

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

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0027987
 APS ID 1100657
 Authorization ID 1461345

Applicant and Facility Information

| | | | |
|---------------------------|--|------------------|--|
| Applicant Name | <u>Applegreen PA Welcome Center LLC</u> | Facility Name | <u>Peter J Camiel Service Plaza</u> |
| Applicant Address | <u>208 Harristown Road Route 208 Glen Rock, NJ 07452</u> | Facility Address | <u>5 Marsh Road Elverson, PA 19520</u> |
| Applicant Contact | <u>Elizabeth Pierce</u> | Facility Contact | <u>Shawn Leslie</u> |
| Applicant Phone | <u>(443) 206-6899</u> | Facility Phone | <u>(443) 206-6899</u> |
| Client ID | <u>370385</u> | Site ID | <u>254845</u> |
| Ch 94 Load Status | <u>Not Overloaded</u> | Municipality | <u>Wallace Township</u> |
| Connection Status | <u>No Limitations</u> | County | <u>Chester</u> |
| Date Application Received | <u>October 19, 2023</u> | EPA Waived? | <u>No</u> |
| Date Application Accepted | <u></u> | If No, Reason | <u>, DEP Discretion</u> |
| Purpose of Application | <u>.</u> | | |

Summary of Review

Sludge use and disposal description and location(s):

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 |
|---------|------|---|---------------|
| | | ./AUTH_LEAD_REV_INFO/AUTH_LEAD_REV_INFO_ROW/FULL_NAME / ./AUTH_LEAD_REV_INFO/AUTH_LEAD_REV_INFO_ROW/JOB_TITLE | March 6, 2024 |
| | | ./AUTH_LEAD_REV_INFO/AUTH_LEAD_REV_INFO_ROW/PERMITS_CHIEF_NAME / ./AUTH_LEAD_REV_INFO/AUTH_LEAD_REV_INFO_ROW/PERMITS_CHIEF_TITLE | |

Discharge, Receiving Waters and Water Supply Information

Outfall No. 001 Design Flow (MGD) .05
 Latitude 40° 7' 13.20" Longitude -75° 45' 51.01"
 Quad Name _____ Quad Code _____
 Wastewater Description: Sewage Effluent

Receiving Waters Marsh Creek (HQ-TSF, MF) Stream Code _____
 NHD Com ID 26105494 RMI 0.3900
 Drainage Area _____ Yield (cfs/mi²) _____
 Q₇₋₁₀ Flow (cfs) _____ Q₇₋₁₀ Basis _____
 Elevation (ft) _____ Slope (ft/ft) _____
 Watershed No. 3-H Chapter 93 Class. HQ-TSF, MF
 Existing Use _____ Existing Use Qualifier _____
 Exceptions to Use _____ Exceptions to Criteria _____

Assessment Status Attaining Use(s)
 Cause(s) of Impairment _____
 Source(s) of Impairment _____
 TMDL Status Final Name Christina River Basin

| | |
|-------------------------|-------------|
| Background/Ambient Data | Data Source |
| pH (SU) _____ | _____ |
| Temperature (°F) _____ | _____ |
| Hardness (mg/L) _____ | _____ |
| Other: _____ | _____ |

Nearest Downstream Public Water Supply Intake _____
 PWS Waters _____ Flow at Intake (cfs) _____
 PWS RMI _____ Distance from Outfall (mi) _____

Changes Since Last Permit Issuance:
 Other Comments:

Treatment Facility Summary

Treatment Facility Name: Peter J Camiel Service Plaza

| WQM Permit No. | Issuance Date |
|----------------|---------------|
| | |
| | |

| Waste Type | Degree of Treatment | Process Type | Disinfection | Avg Annual Flow (MGD) |
|------------|---------------------|--------------|--------------|-----------------------|
| | | | | |

| | | | | |
|---------------------------------|-----------------------------------|---------------------------------------|------------------------------|-------------------------------|
| Sewage | Tertiary | Extended Aeration With Solids Removal | Chlorine With Dechlorination | 0.05 |
| | | | | |
| Hydraulic Capacity (MGD) | Organic Capacity (lbs/day) | Load Status | Biosolids Treatment | Biosolids Use/Disposal |
| 0.05 | 136 | Not Overloaded | Holding Tank | Other WWTP |

Changes Since Last Permit Issuance:

Other Comments:

Compliance History

DMR Data for Outfall 001 (from February 1, 2023 to January 31, 2024)

| Parameter | JAN-24 | DEC-23 | NOV-23 | OCT-23 | SEP-23 | AUG-23 | JUL-23 | JUN-23 | MAY-23 | APR-23 | MAR-23 | FEB-23 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Flow (MGD) Average Monthly | 0.0063 | 0.006 | 0.0055 | 0.0059 | 0.0069 | 0.0082 | 0.0085 | 0.0064 | 0.0055 | 0.0065 | 0.0052 | 0.0054 |
| pH (S.U.) Instantaneous Minimum | 7.1 | 6.9 | 7.1 | 7.4 | 6.8 | 6.9 | 7.0 | 7.0 | 7.4 | 7.0 | 7.5 | 7.7 |
| pH (S.U.) Instantaneous Maximum | 8.6 | 8.8 | 8.5 | 9.4 | 9.5 | 8.8 | 8.9 | 8.6 | 8.8 | 8.7 | 8.7 | 8.5 |
| DO (mg/L) Instantaneous Minimum | 7.4 | 7.9 | 7.7 | 5.2 | 5.1 | 5.2 | 5.6 | 5.4 | 6.0 | 4.7 | 8.9 | 10.2 |
| TRC (mg/L) Average Monthly | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.05 | < 0.1 | < 0.04 | < 0.1 | < 0.1 |
| CBOD5 (lbs/day) Average Monthly | 1.0 | 0.3 | 0.4 | 0.9 | 0.7 | 1.6 | 1.6 | 0.8 | 0.3 | 0.6 | 0.3 | 0.1 |
| CBOD5 (mg/L) Average Monthly | 23.0 | 5.0 | 15.0 | 14.0 | 22.0 | 22.0 | 22.0 | 18.0 | 16.0 | 13.0 | 6.0 | 4.0 |
| BOD5 (lbs/day) Raw Sewage Influent Average Monthly | 13 | 22 | 12 | 29 | 7 | 23 | 29 | 16 | 4 | 12 | 20 | 14 |
| BOD5 (mg/L) Raw Sewage Influent Average Monthly | 419 | 431 | 441 | 454 | 253 | 291 | 362 | 336 | 214 | 226 | 341 | 429 |
| TSS (lbs/day) Average Monthly | 1.6 | 0.6 | 0.1 | 0.3 | 0.09 | 0.2 | 0.5 | 0.2 | < 0.02 | 0.2 | 0.1 | < 0.07 |
| TSS (lbs/day) Raw Sewage Influent Average Monthly | 6 | 34 | 17 | 49 | 21 | 50 | 55 | 36 | 15 | 39 | 37 | 23 |
| TSS (mg/L) Average Monthly | 34.0 | 12.0 | 4.0 | 5.0 | 3.0 | 2.0 | 7.0 | 5.0 | < 1.0 | 4.0 | 3.0 | < 2.0 |

| | | | | | | | | | | | | |
|---|--------|--------|----------|--------|-------|----------|-------|--------|-------|-------|-------|----------|
| TSS (mg/L) Raw Sewage Influent Average Monthly | 200 | 644 | 597 | 764 | 690 | 631 | 684 | 754 | 787 | 749 | 657 | 742 |
| Fecal Coliform (No./100 ml) Average Monthly | < 26 | < 39 | 47 | 111 | < 15 | < 8 | 15 | 41 | < 2 | < 5 | 22 | < 29 |
| Fecal Coliform (No./100 ml) Instantaneous Maximum | 4200 | 755 | 200 | 270 | 110 | 39 | 15 | 110 | < 2 | 13 | 62 | 2500 |
| Nitrate-Nitrite (lbs/day) Average Monthly | 3 | 5 | 3 | 6 | 3 | 9 | 11 | 6 | 2 | 5 | 4 | 3 |
| Nitrate-Nitrite (mg/L) Average Monthly | 85.3 | 88.4 | 110.56 | 96.2 | 90.1 | 117 | 133 | 117 | 91.9 | 95.4 | 79 | 96.5 |
| Total Nitrogen (lbs/day) Average Monthly | < 3 | < 5 | < 3 | < 6 | 3 | < 9 | 11 | 6 | 2 | 5 | 4 | < 3 |
| Total Nitrogen (mg/L) Average Monthly | < 85.8 | < 88.9 | < 110.81 | < 97 | 91.33 | < 118.68 | 134.1 | 117.98 | 98.36 | 97.56 | 80.17 | < 97.24 |
| Ammonia (lbs/day) Average Monthly | 0.02 | 0.03 | 0.02 | 0.003 | 0.01 | < 0.05 | 0.004 | 0.004 | 0.09 | 0.02 | 0.009 | < 0.0006 |
| Ammonia (mg/L) Average Monthly | 0.6 | 0.5 | 0.5 | 0.05 | 0.3 | < 0.6 | 0.1 | 0.1 | 4.2 | 0.3 | 0.2 | < 0.02 |
| TKN (lbs/day) Average Monthly | < 0.02 | < 0.03 | < 0.04 | < 0.05 | 0.03 | < 0.1 | 0.1 | 0.07 | 0.1 | 0.1 | 0.07 | < 0.03 |
| TKN (mg/L) Average Monthly | < 0.5 | < 0.5 | < 1.31 | < 0.85 | 1.28 | < 1.68 | 1.6 | 1.48 | 6.51 | 2.21 | 1.22 | < 0.79 |
| Total Phosphorus (lbs/day) Average Monthly | 0.04 | 0.05 | 0.05 | 0.02 | 0.01 | 0.06 | 0.05 | 0.01 | 0.009 | 0.02 | 0.01 | 0.004 |
| Total Phosphorus (mg/L) Average Monthly | 1.2 | 1.0 | 1.9 | 0.3 | 0.6 | 0.8 | 0.6 | 0.3 | 0.5 | 0.4 | 0.2 | 0.1 |

Compliance History

Effluent Violations for Outfall 001, from: March 1, 2023 To: January 31, 2024

| Parameter | Date | SBC | DMR Value | Units | Limit Value | Units |
|-----------|------|-----|-----------|-------|-------------|-------|
|-----------|------|-----|-----------|-------|-------------|-------|

| | | | | | | |
|----------------|----------|----------|------|------------|------|------------|
| pH | 09/30/23 | IMAX | 9.5 | S.U. | 9.0 | S.U. |
| pH | 10/31/23 | IMAX | 9.4 | S.U. | 9.0 | S.U. |
| DO | 04/30/23 | Inst Min | 4.7 | mg/L | 5.0 | mg/L |
| CBOD5 | 07/31/23 | Avg Mo | 22.0 | mg/L | 10.0 | mg/L |
| CBOD5 | 08/31/23 | Avg Mo | 22.0 | mg/L | 10.0 | mg/L |
| CBOD5 | 06/30/23 | Avg Mo | 18.0 | mg/L | 10.0 | mg/L |
| CBOD5 | 09/30/23 | Avg Mo | 22.0 | mg/L | 10.0 | mg/L |
| CBOD5 | 05/31/23 | Avg Mo | 16.0 | mg/L | 10.0 | mg/L |
| CBOD5 | 01/31/24 | Avg Mo | 23.0 | mg/L | 20.0 | mg/L |
| CBOD5 | 10/31/23 | Avg Mo | 14.0 | mg/L | 10.0 | mg/L |
| TSS | 01/31/24 | Avg Mo | 34.0 | mg/L | 20.0 | mg/L |
| Fecal Coliform | 01/31/24 | IMAX | 4200 | No./100 ml | 1000 | No./100 ml |
| Ammonia | 05/31/23 | Avg Mo | 4.2 | mg/L | 3.0 | mg/L |

Summary of Inspections:

Other Comments:

Development of Effluent Limitations

Outfall No. 001 Design Flow (MGD) .05
 Latitude 40° 7' 16.94" Longitude -75° 46' 29.09"
 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 | 0.5 | Average Monthly | - | 92a.48(b)(2) |

Comments:

Water Quality-Based Limitations

A "Reasonable Potential Analysis" (Attachment) determined the following parameters were candidates for limitations:

The following limitations were determined through water quality modeling (output files attached):

| Parameter | Limit (mg/l) | SBC | Model |
|---|---|---|---|
| | | | |

Comments:

Best Professional Judgment (BPJ) Limitations

Comments:

Anti-Backsliding

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" (386-0400-001), 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 | Metered |
| pH (S.U.) | XXX | XXX | 6.0 Inst Min | XXX | XXX | 9.0 | 1/day | Grab |
| DO | XXX | XXX | 5.0 Inst Min | XXX | XXX | XXX | 1/day | Grab |
| TRC | XXX | XXX | XXX | 0.5 | XXX | 1.2 | 1/day | Grab |
| CBOD5 Nov 1 - Apr 30 | 8.3 | XXX | XXX | 20.0 | XXX | 40 | 2/month | 24-Hr Composite |
| CBOD5 May 1 - Oct 31 | 4.2 | XXX | XXX | 10.0 | XXX | 20 | 2/month | 24-Hr Composite |
| BOD5 Raw Sewage Influent | Report | XXX | XXX | Report | XXX | XXX | 2/month | 24-Hr Composite |
| TSS | 8.3 | XXX | XXX | 20.0 | XXX | 40 | 2/month | 24-Hr Composite |
| TSS Raw Sewage Influent | Report | XXX | XXX | Report | XXX | XXX | 2/month | 24-Hr Composite |
| Fecal Coliform (No./100 ml) | XXX | XXX | XXX | 200 | XXX | 1000 | 2/month | Grab |
| Nitrate-Nitrite | Report | XXX | XXX | Report | XXX | XXX | 2/month | 24-Hr Composite |

Outfall001 , 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 | 2/month | 24-Hr Composite |
| Ammonia Nov 1 - Apr 30 | 3.7 | XXX | XXX | 9.0 | XXX | 18 | 2/month | 24-Hr Composite |
| Ammonia May 1 - Oct 31 | 1.3 | XXX | XXX | 3.0 | XXX | 6 | 2/month | 24-Hr Composite |
| TKN | Report | XXX | XXX | Report | XXX | XXX | 2/month | 24-Hr Composite |
| Total Phosphorus Nov 1 - Mar 31 | 0.83 | XXX | XXX | 2.0 | XXX | 4 | 2/month | 24-Hr Composite |
| Total Phosphorus Apr 1 - Oct 31 | 0.42 | XXX | XXX | 1.0 | XXX | 2 | 2/month | 24-Hr Composite |

Compliance Sampling Location:

Other Comments:

| Approve | Deny | Signatures | Date |
|---------|------|---|---------------|
| | | ./AUTH_LEAD_REV_INFO/AUTH_LEAD_REV_INFO_ROW/FULL_NAME / ./AUTH_LEAD_REV_INFO/AUTH_LEAD_REV_INFO_ROW/JOB_TITLE | March 6, 2024 |
| | | ./AUTH_LEAD_REV_INFO/AUTH_LEAD_REV_INFO_ROW/PERMITS_CHIEF_NAME / ./AUTH_LEAD_REV_INFO/AUTH_LEAD_REV_INFO_ROW/PERMITS_CHIEF_TITLE | |