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7/23/2024 2:35 PM RP

DOCKET NO. D-1984-026 CP-3

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

Quakertown Borough

Wastewater Treatment Plant

Richland Township, Bucks County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an application submitted to the Delaware River Basin Commission (DRBC or Commission) on March 24, 2023 (Application), for approval of the docket holder's proposed wastewater treatment plant (WWTP) and its discharge. The Pennsylvania Department of Environmental Protection (PADEP) issued National Pollutant Discharge Elimination System (NPDES) Permit No. PA0020290 for this discharge. The PADEP issued Water Quality Management Permit No. 0998405 for proposed upgrades related to sludge handling facilities.

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 Bucks 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 the proposed expansion to the docket holder's existing 4.0 million gallons per day (mgd) WWTP and its discharge. The proposed expansion consists of operating at a hydraulic design capacity of 5.0 mgd and an average annual flow of 3.84 mgd to meet the needs of an exceeded reserve capacity of the existing Bucks County Water and Sewer Authority (BCWSA) WWTP via an agreement between the docket holder and the BCWSA.

2. **Location.** The docket holder's WWTP is located at East Broad Street in Richland Township, Bucks County, Pennsylvania. The WWTP will continue to discharge treated effluent to Tohickon Creek, upstream of Lake Nockamixon, at River Mile 157.0 – 23.4 (Delaware River – Tohickon Creek) and is located in the drainage area to the Lower Delaware Special Protection Waters (SPW).

The location of the WWTP outfall in the Tohickon Creek Watershed is as follows:

| OUTFALL NO. | LATITUDE (N) | LONGITUDE (W) |
|-------------|--------------|---------------|
| 001 | 40° 26' 33" | 75° 19' 8" |

3. **Area Served.** The docket holder's WWTP will continue to serve Quakertown Borough, Richlandtown Borough and Richland Township located in Bucks County, Pennsylvania. An agreement signed in 2012 between the docket holder and the BCWSA designated a future expansion of the docket holder's existing WWTP and expansion of the docket holder's service area to include and meet the demand served by the existing BCWSA (D-1999-013 CP-3), which has exceeded its allocated reserved capacity. The docket holder's proposed expanded service area will include the extended portions of Richlandtown Borough and Quakertown 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 existing WWTP operates at an average annual flow of 3.15 mgd with a hydraulic design capacity of 4.0 mgd. The docket holder proposes to expand the annual average flow to 3.84 mgd and increase the hydraulic design capacity to 5.0 mgd. The existing WWTP utilizes a trickling filter with nitrification treatment process and chlorine disinfection.

5. **Facilities.** The WWTP facilities consist of 2 comminutors, a mechanical screen, an aerated grit chamber, a splitter box, a flow equalization tank, a flocculation tank, 2 primary clarifiers, 2 trickling filtration systems, an intermediate pumping station, 2 nitrification towers, a solids contactor tank for phosphorus removal, 2 secondary clarifier tanks, and chlorine contact system with dichlorination disinfection system. Sludge handling facilities consist of 2 aerobic sludge digesters, 2 gravity sludge thickening tanks, and 2 sludge dewatering centrifuges. PADEP issued WQM Permit No. 0998405 to construct an Anaerobic Digestion and Cogeneration Facility at the WWTP.

The docket holder is currently obtaining sewerage treatment plan approval for the expansion from the PADEP. Upon Issuance of the approval, the docket holder will then submit a WQM Permit application to PADEP. Section C. DECISION Condition C.2 requires that the docket holder submit Final Plans and Specifications for the proposed WWTP to the Executive Director for review and written approval prior to the start of construction.

The docket holder's WWTP discharges to waters classified as SPW and is required to have available standby power. The existing WWTP has a generator installed capable of providing standby power.

The docket holder's WWTP is not staffed 24 hours per day and shall have a remote alarm system that continuously monitors plant operations in accordance with the Commission's SPW requirements. The existing WWTP has a remote alarm system installed that continuously monitors plant operations.

The docket holder has prepared and implemented an emergency management plan (EMP) for the expanding WWTP in accordance with Commission SPW requirements.

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. PA0020290.

6. Water Withdrawals. The potable water supply in the project service area is provided by the docket holder. The docket holder's water withdrawal is described in detail in Docket No. D-2000-064 CP-4, which was approved on September 11, 2019.

7. NPDES Permit / DRBC Effluent Requirements. NPDES Permit No. PA0020290 issued by the PADEP includes final effluent limitations for the project discharge to surface waters classified by the PADEP as supporting trout stocking (TSF) and migratory fishes (MF) 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 an average annual discharge rate of 3.1 mgd and 3.84 mgd after expansion.

8. Relationship to the Comprehensive Plan. The existing WWTP was included in the Comprehensive Plan by Docket No. D-1984-026 CP-1 on October 24, 1984. The WWTP approval was renewed and modified by Docket No. D-1984-026 CP-2 on December 9, 2020. Issuance of this docket will continue the WWTP and its discharge in the Comprehensive Plan.

B. FINDINGS

The docket holder applied to approve the docket holder's proposed flow expansion from its existing average annual flow of 3.15 mgd to 3.84 mgd, in addition to the expansion of the docket holder's existing design hydraulic capacity from 4.0 mgd to 5.0 mgd. In accordance with the docket holder's 2018 agreement with the Bucks County Water and Sewer Authority (BCWSA). Future design and permit application approval is planned to occur within the upcoming 3 years to meet the capacity needs of the existing exceeded allocated reserved capacity of the nearby BCWSA WWTP.

1. Special Protection Waters

In 1992, the DRBC adopted SPW requirements, as part of the DRBC *Water Quality Regulations (WQR)*, designed to protect existing water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap has been classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area.

On July 16, 2008, the DRBC approved amendments to its *Water Quality Regulations (WQR)* that provide increased protection for waters that the Commission classifies as SPW. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for SPW designation.

In accordance with Section 3.10.3A.2.f.1) of the Commission's *WQR*, following consultation between the PADEP and Commission staff, Commission staff determined that the requirements under Section 3.10.3A.2.d.8)(e), requirement for the No Measurable Change (NMC) to Existing Water Quality (EWQ) analysis described within the Commission's *WQR* is not applicable to the proposed project since the WWTP will continue to discharge waters that drain to a water storage impoundment identified in Section 3.10.3A.2.g.5) of the Commission's *WQR* (Lake Nockamixon), where time of travel and relevant hydraulic and limnological factors preclude a direct impact on SPW.

The docket holder's WWTP discharges to the drainage area to the Lower Delaware SPW. The docket holder's WWTP discharge is required to comply with the SPW requirements, as outlined in Article 3.10.3A.2. of the *WQR*.

Article 3.10.3A.2.e.1) and 2). of the Commission's *WQR* states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of SPW must submit for approval a Non-Point Source Pollution Control Plan (NPSPCP) that controls the new or increased non-point source loads generated within the portion of the docket holder's service area which is also within the drainage area of SPW. The service area of the docket holder is within the drainage area to SPW. Since this project does entail future construction and expansion of facilities and there are new or increased non-point source loads associated with this approval, the NPSPC requirement is applicable at this time. Accordingly, C. DECISION Condition C.7. have been included in this docket.

As noted above in A.3. the docket holder's area served is located in Richland Township, Richlandtown Borough, and Quakertown Borough. These municipalities have enacted and are actively implementing non-point source/stormwater control ordinances adopting the Richland Township Stormwater Ordinance 432, Richlandtown Borough Stormwater Ordinance 283, and the Quakertown Borough Stormwater Ordinance 1203. Compliance with the Richland Township Stormwater Ordinance 432, Richlandtown Borough Stormwater Ordinance 283, and Quakertown

Borough Stormwater Ordinance 1203 adopted on October 1, 2008, October 11, 2022 and September 3, 2014, generally meet the requirements of Article 3.10.3.A.2.e.1 of the Commission's Water Quality Regulations for the Area Served as described in A.3. above within Richland Township, Richlandtown Borough, and Quakertown Borough. Prior to allowing connections from any new service areas or any new developments not in compliance with these Ordinances 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.

2. Other

At the docket holder's WWTP discharge, the Tohickon Creek has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of 0.22 mgd (0.41 cfs). The ratio of this low flow to the hydraulic design wastewater discharge rate from the proposed 5.0 mgd WWTP is 0.044 to 1.

The nearest surface water intake of record for public water supply is located on the Delaware River approximately 31 River Miles downstream of the docket holder's WWTP and is operated by Bucks County Water and Sewer 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-1984-026 CP-3 below, the project described in Docket No. D-1984-026 CP-2 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1984-026 CP-3; Docket No. D-1984-026 CP-2 is terminated and replaced by Docket No. D-1984-026 CP-3; 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 (Pre-Construction)

| OUTFALL 001 (Discharging to Tohickon 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 |
| CBOD ₅ (at 20° C) (5-1 to 10-31) (11-1 to 4-30) | 8 mg/l (85% Minimum Removal) 15 mg/l (85% Minimum Removal) | As required by NPDES Permit |
| CBOD ₅ (at 20° C) Influent | Monitor & Report | 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 (5-1 to 10-31) (11-1 to 4-30) | 200 geo. mean average 2,000 geo. mean average | As required by NPDES Permit |
| Total Dissolved Solids* | Monitor & Report | As required by NPDES Permit |

* See DECISION Condition C.10.

EFFLUENT TABLE C-2 DRBC Parameters Included in NPDES Permit (Post-Construction)

| OUTFALL 001 (Discharging to Tohickon Creek) | | |
|---|---|-----------------------------|
| PARAMETER | LIMIT | MONITORING |
| pH (Standard Units) | 6 to 9 at all times | |
| Total Suspended Solids | 25 mg/l | As required by NPDES Permit |
| CBOD ₅ (at 20° C) (5-1 to 10-31) (11-1 to 4-30) | 5.5 mg/l (85% Minimum Removal) 11 mg/l (85% Minimum Removal) | As required by NPDES Permit |
| CBOD ₅ (at 20° C) Influent | Monitor & Report | As required by NPDES Permit |
| Ammonia Nitrogen (5-1 to 10-31) (11-1 to 4-30) | 1.6 mg/l 4.8 mg/l | As required by NPDES Permit |
| Fecal Coliform | 200 geo. mean average 2,000 geo. mean average | As required by NPDES Permit |

| OUTFALL 001 (Discharging to Tohickon Creek) | | |
|---|------------------|-----------------------------|
| PARAMETER | LIMIT | MONITORING |
| Total Dissolved Solids* | Monitor & Report | As required by NPDES Permit |

* See DECISION Condition C.10.

2. The docket holder shall submit Final Plans and Specifications for the expanded WWTP to the Executive Director for review and written approval prior to the start of construction.
3. 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.
4. 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

5. Sound practices of excavation, backfill and reseedling shall be followed to minimize erosion and deposition of sediment in streams.
6. 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.
7. Prior to allowing connections from any new service areas or any new developments, the docket holder shall either submit and have approved by the Executive Director of the DRBC a NPSPCP in accordance with Section 3.10.3.A.2.e, or receive written confirmation from the Executive Director of the DRBC that the new service area complies with a DRBC-approved NPSPCP.
8. Prior to the docket holder initiating any substantial alterations or additions to the existing WWTP as defined in Section 3.10.3A2.a.16) of the Commission’s WQR, an application must be submitted and approved by the Commission. Such an application shall be submitted prior to final design to ensure that the Commission can provide the docket holder with draft effluent limitations for SPW specific parameters as guidance for design as to not require duplication of

work or cause a substantial expenditure of public funds without Commission approval. The docket holder is encouraged to contact the Commission staff during the planning stages to identify the potential effluent limitations required to meet the no measurable change parameters under SPW.

9. 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*.

10. 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.

11. 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.

12. 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.

13. 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.

14. 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.

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

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

17. 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.

18. 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.

19. 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.

20. 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).

21. 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.

22. 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).

23. 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).

24. 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).

25. 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.

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.

26. 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: September 30, 2030

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