

DOCKET NO. D-1986-038 CP-4

DELAWARE RIVER BASIN COMMISSION

**Reading Regional Airport Authority
Wastewater Treatment Plant
Bern Township, Berks County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an application submitted to the Delaware River Basin Commission (DRBC or Commission) on May 23, 2018 (Application), for renewal of the existing wastewater treatment plant (WWTP) and its discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0028720 for this discharge was issued by the Pennsylvania Department of Environmental Protection (PADEP) on May 6, 2009. The NPDES Permit renewal is pending. 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 15, 2019.

A. DESCRIPTION

- 1. Purpose.** The purpose of this docket is to renew approval of the docket holder's existing 0.42 million gallons per day (mgd) WWTP and its discharge.
- 2. Location.** The docket holder's WWTP is located at Bernville Road in Bern Township, Berks County, Pennsylvania. The WWTP will continue to discharge treated effluent to the Schuylkill River at River Mile 92.47 – 80.3 (Delaware River – Schuylkill River) via Outfall No. 001.

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

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 22' 56"	75° 57' 10"

- 3. Area Served.** The docket holder's WWTP will continue to serve the Reading Regional Airport, which includes the tenants of 3 Airport Industrial Parks and contained businesses, the Direct Link Building, and the Riveredge Restaurant. The WWTP also serves the St. Joseph Hospital and Medical Center, Water District (A), and the West Shore Area, which are all located within the limits of Bern Township, Berks County, Pennsylvania. For the purpose of defining the

Area Served, Section B (Type of Discharge) and D (Service Area) of the docket holder's Application are incorporated herein by reference, to the extent consistent with all other conditions contained in the DECISION Section of this docket.

4. **Design Criteria.** The docket holder's 0.42 mgd WWTP utilizes a sequencing batch reactor (SBR) treatment process with chlorine disinfection.

5. **Facilities.** The WWTP facilities consist of a fine influent screen, an influent wet well, 2 SBR treatment units, 2 aerobic digesters, 2 chlorine contact tanks, a Parshall flume, a sludge dewatering centrifuge, and a sludge holding tank.

The WWTP facilities are not located in the 100-year floodplain

Wasted sludge will continue to be hauled off-site by a licensed hauler for disposal at a state approved facility.

6. **Water withdrawals.** The potable water supply in the project service area is provided by the Reading Area Water Authority (RAWA). The RAWA water withdrawal is described in detail in Docket No. D-2000-059 CP-2, which was approved on May 11, 2011

7. **NPDES Permit / DRBC Effluent Requirements.** NPDES Permit No. PA0028720 was issued by the PADEP on May 6, 2009 and 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 & C-2 included in the DECISION section of this docket, contain effluent requirements for DRBC parameters that must be met as a condition of this approval (See DECISION Condition C.1.). Effluent requirements for Outfall No. 001 are based on a discharge rate of 0.42 mgd.

8. **Relationship to the Comprehensive Plan.** The existing WWTP was added to the Comprehensive Plan by Docket No. D-1986-038 CP on September 17, 1986. The WWTP approval was modified and renewed by Docket Nos. D-1986-038 CP-2 and D-1986-038 CP-3, on September 27, 2006 and September 12, 2013, respectively. Issuance of this docket will renew and continue the approval of the WWTP and its discharge in the Comprehensive Plan.

B. FINDINGS

The purpose of this docket is to renew the approval of the docket holder's existing 0.42 mgd WWTP and its related discharge.

1. Total Dissolved Solids

Section 3.10.4D.2. of the Commission's *Water Quality Regulations (WQR)* establishes the basin-wide total dissolved solids (TDS) effluent standard as 1,000 mg/l. The Commission's basin-wide in-stream criteria outlines that the TDS concentration of the receiving stream exhibit a

resultant of less than 133% of the background TDS concentration, in conjunction with a TDS less than 500 mg/l (Sections 3.10.3B.1b and 3.10.3B.2 of the Commission's *WQR*).

The 133% of the background TDS requirement is implemented for the protection of aquatic life. The 500 mg/l TDS requirement is utilized to protect the use of the receiving stream as a drinking water source; whereas, the EPA's Safe Drinking Water Act's secondary standard for TDS is 500 mg/l.

Background TDS is to be the observed concentration of TDS during Q_{7-10} conditions or, in the absence thereof, an acceptable estimate to the Commission in accordance with Section 3.10.6G of the Commission's *WQR*. A letter from the Commission to the docket holder dated August 4, 2003 established the in-stream background TDS concentration and accompanying Q_{7-10} flow at the WWTP's discharge as 400 mg/l and 101 mgd, respectively.

Within the referenced letter and Docket Nos. D-1986-38 CP-2 and D-1986-38 CP-3, a variance to the Commission's TDS effluent limit was approved on an average monthly and instantaneous maximum basis of 2,605 mg/l and 5,210 mg/l, respectively. The established in-stream background TDS concentration and Q_{7-10} low flow evaluated at the docket holder's WWTP existing 0.42 mgd flow does not increase the stream's resultant concentration greater than the Commission's *WQR* criteria. Therefore, this docket continues an average monthly TDS effluent limit of 2,605 mg/l and an instantaneous maximum TDS effluent limit of 5,210 mg/l.

2. Other

At the docket holder's WWTP discharge, the Schuylkill River has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of 99.5 mgd (154 cfs). The ratio of this low flow to the hydraulic design wastewater discharge from the 0.42 mgd WWTP is 237 to 1.

The nearest surface water intake of record for public water supply is located on Schuylkill River approximately 24 River Miles downstream of the docket holder's WWTP and is operated by Pottstown Borough 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 are in compliance with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge meeting 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-1986-038 CP-4 below, the project described in Docket No. D-1986-038 CP-3 is removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-1986-038 CP-4; Docket No. D-1986-038 CP-3 is terminated and replaced by Docket No. D-1986-038 CP-4; and the project and the appurtenant facilities described in Section A. DESCRIPTION of this docket shall be continued 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.state.nj.us on the **Annual Effluent Monitoring Report Form** located at this web address: <http://www.state.nj.us/drbc/programs/project/pr/info.html>. 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 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
CBOD ₅ (at 20° C)	25 mg/l	As required by NPDES Permit
Ammonia Nitrogen	20 mg/l	As required by NPDES Permit
Fecal Coliform (5-1 to 9-30)	200 colonies per 100 ml as a geo. avg.	As required by NPDES Permit
(10-1 to 4-30)	2000 colonies per 100 ml as a geo. avg.	
Total Dissolved Solids*	2,605 mg/l (Average Monthly)** 5,210 mg/l (Instantaneous Max.)	As required by NPDES Permit

* See DECISION Condition C.5.

** DRBC requirement; NPDES Permit does not match the approved DRBC limit value of 2,605 mg/l.

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 (Discharging to Schuylkill River)		
PARAMETER	LIMIT	MONITORING
CBOD ₅ (at 20° C)	Monitor & Report Influent	Monthly, paired with CBOD ₅ effluent monitoring sample
CBOD ₅ (at 20° C)	85% Minimum Removal	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 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.

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 CFR 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 or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the event that 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 against the docket holder 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 Sections B (Type of Discharge) and D (Service Area) of the docket holder’s Application to the extent consistent with all other conditions of this DECISION Section.

7. The docket holder is prohibited from treating/pre-treating any hydraulic fracturing wastewater from sources in or out of the Basin at this time. Should the docket holder wish to

treat/pre-treat hydraulic fracturing wastewater in the future, the docket holder will need to first apply to the Commission to renew this docket and be issued a revised docket allowing such treatment and an expanded service area. Failure to obtain this approval prior to treatment/pre-treatment will result in action by the Commission.

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, in order 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 CFR 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 CFR 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 CFR 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. 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 12, 2019

EXPIRATION DATE: June 30, 2025