

DOCKET NO. D-1998-033 CP-6

DELAWARE RIVER BASIN COMMISSION

**Downingtown Area Regional Authority
Wastewater Treatment Plant
East Caln 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 July 29, 2025 (Application), for approval of upgrades to 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. PA0026531 for this discharge. The PADEP issued Water Quality Management Permit No. 1598403 for the proposed upgrades to the facility.

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 February 4, 2026.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to approve upgrades to the docket holder’s existing 7.5 million gallons per day (mgd) WWTP and its discharge. The WWTP is approaching the end of its useful life and needs to be upgraded. The WWTP modernization project consists of a new automatic screen facility, new influent pump station, new grit removal system and EQ pumps, replacement of forward flow pumps in the Primary Clarifier Distribution Building, rehabilitation of the existing EQ tanks and mixing system, upgrades to the activated sludge aeration system, bringing the third final clarifier on-line, replacement of the existing chlorine disinfection system with an Ultraviolet (UV) system, replacement of the post-aeration tank aeration system, floodproofing select buildings, and other appurtenances.

2. Location. The docket holder’s WWTP is located at South Brandywine Avenue in East Caln Township, Chester County, Pennsylvania. The WWTP will continue to discharge treated effluent to East Branch Brandywine Creek, at River Mile at River Mile 70.73 – 1.5 – 20.0 – 7.65 (Delaware River – Christina River – Brandywine Creek – East Branch Brandywine Creek).

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

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	39° 59’ 44.49”	75° 42’ 16.59”

3. **Area Served.** The docket holder's WWTP will continue to serve the Borough of Dowingtown, and portions of Cahn, East Caln, Uwchlan, and West Whiteland Townships and March Creek State Park, 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 7.5 mgd WWTP utilizes an activated sludge treatment process with chlorine disinfection. The WWTP is designed for an annual average flow of 7.5 mgd, and a hydraulic design capacity of 10.88 mgd.

The proposed WWTP will utilize an upgraded activated sludge treatment process with UV disinfection.

5. **Facilities.** The existing WWTP facilities consist of a mechanical bar screen, an aerated grit chamber, a grit holding tank, two (2) primary clarifiers, two (2) equalization tanks, six (6) aeration tanks, three (3) secondary clarifiers, four (4) mixed-media filtration units, a phosphorus removal system, a post-aeration tank, a sludge holding tank, two (2) sludge thickening tanks, and a chlorine disinfection system.

The proposed facilities will consist of construction of a new automatic screening facility, a new influent pump station, a new grit removal system, and equalization pumps. Replacement of forward flow pumps in the Primary Clarifier Distribution Building. Rehabilitate the existing equalization tanks and mixing systems. Upgrade the activated sludge aeration system. Rehabilitation of the existing Clarifier No. 3 and installation of a dedicated RAS pump station. Replace the existing chlorine disinfection system with an ultraviolet light disinfection system. Replace the post-aeration tank aeration system. Floodproof select buildings at the treatment plant site. Architectural upgrades. Add proposed facilities to the existing plant-wide SCADA system, as well as associated piping, drivers, blowers, pumps and control system upgrades.

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 will be 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 for disposal in accordance with the NPDES Permit No. PA0026531.

6. **Water Withdrawals.** The potable water supply in the project service area is provided by Dowingtown Municipal Water Authority (DMWA) and Aqua Pennsylvania, Inc. The docket holder's water withdrawal is described in detail in Docket No's. D-1989-063 CP-3 and D-1975-019 CP, which were approved on September 11, 2019, and August 24, 1977, respectively.

7. **NPDES Permit / DRBC Effluent Requirements.** NPDES Permit No. PA0026531 issued by the PADEP includes final effluent limitations for the project discharge to surface waters classified by the PADEP as supporting warm water fishes and migratory fishes (WWF, MF). EFFLUENT TABLE C-1 included in Section C. DECISION condition C.1. of this docket, contains 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 7.5 mgd.

8. **Relationship to the Comprehensive Plan.** The existing WWTP was included in the Comprehensive Plan by Addendum No. 1 adopted on July 25, 1962. The WWTP approval was renewed and/or modified by Docket Nos. listed below. Issuance of this docket will continue the WWTP and its discharge in the Comprehensive Plan.

DOCKET NO.	DATE APPROVED	DOCKET DESCRIPTION
D-1970-109 CP	July 22, 1970	Replaced DRWPCC with DARA New Facility
D-1984-043 CP	November 25, 1986	Expansion to 7.0 mgd
D-1991-008 CP	March 27, 1991	WWTP Upgrade Project
D-1998-033 CP	January 27, 1999	WWTP Re-Rate to 7.134 mgd
D-1998-033 CP-2	May 10, 2007	WWTP Re-Rate to 7.5 mgd
D-1998-033 CP-3	May 10, 2012	Renewed Approval
D-1998-033 CP-4	March 15, 2017	Renewed Approval
D-1998-033 CP-5	December 6, 2023	Renewed Approval

B. FINDINGS

The docket holder applied to approve upgrades to the docket holder's existing 7.5 million gallons per day (mgd) WWTP and its discharge. The WWTP is approaching the end of its useful life and needs to be upgraded. STP modernization project consisting a new automatic screen facility, new influent pump station, new grit removal system and EQ pumps, replacement of forward flow pumps in the Primary Clarifier Distribution Building, rehabilitation of the existing EQ tanks and mixing system, upgrade the activated sludge aeration system, bringing the third final clarifier on-line, replacement of the existing chlorine disinfection system with an Ultraviolet (UV) system, replacement of the post-aeration tank aeration system, floodproofing select buildings, and other appurtenances.

2. Other

At the docket holder's WWTP discharge, the East Branch Brandywine Creek has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of 8.34 mgd (12.9 cfs). The ratio of this low flow to the hydraulic design wastewater discharge rate from the 10.88 mgd WWTP is 0.77 to 1 (8.34 mgd / 10.88 mgd)

The nearest surface water intake of record for public water supply is located on East Branch Brandywine Creek approximately 4 River Miles downstream of the docket holder's WWTP and is operated by Aqua Pennsylvania.

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-1998-033 CP-6 below, the project described in Docket No. D-1998-033 CP-5 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1998-033 CP-6; Docket No. D-1998-033 CP-5 is terminated and replaced by Docket No. D-1998-033 CP-6; 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 TABLE 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 (Discharging to East Branch Brandywine Creek)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit
Total Suspended Solids	30 mg/l	As required by NPDES Permit

OUTFALL 001 (Discharging to East Branch Brandywine Creek)		
PARAMETER	LIMIT	MONITORING
CBOD ₅ (at 20° C) (5-1 to 10-31) (11-1 to 4-30)	10 mg/l 20 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
Total Dissolved Solids (TDS)*	1,000 mg/l*	As required by NPDES Permit

* See DECISION Condition C.9.

2. Within 10 days of the date that construction of the project has started, the docket holder shall notify the DRBC of the starting date and scheduled completion date. Within 30 days of the date of project completion, the docket holder shall notify the DRBC of the project completion date.

3. Within 30 days of completion of construction of the approved project, the docket holder is to submit to the attention of the Project Review Section of DRBC a Construction Completion Statement (“Statement”) signed by the docket holder’s professional engineer for the project. The Statement must (1) either confirm that construction has been completed in a manner consistent with any and all DRBC-approved plans or explain how the as-built project deviates from such plans; and (2) indicate the date on which the project was (or is to be) placed in operation.

Other Conditions

4. Sound practices of excavation, backfill and reseedling shall be followed to minimize erosion and deposition of sediment in streams.

5. Nothing in this docket constitutes a defense to any penalty action for past conduct of the docket holder or ongoing activity not authorized by this approval. In particular, renewal of this docket does not resolve violations – whether in the past or continuing – of provisions of the Delaware River Basin *Compact* (“*Compact*”) or any rule, regulation, order or approval duly issued by the Commission or the Executive Director pursuant to the Compact. The Commission reserves its right to take appropriate enforcement action against the docket holder, including but not limited to recovery of financial penalties consistent with Section 14.17 of the Compact, for any and all such prior or continuing violations.

6. The project’s facilities are located within the floodway in the 100-year floodplain elevation. All are prior non-conforming structures according to the *DRBC Administrative Manual-Part III Basin Regulation-Flood Plain Regulations* adopted November 10, 1976 by the Commission. As such, these structures may not be expanded, except that they may be modified, altered or repaired to incorporate flood proofing measures provided such measures do not raise the level of the 100-year flood, and if destroyed or damaged by any means, including a flood, to the extent of 50 percent or more of its market value at that time, may not be restored, repaired, reconstructed or improved except in conformity with the provisions of these regulations.

7. 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*.
8. The docket holder may request permission from the Executive Director to perform specific conductance monitoring in lieu of TDS monitoring. The request shall be made in writing and shall include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow specific conductance monitoring in lieu of TDS monitoring.
9. In accordance with 18 C.F.R. 401.8. of the Commission's *Rules of Practice and Procedure (RPP)*, if at any future time the Project is changed materially from the Project as described in this docket, it will be deemed to constitute a new and different project for the purposes of Article 11 of the Delaware River Basin Compact and will require Commission amendment of the Comprehensive Plan. In accordance with the same section of the RPP, whenever a change to the Project is made, the sponsor must advise the Executive Director, who will determine whether the change is deemed materially for purposes of this provision.
10. 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.
11. 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.
12. 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.

13. 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.
14. The facility and operational records shall be available at all times for inspection by the DRBC.
15. The facility shall be operated at all times to comply with the requirements of the Commission's *WQR*.
16. 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.
17. 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.
18. 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.
19. 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).
20. 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.
21. 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).
22. 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).
23. 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).

24. 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.

25. 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 4, 2026

EXPIRATION DATE: November 30, 2028