

DOCKET NO. D-1986-028 CP-5

DELAWARE RIVER BASIN COMMISSION

**City of Reading
Wastewater Treatment Plant
City of Reading, Berks County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an application submitted to the Delaware River Basin Commission (DRBC or Commission) on April 25, 2023 (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. PA0026549.

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 Berks County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on May 8, 2024.

A. DESCRIPTION

- Purpose.** The purpose of this docket is to renew approval of the docket holder’s existing WWTP and its 20.5 million gallons per day (mgd) discharge.
- Location.** The docket holder’s WWTP is located off Morgantown Road on Fritz Island in the City of Reading, Berks County, Pennsylvania. The WWTP will continue to discharge treated effluent to the Schuylkill River, at River Mile 92.5 – 72.8 (Delaware River – Schuylkill River).

The location of the WWTP outfall in the Schuylkill River Watershed is as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 18’ 12”	75° 55’ 09”

- Area Served.** The Fritz Island WWTP will continue to serve the City of Reading, the Townships of Alsace, Lower Alsace, Cumru, Bern, Muhlenberg, Robeson, and Spring, and the Boroughs of Kenhorst, Laureldale, Mohnton, Mount Penn, Shillington, and Wyomissing, all in Berks 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 chlorine disinfection. The WWTP is designed for an annual average flow of 20.5 mgd, and a hydraulic design capacity of 27.8 mgd.

5. **Facilities.** The WWTP facilities consist of a screening and grit removal chamber, four primary clarifiers, suspended growth reactors in a step feed configuration, four secondary clarifiers with return activated sludge (RAS) pumping, disinfection via chlorination, sulfide dioxide dechlorination, and post treatment aeration. The sludge handling facilities consist of a sludge blend tank, two gravity belt thickeners, three primary and two secondary anaerobic digesters, a sludge holding tank with a dual membrane cover, and two centrifuges.

Several of the existing WWTP facilities are located in the flood fringe portion of the 100-year flood hazard area. The facilities located in the flood zone are protected from the 100-year flood since the tops of the tanks are above the flood protection elevation (one foot above the 100-year flood elevation). None of the treatment facilities are located in the floodway.

Wasted sludge will continue to be hauled off-site by a licensed hauler for disposal in accordance with the NPDES Permit No. PA0026549.

6. **Water Withdrawals.** The potable water supply in the project service area is provided by a surface water intake owned and operated by Reading Area Water Authority (RAWA). RAWA's surface water withdrawal from the Lake Ontelaunee Reservoir is described in detail in Docket No. D-2000-059 CP-2, which was approved by the DRBC on May 11, 2011.

7. **NPDES Permit / DRBC Effluent Requirements.** NPDES Permit No. PA0026549 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 warm water fishes (WWF). EFFLUENT TABLES 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 20.5 mgd.

8. **Relationship to the Comprehensive Plan.** The WWTP was first added to the Comprehensive Plan via Resolution No. 62-14 on July 25, 1962. The WWTP approval was modified as described in the following dockets:

DOCKET NO.	APPROVAL DATE	WWTP MODIFICATION
D-1967-053 CP-1	May 24, 1967	WWTP upgrade/expansion
D-1986-028 CP-1	September 17, 1986	WWTP upgrade/expansion
D-1986-028 CP-2	June 11, 2014	WWTP upgrade/expansion
D-1986-028 CP-3	September 10, 2014	WWTP upgrade/expansion
D-1986-028 CP-4	November 13, 2019	WWTP upgrade/expansion

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 Fritz Island WWTP and its 20.5 mgd discharge.

Color Determination

DRBC approved a color determination of 186 units on the Platinum Cobalt (Pt-Co) scale for the Fritz Island WWTP via letter from the Executive Director on October 19, 1998. Section 4.30.5 of the Commission's *Water Quality Regulations (WQR)* states that WWTP effluent "shall not exhibit more than a true color of 100 units on the platinum cobalt scale, or its equivalent, or the natural color of the receiving waters, whichever is greater." Section 4.30.5.c. allows for a variance of the 100-unit effluent limit, which was granted via the October 19, 1998 letter. This color determination of 186 Pt. Co. units is continued via this docket.

Other

Just upstream of the project discharge location, the Schuylkill River at the USGS Schuylkill River at Reading Gage (USGS Gage No. 01471510), has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of 166 mgd (257 cfs). The ratio of this low flow to the wastewater effluent discharge rate (20.5 mgd) from the WWTP is 8 to 1.

The nearest surface water intake of record for public water supply is located on the Schuylkill River approximately 16 River Miles downstream of the docket holder's WWTP and is operated by the City of Pottstown.

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-1986-028 CP-5 below, the project described in Docket No. D-1986-028 CP-4 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1986-028 CP-5; Docket No. D-1986-028 CP-4 is terminated and replaced by Docket No. D-1986-028 CP-5; 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 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 No. 001 (Schuylkill River)		
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
Dissolved Oxygen	5.0 mg/l (minimum at all times)	As required by NPDES Permit
CBOD ₅ (at 20° C) (5-1 to 10-31) (11-1 to 4-30)	17.3 mg/l (85% minimum removal) 21.6 mg/l (85% minimum removal)	As required by NPDES Permit
Ammonia Nitrogen (5-1 to 10-31) (11-1 to 4-30)	5.1 mg/l 15.3 mg/l	As required by NPDES Permit
Fecal Coliform (5-1 to 9-30) (10-1 to 4-30)	200 colonies per 100 ml as a geo. avg. 2000 colonies per 100 ml as a geo. avg.	As required by NPDES Permit
Color (Pt.-Co.)	186 Units**	As required by NPDES Permit
Total Dissolved Solids	1,000 mg/l*	As required by NPDES Permit

* See DECISION Condition C.4.

** See Color Determination in FINDINGS section.

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

OUTFALL No. 001 (Schuylkill River)		
PARAMETER	LIMIT	MONITORING
CBOD ₅ (at 20° C) Influent	Monitor & Report	Monthly

Other Conditions

2. 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.
3. 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*.
4. 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.
5. 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.
6. 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.
7. 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*.

- 8.** 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.
- 9.** The facility and operational records shall be available at all times for inspection by the DRBC.
- 10.** The facility shall be operated at all times to comply with the requirements of the Commission’s *WQR*.
- 11.** 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.
- 12.** 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.
- 13.** 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.
- 14.** 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).
- 15.** 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.
- 16.** 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).
- 17.** 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).

18. 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).

19. 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.

20. 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: June 5, 2024

EXPIRATION DATE: April 30, 2028