Pennsylvania Department of Environmental Protection

Northeast Regional Office
CLEAN WATER PROGRAM

# NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

| | | | |
|---|---|---|---|
| Application Type | **Renewal** | Application No. | **PA0060046** |
| Facility Type | **Non-Municipal** | APS ID | **849851** |
| Major / Minor | **Major** | Authorization ID | **1506493** |

## Applicant and Facility Information

| | | | |
|---|---|---|---|
| Applicant Name | **CAN DO, Inc.** | Facility Name | **CAN DO WWTP** |
| Applicant Address | 1 South Church Street, Suite 200 | Facility Address | 653 Oak Ridge Road |
| | Hazleton, PA 18201 | | Hazleton, PA 18202 |
| Applicant Contact | Raiana Nichols | Facility Contact | Raiana Nichols |
| Applicant Phone | (570) 455-1508 | Facility Phone | (570) 455-1508 |
| Client ID | 82020 | Site ID | 262461 |
| Ch 94 Load Status | - | Municipality | Hazle Township |
| Connection Status | - | County | Luzerne |
| Date Application Received | November 1, 2024 | EPA Waived? | No |
| Date Application Accepted | November 1, 2024 | If No, Reason | Major Facility, Significant CB Discharge, Pretreatment Program |
| Purpose of Application | Renewal of NPDES permit. | | |

## Summary of Review

The applicant is requesting renewal of an NPDES permit to discharge 1 MGD of treated sewage / wastewater to Tomhicken Creek, a CWF/MF designated receiving stream in state water plan basin 05-E (Catawissa – Roaring Creeks). 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.

The pH, Total Suspended Solids (TSS) and Fecal Coliform limits are technology-based limits carried over from the previous permit.

Monthly monitoring requirements for Total Dissolved Solids (TDS), Chloride, Bromide and Sulfate were established during the previous renewal in accordance with recommendations of DEP's Toxics Screening Spreadsheet for a major sewage discharger. Toxics Management Spreadsheet (TMS) modeling performed during this renewal didn't recommend any monitoring requirements. For this renewal, the minimum measurement frequency for TDS, Chloride, Bromide and Sulfate is updated from 1/month to 1/quarter.

The $CBOD_5$ and Dissolved Oxygen limits are water quality-based and carried over from the previous permit. WQM 7.0 modeling recommended more stringent limitations for Ammonia-N (1.56 mg/L summertime monthly average, 3.12 mg/L IMAX). eDMR review indicates the permittee cannot consistently meet the new limitations, therefore, they will come into effect three years after the permit effective date. The standard 3x multiplier is applied to the wintertime Ammonia-N limitations. Development of an Ammonia-N minimization plan with yearly milestones is included in Part C.VI. For modeling inputs, the drainage areas and elevations were obtained from USGS's StreamStats interactive map and the RMIs were obtained from DEP's eMapPA. Data from downstream gage 01540300 (Tomhicken Creek near Zion Grove, PA) was used to develop the low flow yield of 0.114 cfs/$mi^2$.

| Approve | Deny | Signatures | Date |
|---|---|---|---|
| X | | Brian Burden, E.I.T. / Project Manager | September 4, 2025 |
| X | | Edward Dudick, P.E. / Environmental Engineer Manager | September 5, 2025 |

**Summary of Review**

The TRC Calculation Spreadsheet did not recommend more stringent limitations for TRC. Since the facility utilizes ultraviolet radiation for disinfection, the existing monthly average TRC limitation is removed from the permit and the minimum measurement frequency is updated to "daily when discharging" in Part A of the permit. As in the previous renewal, the permittee shall sample for TRC on each day chlorine is utilized for backup disinfection, cleaning, or other purposes (see Part C.I.E.). Daily monitoring/reporting requirements for ultraviolet light dosage in units of $mWsec/cm^2$ are carried over from the previous permit.

For TMS modeling, a discharge hardness of 327 mg/L was input as the long-term average (as reported on the renewal application) and the pH default value of 7.0 S.U. was used. Default stream hardness (100 mg/L) and stream pH (7.0 S.U.) values were used. The TMS made the following recommendations:

- Total Aluminum: A monthly average limitation of 0.75 mg/L and IMAX of 0.81 mg/L was recommended. The maximum reported discharge concentration was 2.11 mg/L. Since it appears the permittee cannot meet the new limitations, requirements for a Toxics Reduction Evaluation (TRE) are included in Part C for Total Aluminum and the new limitations will come into effect 3 years after the permit effective date. In accordance with Table 6-3 of DEP's Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits (doc. No. 362-0400-001), the minimum measurement frequency is updated from 1/month to 1/week.

- Total Boron: A monthly average limitation of 1.74 mg/L and IMAX of 4.35 mg/L was recommended. The maximum reported discharge concentration was 0.883 mg/L. Since it appears the permittee can meet the new limitations, the new limitations will come into effect on the permit effective date.

- Total Cadmium: A monthly average limitation of 0.68 ug/L and IMAX of 1.7 ug/L was recommended. The maximum reported discharge concentration was 0.52 ug/L. Since it appears the permittee may not be able to consistently meet the new limitations, requirements for a TRE are included in Part C for Total Cadmium and the new limitations will come into effect 3 years after the permit effective date.

- Total Cobalt: Monitoring/reporting requirements were recommended for Total Cobalt since the maximum reported concentration (2.34 ug/L) is greater than 10% of the calculated average monthly water quality-based effluent limit (20.7 ug/L). It doesn't appear that Total Cobalt discharge concentrations will exceed the Chapter 93 water quality standards, and no requirements are included in the permit at this time.

- Total Copper: A monthly average limitation of 0.026 mg/L and IMAX of 0.066 mg/L was recommended. The maximum reported discharge concentration was 18.5 mg/L. Since it appears the permittee cannot meet the new limitations, requirements for a TRE are included in Part C for Total Copper and the new limitations will come into effect 3 years after the permit effective date. In accordance with Table 6-3 of DEP's Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits, the minimum measurement frequency is updated from 1/year to 1/week.

- Total Iron: Monitoring/reporting requirements were recommended for Total Iron since the maximum reported concentration (0.367 mg/L) is greater than 10% of the calculated average monthly water quality-based effluent limit (1.63 mg/L). Monthly monitoring/reporting requirements are continued in this renewal.

- Total Manganese: A monthly average limitation of 1.08 mg/L and IMAX of 2.71 mg/L was recommended. The maximum reported discharge concentration was 10.9 mg/L. Since it appears the permittee cannot meet the new limitations, requirements for a TRE are included in Part C for Total Manganese and the new limitations will come into effect 3 years after the permit effective date. In accordance with Table 6-3 of DEP's Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits, the minimum measurement frequency is updated from 1/year to 1/week.

- Total Zinc: A monthly average limitation of 0.311 mg/L and IMAX of 0.340 mg/L was recommended. Due to antibacksliding regulations, the existing monthly average limit of 0.170 mg/L and IMAX of 0.340 mg/L remains in the permit. The daily maximum limitation is removed from the permit in accordance with Table 5-3 of DEP's Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits.

Note: The permittee has the option to perform site-specific studies to verify or refine the WQBELs (see Part C.V.B.)

**Summary of Review**

A Total Maximum Daily Load (TMDL) for the Catawissa Creek Watershed was prepared for PA DEP on March 1, 2003. The TMDL addresses metals (Iron, Manganese, and Aluminum) and depressed pH associated with acid mine drainage (AMD). There are no Wasteload Allocations (WLAs) assigned to this facility. Limitations and monitoring requirements for these pollutants of concern are detailed above.

Monitoring/reporting requirements are carried over for Total Phosphorus, Total Nitrogen, Total Kjeldahl Nitrogen, Nitrate-Nitrite as N, Total Hardness, influent $BOD_5$ and influent TSS. Monthly monitoring/reporting is added to the permit for E. Coli as recommended by current guidance.

To quantify nutrient reduction needs, maximum nutrient loads (cap loads) for each major watershed tributary to the Chesapeake Bay were established. This included allocation of cap loads for Total Nitrogen (TN) and Total Phosphorus (TP) in Pennsylvania for the Potomac and Susquehanna watersheds. Pennsylvania's overall cap loads for TN and TP were further divided into cap loads for point and non-point sources. The method used to allocate the point source portion of the load was developed after DEP conducted an extensive stakeholder process with sewage treatment plants in 2006. The workgroup recommendation made the allocations based on the design annual average daily flow, and concentrations of 6 mg/L TN and 0.8 mg/L TP. Based on this methodology, the allocations for TN and TP for this facility are 18,265 lbs/yr and 2,435 lbs/yr, respectively. Mass limitations for Net Total Nitrogen and Net Total Phosphorus must be reported on an annual basis. Offsets were not requested during this renewal cycle.

The permittee was required to conduct Whole Effluent Toxicity (WET) testing on an annual basis during the previous permit term for the following endpoints: chronic *Pimephales promelas* survival, chronic *Pimephales promelas* growth, chronic *Ceriodaphnia dubia* survival, and chronic *Ceriodaphnia dubia* reproduction. All tests used the following dilution series: 23%, 47%, 93%, 97%, and 100%, with 93% as the facility-specific Target In-Stream Waste Concentration (TIWC).

Each recently reviewed endpoint passed the test for significant toxicity as per NERO's Water Pollution Biologist, therefore, there is no reasonable potential to establish WET limits in the permit. An updated $Q_{7-10}$ value utilized for modeling during this renewal slightly adjusted the required dilution series to 23%, 46%, 92%, 96%, and 100% with 92% as the facility-specific TIWC. The template Part C WET condition is updated with the revised dilution series. WET testing shall be conducted annually during the upcoming permit cycle, at a minimum.

The permittee continues operation of an Industrial Pretreatment Program (IPP). All industrial users that discharge process flow wastewater are as follows:

1. Aspire Bakeries, 2 Chestnut Hill Drive, Hazle Twp, PA. *32,400 gpd process flows* – subject to 40 CFR Part 405 (Dairy Products Processing) and a significant industrial user (SIU).

2. Cargill Meat Solutions, 65 Green Mountain Road, Hazleton, PA. *43,200 gpd process flows* – subject to 40 CFR Part 432 (Meat and Poultry Products) and a SIU.

3. Hood Packing / Atlas Roofing, 3 Maplewood Drive, Hazle Twp, PA. *3,240 gpd process flows*.

4. Niagara Bottling LLC Hazleton, 100 Timberline Drive, Hazle Twp, PA. *275,206 gpd process flows*. This SIU has caused recent WWTP upset(s).

5. PFNonwovens, 101 Green Mountain Road, Hazleton, PA. *6,220 gpd process flows* – subject to 40 CFR 410 (Textile Mills).

6. Freedom Corrugated, LLC, 595 Oak Ridge Road, Hazle Twp, PA. *12,640 gpd process flows* – subject to 40 CFR 430 (Pulp, Paper, and Paperboard).

7. Schuetz Container, 360 Maplewood Drive, Hazle Twp, PA. *36,000 gpd process flows* – subject to 40 CFR 463 (Plastics Molding and Forming).

8. Hershey Company, 6 Scotch Pine Drive, Hazle Twp, PA. *76,500 gpd process flows* – subject to 40 CFR Part 405 (Dairy Products Processing) and a significant industrial user (SIU).

**Summary of Review**

9. Insteel Wire Products, 503 Forest Road, Hazle Twp, PA. *690 gpd process flows* – subject to 40 CFR Part 420 (Iron and Steel Manufacturing).

10. International Paper, 533 Forest Road, Hazle Twp, PA. *4,720 gpd process flows* – subject to 40 CFR 430 (Pulp, Paper, and Paperboard).

11. LEVIAT, 565 Oak Ridge Road, Hazle Twp, PA. *590 gpd process flows* – subject to 40 CFR Part 420 (Iron and Steel Manufacturing).

12. Polyglass USA, 555 Oak Ridge Road, Hazle Twp, PA. *3,270 gpd process flows* – subject to 40 CFR Part 443 (Paving and Roofing Materials).

13. Pretium Packaging, 512 Forest Road, Hazle Twp, PA. *3,720 gpd process flows* – subject to 40 CFR 463 (Plastics Molding and Forming).

Outfall 002 discharges site stormwater to Tomhicken Creek. The latest PAG-03 Appendix J industrial stormwater general permit requirements are applied at Outfall 002. Semiannual monitoring/reporting is required for TSS, Oil & Grease, pH, Chemical Oxygen Demand (COD), Total Nitrogen, and Total Phosphorus.

The previously issued permit expired on April 30, 2025, and the application for permit renewal was submitted on time. There are no open WPC NPDES violations for the permittee that would warrant withholding issuance of the final permit.

Sludge use and disposal description and location(s): The permit renewal application indicates 21.47 dry tons of sewage sludge was hauled to the Greater Hazleton Joint Sewer Authority WWTP during the previous year via Biros Septic.

TMS PA0060046.pdf WQM Modeling.pdf TRC Calculation.pdf Watershed Information.pdf

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. | 001 | Design Flow (MGD) | 1.0 |
| Latitude | 40º 55' 19" | Longitude | -76º 4' 43" |
| Quad Name | Conyngham | Quad Code | 1137 |
| Wastewater Description: | Sewage Effluent | | |

| | | | |
|---|---|---|---|
| Receiving Waters | Tomhicken Creek (CWF, MF) | Stream Code | 27567 |
| NHD Com ID | 65640859 | RMI | 9.85 (eMapPA) |
| Drainage Area | 1.19 $mi^2$ | Yield ($cfs/mi^2$) | 0.114 |
| $Q_{7-10}$ Flow (cfs) | 0.135 | $Q_{7-10}$ Basis | Gage 01540300 |
| Elevation (ft) | 1722 | Slope (ft/ft) | 0.01 |
| Watershed No. | 5-E | Chapter 93 Class. | CWF, MF |
| Existing Use | - | Existing Use Qualifier | - |
| Exceptions to Use | - | Exceptions to Criteria | - |
| Assessment Status | Impaired | | |
| Cause(s) of Impairment | pH | | |
| Source(s) of Impairment | Acid Mine Drainage | | |
| TMDL Status | Final | Name | Catawissa Creek Watershed TMDL |

| Background/Ambient Data | | Data Source |
|---|---|---|
| pH (SU) | 7 | Default value |
| Temperature (°C) | 20 | Default value |
| Hardness (mg/L) | 100 | Default value |
| Other: | - | - |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | | Catawissa Municipal Water Authority | |
| PWS Waters | Catawissa Creek | Flow at Intake (cfs) | - |
| PWS RMI | 0.94 | Distance from Outfall (mi) | ~32 |

**Treatment Facility Summary**

**Treatment Facility Name:** CAN DO WWTP

| WQM Permit No. | Issuance Date |
|---|---|
| 4014401 | 5/5/2014 |
| 4006402 | 8/14/2006 |
| 4001402 | 3/26/2001 |
| 4099402 | 6/2/1999 |
| 4084406 | 12/26/1984 |
| 4082403 | 3/4/1982 |

| Waste Type | Degree of Treatment | Process Type | Disinfection | Avg Annual Flow (MGD) |
|---|---|---|---|---|
| Sewage | Secondary | Extended Aeration | Ultraviolet | 1.0 |

| Hydraulic Capacity (MGD) | Organic Capacity (lbs/day) | Load Status | Biosolids Treatment | Biosolids Use/Disposal |
|---|---|---|---|---|
| 1.0 | 4,700 | Not Overloaded | Holding Tank | Hauled Offsite |

## Development of Effluent Limitations

**Outfall No.** 001 **Design Flow (MGD)** 1.0
**Latitude** 40º 55' 19" **Longitude** -76º 4' 43"
**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 |
|---|---|---|---|---|
| Total Suspended Solids | 30.0 | Average Monthly | 133.102(b)(1) | 92a.47(a)(1) |
| | 60.0 | IMAX | - | - |
| 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) |
| | 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) |
| | 10,000 / 100 ml | IMAX | - | 92a.47(a)(5) |

### Water Quality-Based Limitations

The following limitations were determined through water quality modeling:

| Parameter | Limit (mg/l) | SBC | Model |
|---|---|---|---|
| Dissolved Oxygen | 6.0 | Minimum | Previous Modeling |
| Total Residual Chlorine | 0.06 | IMAX | Previous Modeling |
| $CBOD_5$ | 20.48 | Average Monthly | Previous Modeling |
| | 40.96 | IMAX | |
| Ammonia-Nitrogen (5/1 – 10/31) | 1.56 | Average Monthly | 2025 Toxics Management Spreadsheet |
| | 3.12 | IMAX | |
| Ammonia-Nitrogen (11/1 – 4/30) | 4.68 | Average Monthly | |
| | 9.36 | IMAX | |
| Total Aluminum | 0.75 | Average Monthly | 2025 Toxics Management Spreadsheet |
| | 0.81 | IMAX | |
| Total Boron | 1.74 | Average Monthly | 2025 Toxics Management Spreadsheet |
| | 4.35 | IMAX | |
| Total Cadmium (µg/L) | 0.68 | Average Monthly | 2025 Toxics Management Spreadsheet |
| | 1.7 | IMAX | |
| Total Copper | 0.026 | Average Monthly | 2025 Toxics Management Spreadsheet |
| | 0.066 | IMAX | |
| Total Manganese | 1.08 | Average Monthly | 2025 Toxics Management Spreadsheet |
| | 2.71 | IMAX | |
| Total Zinc | 0.17 | Average Monthly | Previous Modeling |
| | 0.34 | IMAX | |

Comments: The revised Ammonia-Nitrogen limitations and new limitations for Total Aluminum, Total Cadmium, Total Copper, and Total Manganese will come into effect 3 years after the permit effective date.

Pennsylvania
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## Whole Effluent Toxicity (WET)

For Outfall 001, ☐ **Acute** ☒ **Chronic** WET Testing was completed:

☐ For the permit renewal application (4 tests).
☐ Quarterly throughout the permit term.
☐ Quarterly throughout the permit term and a TIE/TRE was conducted.
☒ Other: **Annually throughout the permit term.**

The dilution series used for the tests was: 100%, 97%, 93%, 47%, and 23%. The Target Instream Waste Concentration (TIWC) to be used for analysis of the results is: 93%.

**Summary of Most Recent Test Results**

*(NOTE – Enter results into one table, depending on which data analysis method was used).*

TST Data Analysis

*(NOTE – In lieu of recording information below, the application manager may attach the DEP WET Analysis Spreadsheet).*

| Test Date | ***Ceriodaphnia* Results (Pass/Fail)** | | ***Pimephales* Results (Pass/Fail)** | |
|---|---|---|---|---|
| | **Survival** | **Reproduction** | **Survival** | **Growth** |
| July 2024 | Pass | Pass | Pass | Pass |
| June 2023 | Pass | Pass | Pass | Pass |
| April 2022 | Pass | Pass | Pass | Pass |

***** *A "passing" result is that in which the replicate data for the TIWC is not statistically significant from the control condition. This is exhibited when the calculated t value ("T-Test Result") is greater than the critical t value. A "failing" result is exhibited when the calculated t value ("T-Test Result") is less than the critical t value.*

Is there reasonable potential for an excursion above water quality standards based on the results of these tests? (*NOTE – In general, reasonable potential is determined anytime there is at least one test failure in the previous four tests).*

☐ **YES** ☒ **NO**

**Evaluation of Test Type, IWC and Dilution Series for Renewed Permit**

Acute Partial Mix Factor (PMFa): **1** Chronic Partial Mix Factor (PMFc): **1**

1. **Determine IWC – Acute (IWCa)**:

   $(Q_d \times 1.547) / ((Q_{7\text{-}10} \times PMFa) + (Q_d \times 1.547))$

   [(1.0 MGD x 1.547) / ((0.13566 cfs x 1) + (1.0 MGD x 1.547))] x 100 = **91.9%**

   Is IWCa < 1%? ☐ **YES** ☒ **NO (YES - Acute Tests Required OR NO - Chronic Tests Required)**

   If the discharge is to the tidal portion of the Delaware River, indicate how the type of test was determined:

   **N/A**

   **Type of Test for Permit Renewal**: **Chronic**

2. **Determine Target IWCc (If Chronic Tests Required)**

   $(Q_d \times 1.547) / (Q_{7\text{-}10} \times PMFc) + (Q_d \times 1.547)$

[(1.0 MGD x 1.547) / ((0.13566 cfs x 1) + (1.0 MGD x 1.547))] x 100 = **91.9% (~92%)**

**3. Determine Dilution Series**

*(NOTE – check Attachment C of WET SOP for dilution series based on TIWCa or TIWCc, whichever applies).*

Dilution Series = 100%, 96%, 92%, 46%, and 23%.

**WET Limits**

Has reasonable potential been determined? ☐ YES ☒ NO

Will WET limits be established in the permit? ☐ YES ☒ NO

If WET limits will be established, identify the species and the limit values for the permit (TU).

**N/A**

If WET limits will not be established, but reasonable potential was determined, indicate the rationale for not establishing WET limits:

**N/A**