

DOCKET NO. D-2001-054-4

DELAWARE RIVER BASIN COMMISSION

**Aqua Pennsylvania Wastewater, Inc.
Culbertson Run Wastewater Treatment Plant
East Brandywine Township, Chester County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an application submitted to the Delaware River Basin Commission (DRBC or Commission) on December 20, 2022 (Application), 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. PA0050458 for its stream discharge. The PADEP also issued Water Quality Management (WQM) Permit No. 1596401 and 1504407 for its seepage beds disposal.

The application was reviewed for 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 February 7, 2024.

A. DESCRIPTION

- Purpose.** The purpose of this docket is to renew approval of the docket holder’s existing 0.053 million gallons per day (mgd) WWTP and its discharges to subsurface disposal beds and surface waters.
- Location.** The docket holder’s WWTP is located at Little Washington Lyndell Road in East Brandywine Township, Chester County, Pennsylvania. The WWTP will continue to discharge treated effluent to Culbertson Run, at River Mile 70.7 – 1.8 – 20.0 – 14.2 – 2.3 (Delaware River – Christina River – Brandywine Creek – East Brandywine Creek – Culbertson Run) and is located in the drainage area to Water Quality Zone C7.

The location of the WWTP outfall is as follows:

| OUTFALL NO. | LATITUDE (N) | LONGITUDE (W) |
|--------------------|---------------------|----------------------|
| 001 | 40° 2’ 51” | 75° 46’ 30” |

- Area Served.** The docket holder’s WWTP will continue to serve East Brandywine Township 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 WWTP utilizes an activated sludge treatment process with ultraviolet (UV) disinfection. Treated effluent from Culbertson Run WWTP has a stream discharge under NPDES Permit No. PA0050458 allowing 0.053 mgd discharge, an on-site seepage beds and Timberlake Development discharge permit under WQM Permit No. 1596401 with an annual average flow of 0.145 mgd and hydraulic design capacity of 0.155 mgd and the Hide-A-way Farms seepage beds under WQM Permit No. 1504407 with an annual average flow of 0.0396 mgd and hydraulic design capacity of 0.046 mgd.

5. **Facilities.** The WWTP facilities consist of a comminutor, an influent flow meter, two (2) flow equalization tanks, an influent screen with odor control, a flow distribution box, five (5) parallel Modified Ludzak Ettinger treatment trains in each consisting of an anoxic/oxic tank and a clarifier. The treatment trains are followed by two (2) plate settlers, two (2) rapid sand filters, two (2) UV disinfection systems, an aerated sludge holding tank, two (2) effluent pump stations, a stream discharge, and three (3) separate seepage bed areas; on-site seepage beds, Timberlake Development seepage beds and Hideaway Farm seepage beds.

The project facilities are not located in the 100-year floodplain.

Wasted sludge will continue to be hauled off-site for disposal in accordance with the NPDES Permit No. PA0050458.

6. **Water Withdrawals.** The potable water supply in the project service area is provided by Aqua Pennsylvania, Inc. The docket holder's water withdrawal is described in detail in Docket No. D-2003-033 CP-2, which was approved on September 14, 2016.

7. **NPDES Permit / Water Quality Management Permit / DRBC Effluent Requirements.** NPDES Permit No. PA0050458 issued by the PADEP includes final effluent limitations for the project discharge to surface waters classified by the PADEP as supporting high quality water, trout stocking (HQ-TSF) and migratory fishes (MF). Water Quality Management Permit Nos. 1596401 and 1504407 issued by the PADEP include project discharges of 0.145 mgd and 0.0396 mgd. EFFLUENT TABLE(S) C-1 and 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 0.053 mgd.

B. FINDINGS

The docket holder applied to renew approval of their existing 0.053 mgd WWTP and its discharge.

At the WWTP discharge location, Culbertson Run has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of less than 0.1 cubic feet per second (cfs) and therefore is classified by the Commission as an intermittent stream.

The nearest surface water intake of record for public water supply is located on East Branch Brandywine Creek approximately 7 River Miles downstream of the docket holder's WWTP and is operated by Downingtown Municipal Water Authority.

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-2001-054-4 below, the project described in Docket No. D-2001-054-3 is removed to the extent that it is not included in Docket No. D-2001-054-4; Docket No. D-2001-054-3 is terminated and replaced by Docket No. D-2001-054-4; and 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 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

| OUTFALL 001 (Discharge to Culbertson Run) | | |
|---|--|-----------------------------|
| PARAMETER | LIMIT | MONITORING |
| pH (Standard Units) | 6 to 9 at all times | As required by NPDES Permit |
| Total Suspended Solids | 20 mg/l | As required by NPDES Permit |
| CBOD ₅ (at 20° C) (5-1 to 10-31) (11-1 to 4-30) | 6.6 mg/l 13.2 mg/l | As required by NPDES Permit |
| Ammonia Nitrogen (5-1 to 10-31) (11-1 to 4-30) | 2.0 mg/l 6.0 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

| OUTFALL 001 (Discharge to Culbertson Run) | | |
|--|------------------|-------------------|
| PARAMETER | LIMIT | MONITORING |
| Total Dissolved Solids* | 1,000 mg/l * | One Per Quarter * |
| CBOD ₅ (at 20° C) Influent | Monitor & Report | Monthly |

* 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 of the Executive Director in writing 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: March 6, 2024

EXPIRATION DATE: September 30, 2028