pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

**Northcentral Regional Office**
**CLEAN WATER PROGRAM**

# NPDES PERMIT FACT SHEET
# INDIVIDUAL SEWAGE

| | | | |
|---|---|---|---|
| Application Type | **Renewal** | Application No. | **PA0111368** |
| Facility Type | **Non-Municipal** | APS ID | **991046** |
| Major / Minor | **Minor** | Authorization ID | **1269458** |

## Applicant and Facility Information

| | | | |
|---|---|---|---|
| Applicant Name | **Jersey Shore Area School District** | Facility Name | **Salladasburg Elementary School Wastewater Treatment Plant** |
| Applicant Address | 175 A And P Drive | Facility Address | 2490 Route 287 Highway |
| | Jersey Shore, PA 17740-7814 | | Jersey Shore, PA 17740 |
| Applicant Contact | Mark Wall | Facility Contact | Mark Wall |
| Applicant Phone | (570) 398-5055 | Facility Phone | (570) 398-5055 |
| Client ID | 172 | Site ID | 259556 |
| Ch 94 Load Status | Not Overloaded | Municipality | Mifflin Township |
| Connection Status | No Limitations | County | Lycoming |
| Date Application Received | April 16, 2019 | EPA Waived? | Yes |
| Date Application Accepted | May 1, 2019 | If No, Reason | |

Purpose of Application: Renewal of an existing NPDES permit for the discharge of treated sewage.

## 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 |
|---|---|---|---|
| | | Derek S. Garner / Project Manager | |
| | | Nicholas W. Hartranft, P.E. / Environmental Engineer Manager | |

## Discharge, Receiving Waters and Water Supply Information

| | | | |
|---|---|---|---|
| Outfall No. | 001 | Design Flow (MGD) | 0.0047 |
| Latitude | 41º 15' 55.93" | Longitude | -77º 13' 54.81" |
| Quad Name | Salladasburg | Quad Code | 0828 |
| Wastewater Description: | Sewage Effluent | | |

| | | | |
|---|---|---|---|
| Receiving Waters | Larry's Creek | Stream Code | 21014 |
| NHD Com ID | 66915667 | RMI | 4.24 |
| Drainage Area | 62.49 | Yield (cfs/mi$^2$) | 0.034 |
| $Q_{7-10}$ Flow (cfs) | 2.11 | $Q_{7-10}$ Basis | Gage No. 01549780 |
| Elevation (ft) | 618 | Slope (ft/ft) | n/a |
| Watershed No. | 10-A | Chapter 93 Class. | WWF |
| Existing Use | Exceptional Value (EV) | Existing Use Qualifier | RBP - Antidegradation |
| Exceptions to Use | n/a | Exceptions to Criteria | n/a |
| Assessment Status | Attaining Use(s) | | |
| Cause(s) of Impairment | **n/a** | | |
| Source(s) of Impairment | **n/a** | | |
| TMDL Status | **n/a** | Name | **n/a** |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | Pennsylvania-American Water Company | | |
| PWS Waters | West Branch Susquehanna River | Flow at Intake (cfs) | 688 |
| PWS RMI | 10.6 | Distance from Outfall (mi) | 36 |

DEP has evaluated information indicating that the existing use of the receiving waters is different than the designated use under 25 Pa. Code § 93.9. In developing the draft NPDES permit, DEP is proposing to protect the existing use of the receiving waters. Following DEP's notice of the receipt of the application and the draft permit in the Pennsylvania Bulletin, DEP will accept written comments during the public comment period regarding DEP's tentative determination to protect the existing use. DEP will make a final determination on existing use protection for the receiving waters as part of the final permit action.

## Treatment Facility Summary

The Salladasburg Elementary School Wastewater Treatment Plant is a package extended aeration treatment plant with an annual average design flow and hydraulic design capacity of 0.0047 MGD and an organic capacity of 33.3 lbs BOD5/day, owned and operated by the Jersey Shore Area School District. Construction and operation of the original treatment plant was approved under WQM Permit No. 266S014, issued May 25, 1966. Removal of the chlorine disinfection facilities and subsequent installation of an ultraviolet light disinfection unit was approved under WQM Permit No. 4115401, issued February 22, 2016. Treatment at facility consists of:

- One (1) comminutor
- One (1) manual bar screen
- One (1) aeration tank
- One (1) clarifier tank
- Two (2) ultraviolet disinfection units
- One (1) sludge holding tank

Disinfected effluent is ultimately discharged via Outfall 001 to Larry's Creek.

Sludge is hauled to the Tiadaghton Valley Municipal Authority Wastewater Treatment Plant (NPDES Permit No. PA0234079).

## Compliance History

The following effluent violations occurred over the existing permit term:

| Monitoring Period | Parameter | Sample Value | Violation Condition | Permit Value | Units | SBC |
|---|---|---|---|---|---|---|
| May 2019 | pH | 5.12 | < | 6 | S.U. | Minimum |
| January 2019 | Fecal Coliform | > 2540 | > | 2000 | CFU/100 ml | Geometric Mean |
| August 2019 (1) | Dissolved Oxygen | 4.73 | < | 5 | mg/L | Minimum |
| September 2019 (1) | Dissolved Oxygen | 4.3 | < | 5 | mg/L | Minimum |

(1) Attributed to operator error and training, including dissolved oxygen meter calibration.

There does not appear to be any chronic effluent issues that should impact the development of effluent limits.

The facility was last inspected by DEP on October 28, 2019. The inspection report notes the plant is operating well with no operational changes planned in the near future. The only violations noted in the report are included in the abovementioned effluent limit exceedances.

## Development of Effluent Limitations

**Outfall No.** 001 **Design Flow (MGD)** 0.0047
**Latitude** 41º 15' 55.69" **Longitude** -77º 13' 54.00"
**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 |
|---|---|---|---|---|
| $CBOD_5$ | 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 | 0.02 | IMAX | - | 92a.48(b)(3) |

### Water Quality-Based Limitations

A new "Reasonable Potential Analysis" in WQM 7.0 v1.0b was not conducted. No input values have changed since the previous renewal. The existing model input/output data has been attached.

### Best Professional Judgment (BPJ) Limitations

DEP recommends that dissolved oxygen and ammonia-n requirements remain in the permit to monitor treatment plant performance and to ensure Chapter 93 criteria is met in Larry's Creek.

### Chesapeake Bay

The facility has completed five years' worth of sampling for total nitrogen and total phosphorus. The sample results are as follows:

| Monitoring Period | Concentrations (mg/l) | |
|---|---|---|
| | Total Nitrogen | Total Phosphorus |
| 2015 | 24.1 | 2.1 |
| 2016 | 11 | 2.68 |
| 2017 | 22.88 | 0.2 |
| 2018 | 8.83 | 1.89 |
| ***AVG*** | ***16.70*** | ***1.72*** |

Per Pennsylvania's Chesapeake Bay Watershed Implementation Plan, Phase II, the facility is no longer required to provide annual nutrient sample results. Accordingly, annual monitoring requirements for total nitrogen and total phosphorus have been removed from the permit.

**Anti-Backsliding**

Monitoring requirements for total nitrogen and total phosphorus have been removed from the permit per anti-backsliding regulations at 40 CFR § 122.44(l)(2)(i)(B)(1), which allows for parameters to be removed from the permit based on information (e.g., sample results) that were not available at the time of previous permit issuance.

## Existing Effluent Limitations and Monitoring Requirements

The existing limits and monitoring requirements are as follows:

| Parameter | Effluent Limitations | | | | | | Monitoring Requirements | |
|---|---|---|---|---|---|---|---|---|
| | Mass Units (lbs/day) | | Concentrations (mg/L) | | | | Minimum Measurement Frequency | Required Sample Type |
| | Average Monthly | Average Weekly | Instant. Minimum | Average Monthly | Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | Report Daily Max | XXX | XXX | XXX | XXX | 5/week | Measured |
| pH (S.U.) | XXX | XXX | 6.0 | XXX | XXX | 9.0 | 5/week | Grab |
| DO | XXX | XXX | 5.0 | XXX | XXX | XXX | 5/week | Grab |
| CBOD5 | XXX | XXX | XXX | 25.0 | XXX | 50.0 | 1/month | Grab |
| TSS | XXX | XXX | XXX | 30.0 | XXX | 60.0 | 1/month | Grab |
| Fecal Coliform (No./100 ml) Oct 1 - Apr 30 | XXX | XXX | XXX | 2000 Geo Mean | XXX | 10000 | 1/month | Grab |
| Fecal Coliform (No./100 ml) May 1 - Sep 30 | XXX | XXX | XXX | 200 Geo Mean | XXX | 1000 | 1/month | Grab |
| UV Transmittance (%) | XXX | XXX | Report | XXX | XXX | XXX | 5/week | Grab |
| Ammonia | XXX | XXX | XXX | Report | XXX | XXX | 1/month | Grab |

Compliance Sampling Location: Outfall 001

## 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) | | Concentrations (mg/L) | | | | Minimum Measurement Frequency | Required Sample Type |
| | Average Monthly | Average Weekly | Instant. Minimum | Average Monthly | Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | Report Daily Max | XXX | XXX | XXX | XXX | 5/week | Measured |
| pH (S.U.) | XXX | XXX | 6.0 | XXX | XXX | 9.0 | 5/week | Grab |
| DO | XXX | XXX | 5.0 | XXX | XXX | XXX | 5/week | Grab |
| CBOD5 | XXX | XXX | XXX | 25.0 | XXX | 50.0 | 1/month | Grab |
| TSS | XXX | XXX | XXX | 30.0 | XXX | 60.0 | 1/month | Grab |
| Fecal Coliform (No./100 ml) Oct 1 - Apr 30 | XXX | XXX | XXX | 2000 Geo Mean | XXX | 10000 | 1/month | Grab |
| Fecal Coliform (No./100 ml) May 1 - Sep 30 | XXX | XXX | XXX | 200 Geo Mean | XXX | 1000 | 1/month | Grab |
| UV Transmittance (%) | XXX | XXX | Report | XXX | XXX | XXX | 5/week | Grab |
| Ammonia | XXX | XXX | XXX | Report | XXX | XXX | 1/month | Grab |


# Attachments