

**DOCKET NO. D-2000-066 CP-4**

**DELAWARE RIVER BASIN COMMISSION**

**Avondale Borough  
Wastewater Treatment Plant  
Avondale Borough, Chester County, Pennsylvania**

**PROCEEDINGS**

This docket is issued in response to an application submitted to the Delaware River Basin Commission (DRBC or Commission) on May 30, 2023 (Application) by Carroll Engineering Corporation on behalf of Avondale Borough (docket holder) for renewal of the docket holder's existing wastewater treatment plant (WWTP) and its discharge. The Pennsylvania Department of Environmental Protection (PADEP) issued National Pollutant Discharge Elimination System (NPDES) Permit No. PA0025488 for this discharge.

The application was reviewed for continuation of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Chester County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on August 7, 2024.

**A. DESCRIPTION**

- Purpose.** The purpose of this docket is to renew approval of the docket holder's existing 0.5 million gallons per day (mgd) WWTP and its discharge.
- Location.** The WWTP will continue to discharge treated effluent to an unnamed tributary (UNT) to East Branch White Clay Creek, referred to as Indian Run, at River Mile 70.2 – 10.0 – 15.9 – 7.6 – 0.1 (Delaware River – Christina River – White Clay Creek – East Branch White Clay Creek – UNT East Branch White Clay Creek) via Outfall No. 001, in Avondale Borough, Chester County, Pennsylvania.

The location of the WWTP outfall in the East Branch White Clay Creek Watershed is as follows:

| OUTFALL NO. | LATITUDE (N) | LONGITUDE (W) |
|-------------|--------------|---------------|
| 001         | 39° 49' 21"  | 75° 47' 6"    |

- Area Served.** The docket holder's WWTP will continue to serve New Garden Township and Avondale Borough located in Chester County, Pennsylvania. For the purpose of defining the Area Served, the Type of Discharge and the Service Area sections from the docket holder's Application are incorporated herein by reference, to the extent consistent with all other conditions contained in Section C. DECISION of this docket.

4. **Design Criteria.** The docket holder's 0.5 mgd WWTP utilizes an oxidation ditch treatment process with chlorine disinfection. The WWTP is designed to treat an average annual flow of 0.5 mgd and has a hydraulic design capacity of 0.65 mgd.

5. **Facilities.** The WWTP facilities consist of a grinding screen with grit removal, a three-ring orbital batch reactor for biological nutrient removal, two final clarifier tanks, an aerobic sludge digester, a chlorine tank with post aeration, and a sludge holding tank.

Several of the WWTP facilities are located in the 100-year floodplain. The docket holder indicated in the application that the WWTP facilities located in the floodplain are not located in the floodway and are flood proofed up to the flood protection elevation (one foot above the 100-year flood elevation).

Wasted sludge will continue to be hauled off-site by a licensed hauler for disposal in accordance with the NPDES Permit No. PA0025488.

6. **Water Withdrawals.** The potable water supply in the project service area is provided by groundwater wells owned and operated by the docket holder. The docket holder's water withdrawal is described in detail in Docket No. D-2023-003 CP-1, which was approved on May 8, 2024.

7. **NPDES Permit / DRBC Effluent Requirements.** NPDES Permit No. PA0025488 issued by the PADEP includes final effluent limitations for the project discharge to surface waters classified by the PADEP as supporting migratory fishes (MF) and cold water fishes (CWF). EFFLUENT TABLES C-1 & C-2 included in Section C. DECISION condition C.1. of this docket, contain effluent requirements for DRBC parameters that must be met as a condition of this approval. Effluent requirements for Outfall No. 001 are based on a discharge rate of 0.5 mgd.

8. **Relationship to the Comprehensive Plan.** The Avondale Borough WWTP was included in the Comprehensive Plan by Docket No. D-1966-224 CP-1 on November 28, 1966. The project was continued in the Comprehensive Plan and upgrades to the WWTP were approved by Docket Nos. D-1991-029 CP, D-1992-045 CP-1, and D-2000-066 CP on October 2, 1991, December 9, 1992, and March 3, 2004, respectively. The existing WWTP was continued in the Comprehensive Plan with the issuance of a renewed approval by Docket Nos. D-2000-066 CP-2, and D-2000-066 CP-3 on December 20, 2014 and May 16, 2018, respectively. Issuance of this docket will continue the WWTP and its discharge in the Comprehensive Plan.

## B. FINDINGS

The docket holder applied to renew approval of their existing 0.5 mgd WWTP and its discharge.

At the docket holder's WWTP discharge, the UNT East Branch White Clay Creek (previously referred to as Indian Run) has an estimated seven-day low flow with a recurrence interval of ten years ( $Q_{7-10}$ ) of 0.84 mgd (1.3 cfs). The ratio of this low flow to the hydraulic design wastewater discharge rate from the 0.5 mgd WWTP is approximately 1.7 to 1.

The nearest surface water intake of record for public water supply is located in Newark, Delaware, on the White Clay Creek approximately 13 River Miles downstream of the docket holder's WWTP and is operated by the City of Newark.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The effluent limits in the NPDES Permit conform with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge that meets the effluent requirements as set forth in the Commission's *Water Quality Regulations (WQR)*.

### **C. DECISION**

Effective on the approval date for Docket No. D-2000-066 CP-4 below, the project described in Docket No. D-2000-066 CP-3 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-2000-066 CP-4; Docket No. D-2000-066 CP-3 is terminated and replaced by Docket No. D-2000-066 CP-4; and the project and the appurtenant facilities described in Section A "DESCRIPTION" of this docket shall be included in the Comprehensive Plan. The project and appurtenant facilities as described in Section A of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

### **Monitoring and Reporting**

1. The docket holder shall comply with the requirements contained in the EFFLUENT TABLES below. The docket holder shall submit the required monitoring results electronically to the DRBC Project Review Section via email [aemr@drbc.gov](mailto:aemr@drbc.gov) on the **Annual Effluent Monitoring Report Form** located at this web address: <https://www.nj.gov/drbc/programs/project/docket-app-info.html#3>. The monitoring results shall be submitted annually, absent any observed limit violations, by January 31. If a DRBC effluent limit is violated, the docket holder shall submit the result(s) to the DRBC within 30 days of the violation(s) and provide a written explanation that states the action(s) the docket holder has taken to correct the violation(s) and protect against any future violations. The following average monthly effluent limits are among those listed in the NPDES Permit and meet or are more stringent than the effluent requirements of the DRBC.

**EFFLUENT TABLE C-1: DRBC Parameters Included in NPDES Permit**

| <b>OUTFALL 001 (Discharging to UNT East Branch White Clay Creek)</b> |                                                                |                             |
|----------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------|
| <b>PARAMETER</b>                                                     | <b>LIMIT</b>                                                   | <b>MONITORING</b>           |
| pH (Standard Units)                                                  | 6 to 9 at all times                                            | As required by NPDES Permit |
| Total Suspended Solids                                               | 18 mg/l                                                        | As required by NPDES Permit |
| Dissolved Oxygen                                                     | 4.0 mg/l (minimum at all times)                                | As required by NPDES Permit |
| CBOD <sub>5</sub> (at 20° C) (5-1 to 10-31)<br>(11-1 to 4-30)        | 15 mg/l (85% minimum removal)<br>25 mg/l (85% minimum removal) | As required by NPDES Permit |
| Ammonia Nitrogen (5-1 to 10-31)<br>(11-1 to 4-30)                    | 1.2 mg/l<br>3.6 mg/l                                           | As required by NPDES Permit |
| Fecal Coliform                                                       | 200 colonies per 100 ml as a geo. avg.                         | As required by NPDES Permit |

The following monitoring requirements and average monthly effluent limits are for DRBC parameters not listed in the NPDES Permit.

**EFFLUENT TABLE C-2: DRBC Parameters Not Included in NPDES Permit**

| <b>OUTFALL 001 (Discharging to UNT East Branch White Clay Creek)</b> |                  |                                                                        |
|----------------------------------------------------------------------|------------------|------------------------------------------------------------------------|
| <b>PARAMETER</b>                                                     | <b>LIMIT</b>     | <b>MONITORING</b>                                                      |
| Total Dissolved Solids*                                              | 1,000 mg/l *     | Quarterly                                                              |
| CBOD <sub>5</sub> (at 20° C) Influent                                | Monitor & Report | Same as CBOD <sub>5</sub> monitoring required in existing NPDES Permit |

\* See DECISION Condition C.3

### **Other Conditions**

2. Except as otherwise authorized by this docket, if the docket holder seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the docket holder shall apply for approval from the Executive Director or for a docket revision in accordance with Section 3.8 of the *Compact* and the *Rules of Practice and Procedure*.
3. The docket holder may request in writing, for approval from the Executive Director for the substitution of specific conductance for TDS. The request should include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow the substitution of specific conductance for TDS monitoring.
4. Section 2.3.10 of the Commission's *Rules of Practice and Procedure (RPP)* (18 C.F.R. 401.41), limiting the Commission's approval to three years in the absence of an expenditure of substantial funds by the project sponsor in reliance on the approval, is hereby waived for good cause shown in accordance with Section 2.9.3 (18 C.F.R. 401.123) of the same regulations. This approval shall expire on the expiration date set forth below unless prior thereto the docket holder has applied to the Commission to renew or extend this approval.
5. The docket holder is responsible for timely submittal to the DRBC of a docket renewal application on the appropriate application form including the appropriate docket application filing fee (see 18 C.F.R. 401.43) at least 6 months in advance of the docket expiration date set forth below. The docket holder will be subject to late filed renewal surcharges in the event of untimely submittal of its renewal application, whether DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. If a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below, the terms and conditions of the current docket will remain fully effective and enforceable pending the grant or denial of the application for docket approval.
6. The docket holder is permitted to treat and discharge wastewater as set forth in the Area Served Section of this docket, which incorporates by reference the Type of Discharge and Service Area sections of the docket holder's Application to the extent consistent with all other conditions of this section. Any expansion beyond that included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the Compact.
7. In accordance with the Commission's regulations at 18 C.F.R. Part 440, the docket holder is prohibited from discharging wastewater from high volume hydraulic fracturing ("HVHF") or HVHF-related activities to waters or land within the Basin. The docket holder is further prohibited from discharging hydraulic fracturing wastewater, whether treated or untreated, from sources within or outside the Basin, without obtaining the Commission's prior review and express approval in the form of a revised docket. Violation of this or any condition of this docket approval may result in enforcement, including the risk of financial penalties, pursuant to Section 14.17 of the Delaware River Basin Compact and Section 2.7.8 (18 CFR 401.98) of the Commission's Rules of Practice and Procedure.
8. The facility and operational records shall be available at all times for inspection by the DRBC.

- 9.** The facility shall be operated at all times to comply with the requirements of the Commission's WQR.
- 10.** If at any time the receiving treatment plant proves unable to produce an effluent that is consistent with the requirements of this docket approval, no further connections shall be permitted until the deficiency is remedied.
- 11.** Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.
- 12.** The docket holder shall discharge wastewater in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.
- 13.** No sewer service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).
- 14.** The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend, suspend or rescind the docket for cause, to ensure proper control, use and management of the water resources of the Basin.
- 15.** The docket holder shall be subject to applicable DRBC regulatory program fees, in accordance with duly adopted DRBC resolutions and/or regulations (see 18 C.F.R. 401.43).
- 16.** This approval is transferable by request to the DRBC Executive Director provided that the project purpose and area served approved by the Commission in this docket will not be materially altered because of the change in project ownership. The request shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 C.F.R. 401.43).
- 17.** The docket holder shall request a name change of the entity to which this approval is issued if the name of the entity to which this approval is issued changes its name. The request for name change shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 C.F.R. 401.43).
- 18.** The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.
- 19.** Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the *Rules of Practice and Procedure (RPP)*. In accordance with Section 15.1(p) of the *Delaware River Basin Compact*, cases and controversies arising under the *Compact* are reviewable in the United States district courts.

**BY THE COMMISSION**

**APPROVAL DATE: September 5, 2024**

**EXPIRATION DATE: October 31, 2028**