

DOCKET NO. D-1988-077 CP-6

DELAWARE RIVER BASIN COMMISSION

**Township of Spring
Wastewater Treatment Plant
Spring 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 October 1, 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. PA0043052 for this discharge. The PADEP also issued Water Quality Management Permit No. 0609404 A-2 for upgrades to the facility on January 11, 2024.

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 August 7, 2024.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to approve a modification to the docket holder's existing 2.0 million gallons per day (mgd) WWTP and its discharge. The proposed modifications consist of replacing the belt filter press with a screw press, installing a polymer system, and relocating phosphorus polishing pumps.

2. Location. The docket holder's WWTP is located at Reedy Road in Spring Township, Berks County, Pennsylvania. The WWTP will continue to discharge treated effluent to Cacoosing Creek at River Mile 92.47 – 76.8 – 4.0 – 2.0 (Delaware River – Schuylkill River – Tulpehocken Creek – Cacoosing Creek).

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

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 20' 52"	76° 0' 25"

3. **Area Served.** The docket holder's WWTP will continue to serve portions of the following Berks County municipalities: Spring Township, South Heidelberg Township, Lower Heidelberg Township, and Wyomissing Borough. 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 2.0 mgd WWTP operates as a 3-Plant system with a fixed film activated sludge process employed at Plants 1 and 2 and an oxidative ditch treatment process at Plant 3. All three plants utilize grit and screenings removal and ultraviolet (UV) disinfection. The WWTP is designed for an annual average flow of 2.0 mgd and a hydraulic design capacity of 2.28 mgd.

5. **Facilities.** The existing WWTP facilities consist of a septage receiving station with a flow splitter to separate the influent flows between Plants 1 and 2 from flows to Plant 3. Plants 1 and 2 operate with a fine screen and grit removal station, 3 submerged aeration fixed-film reactors in a 7-stage process followed by two Parshall flumes and a UV disinfection unit. Plant 3 consists of a coarse screen and grit chamber, a screw pump to convey flow to an oxidation ditch with 3 final clarifier units, and a UV disinfection unit with a post-aeration tank. The WWTP sludge handling facilities consist of 2 anaerobic digesters, one Dystor gas and sludge storage tank, and a belt filter press. A septage receiving station that flows to Plant 3 is not used at this time.

The proposed WWTP modifications consist of replacing the sludge handling facility's belt filter press with a screw press and installing a polymer system to condition the sludge prior to dewatering. In addition, pumps that are used for phosphorus polishing will be relocated to a different building on the property to improve the treatment plant hydraulics.

Several of the WWTP facilities located within Plants 1 and 2 are located in the 100-year floodplain. Plant 3 is not located in the 100-year floodplain. Any future construction located at Plants 1 or 2 facilities located in the floodplain will need to be floodproofed 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. PA0043052.

6. **Water Withdrawals.** The potable water supply in the project service area is provided by groundwater withdrawals owned and operated by Pennsylvania American Water Company, described in detail in docket No. D-1998-043 CP-3, which was approved on September 16, 2015.

7. **NPDES Permit / DRBC Effluent Requirements.** NPDES Permit No. PA0043052 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 2.0 mgd.

8. Relationship to the Comprehensive Plan. The existing WWTP was included in the Comprehensive Plan by Docket No. D-1965-140 CP on December 29, 1965. The WWTP approval was renewed and/or modified by the Docket Nos. listed below. Issuance of this docket will continue the WWTP and its discharge in the Comprehensive Plan.

DOCKET NO.	APPROVAL DATE	DOCKET ACTION
D-1988-077 CP	February 22, 1989	WWTP Modification & Expansion
D-1988-077 CP-2	May 5, 2010	WWTP Modification & Expansion
D-1988-077 CP-3	June 10, 2015	WWTP Approval Renewal
D-1988-077 CP-4	February 12, 2020	WWTP Approval Renewal
D-1988-077 CP-5	August 11, 2021	WWTP Modification

B. FINDINGS

The docket holder applied to request approval for a modification to the docket holder's existing 2.0 million gallons per day (mgd) WWTP and its discharge.

1. Total Dissolved Solids

Section 3.10.4.D.2 of the Commission's Water Quality Regulations (WQR) states the following:

"Total dissolved solids shall not exceed 1000 mg/l, or a concentration established by the Commission which is compatible with designated water uses and stream quality objectives and recognizes the need for reserve capacity to serve future dischargers."

On May 5, 2010, the DRBC approved Docket No. D-1988-077 CP-2, which contained a TDS effluent limit of 1,000 mg/l with required quarterly TDS monitoring. Due to multiple exceedances of the TDS effluent limit, the docket holder performed additional influent and effluent testing, where influent samplings indicated influent TDS concentrations to be above 1,000 mg/l. On March 19, 2015, the docket holder and DRBC staff agreed on additional influent and effluent TDS testing to investigate the sources and possible mitigation of TDS. Docket No. D-2007-034 CP-3 (approved on June 10, 2015) contained a temporary TDS effluent variance of 1,500 mg/l while performing testing and track down study of the potential TDS sources.

Since the docket holder performed the track down study and maintained consistent monitoring of TDS influent and effluent, TDS concentrations have remained below 1,000 mg/l. However, values still remain elevated and close to 1,000 mg/l. Monitoring over the past year has produced an average of 886 mg/l TDS. Therefore, this docket continues the requirement for the docket holder to conduct monthly monitoring of the influent and effluent TDS concentrations (See Section C. DECISION Condition C.1.).

The docket holder will also continue to monitor the potential sources of TDS. The docket maintains Condition C.2. to request a reduction in the effluent monitoring from monthly to quarterly and elimination of the TDS influent testing upon the completion and additional 12 months of monthly monitoring without an effluent exceedance of 1,000 mg/l (see Section C. DECISION Condition C.2.).

2. Other

At the docket holder's WWTP discharge, the Cacoosing Creek has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of 2.65 mgd (4.1 cfs). The ratio of this low flow to the wastewater discharge rate from the 2.0 mgd WWTP is 1.3 to 1.

The nearest surface water intake of record for public water supply is located on the Schuylkill River approximately 25 River Miles downstream of the docket holder's WWTP and is operated by Pottstown Borough 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-1988-077 CP-6 below, the project described in Docket No. D-1988-077 CP-5 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1988-077 CP-6; Docket No. D-1988-077 CP-5 is terminated and replaced by Docket No. D-1988-077 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 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 (Discharging to Cacoosing 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
Dissolved Oxygen	5.0 mg/l (minimum at all times)	As required by NPDES Permit
CBOD ₅ (at 20° C)	25 mg/l (minimum 85% removal)	As required by NPDES Permit
Ammonia Nitrogen (5-1 to 10-31) (11-1 to 4-30)	3.5 mg/l 10.5 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

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 Cacoosing Creek)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids Effluent*	Monitor & Report*	Monthly
Total Dissolved Solids Influent*	Monitor & Report*	Monthly
CBOD ₅ (at 20° C) Influent	Monitor & Report Percent Removal	Monthly

* See DECISION Condition C.2 and C.5.

Other Conditions

2. The docket holder is required to perform monthly influent and effluent TDS testing in accordance with EFFLUENT TABLE C-2 above. After completing 12 consecutive months of monthly monitoring without an effluent exceedance of 1,000 mg/l, the docket holder may request in writing to the Executive Director a reduction in the effluent monitoring frequency from monthly to quarterly and may request elimination of the TDS influent testing.

3. 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.

4. 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*.

5. 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.

6. 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.

7. 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.

8. 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.

9. 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.

10. The facility and operational records shall be available at all times for inspection by the DRBC.

11. The facility shall be operated at all times to comply with the requirements of the Commission's *WQR*.

12. 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.

13. 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.

14. 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.

15. 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).

16. 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.

17. 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).

18. 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).

19. 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).

20. 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.

21. Prior to allowing connections from any new service areas or any new developments not in compliance with the Ordinances described in Section B.1. above, the docket holder shall submit and have approved by the Executive Director of the DRBC a Non-Point Source Pollution Control Plan (NPSPCP) in accordance with Section 3.10.3.A.2.e.

22. 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:

EXPIRATION DATE: January 31, 2030

DRAFT