DO Sep 1 - Jun 30 | XXX | XXX | 5.0 Inst Min | XXX | XXX | XXX | 1/day | Grab |
| DO Jul 1 - Aug 31 | XXX | XXX | 5.0 Inst Min | XXX | XXX | XXX | 1/week | Grab |
| TRC Sep 1 - Jun 30 | XXX | XXX | XXX | 0.5 | XXX | 1.2 | 1/day | Grab |
| TRC Jul 1 - Aug 31 | XXX | XXX | XXX | 0.5 | XXX | 1.2 | 1/week | Grab |
| CBOD5 | 4.5 | XXX | XXX | 25.0 | XXX | 50 | 2/month | 8-Hr Composite |
| CBOD5 Raw Sewage Influent | Report | XXX | XXX | Report | XXX | XXX | 2/month | 8-Hr Composite |
| TSS | 5.4 | XXX | XXX | 30.0 | XXX | 60 | 2/month | 8-Hr Composite |
| TSS Raw Sewage Influent | Report | XXX | XXX | Report | XXX | XXX | 2/month | 8-Hr Composite |
| Fecal Coliform (CFU/100 ml) Oct 1 - Apr 30 | XXX | XXX | XXX | 200.0 Geo Mean | XXX | 1000.0* | 2/month | Grab |
| Fecal Coliform (CFU/100 ml) May 1 - Sep 30 | XXX | XXX | XXX | 200.0 Geo Mean | XXX | 1000.0 | 2/month | Grab |

Outfall 001 , Continued (from 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 | | |
| Total Nitrogen | Report | XXX | XXX | Report | XXX | XXX | 1/month | 8-Hr Composite |
| Ammonia Nov 1 - Apr 30 | 3.6 | XXX | XXX | 20.0 | XXX | 40 | 2/month | 8-Hr Composite |
| Ammonia May 1 - Oct 31 | 2.3 | XXX | XXX | 13.0 | XXX | 26 | 2/month | 8-Hr Composite |
| Total Phosphorus | Report | XXX | XXX | Report | XXX | XXX | 1/month | 8-Hr Composite |