

DOCKET NO. D-1988-051 CP-4

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

**Bath Borough Authority
Wastewater Treatment Plant
Bath Borough, Northampton County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an application submitted to the Delaware River Basin Commission (DRBC or Commission) on March 31, 2022 (Application), to renew the approval of the docket holder’s wastewater treatment plant (WWTP) and its discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0020206 for this discharge was issued by the Pennsylvania Department of Environmental Protection (PADEP).

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 Lehigh Valley Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on August 10, 2022.

A. DESCRIPTION

- Purpose.** The purpose of this docket is to renew the approval of the docket holder’s 0.51 million gallons per day (mgd) WWTP and its discharge.
- Location.** The docket holder’s WWTP is located off Mill Street just east of its intersection with Race Street in Bath Borough, Northampton County, Pennsylvania. The WWTP will continue to discharge treated effluent to Monocacy Creek, which is tributary to the Lehigh River, at River Mile 183.7 – 11.5 – 13.2 (Delaware River – Lehigh River – Monocacy Creek) and is located in the drainage area to the Lower Delaware Special Protection Waters (SPW).

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

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 43’ 21.95”	75° 23’ 43.14”

3. **Area Served.** The docket holder's WWTP will continue to serve Bath Borough and portions of East Allen Township and Upper Nazareth Township, located in Northampton 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 newly upgraded 0.51 mgd WWTP utilizes an intermittent cycle extended aeration system (ICEAS), which is a sequencing batch reactor (SBR) treatment process with ultraviolet (UV) disinfection. DRBC approved the proposed WWTP in Docket No. D-1988-051 CP-3 on September 13, 2017. The construction was completed in June 2021.

5. **Facilities.** The WWTP facilities consist of an automated mechanically-cleaned bar screen, 2 continuous flow ICEAS units (in parallel), one dual unit UV disinfection system, 3 aerobic digestors and a centrifuge.

The docket holder's WWTP discharges to waters classified as SPW and is required to have available standby power. The newly upgraded 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 newly upgraded WWTP has a SCADA remote alarm system installed that continuously monitors plant operations.

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

The project facilities are not located in the 100-year floodplain.

Wasted sludge will continue to be handled in accordance with NPDES Permit No. PA0020206.

6. **Water Withdrawals.** The potable water supply in the project service area is provided by groundwater wells owned and operated by the docket holder. The docket holder's water withdrawal is described in detail in Docket No. D-2007-16 CP-2, which was approved on June 14, 2017.

7. **NPDES Permit / DRBC Effluent Requirements.** NPDES Permit No. PA0020206 issued by the PADEP includes final effluent limitations for the project discharge to surface waters classified by the PADEP as supporting high quality, cold water fishes (HQ-CWF). 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 0.51 mgd.

8. **Relationship to the Comprehensive Plan.** The docket holder's WWTP was added to the Comprehensive Plan by Docket No. D-1964-023 CP-1 on June 24, 1964. The WWTP approval was expanded by Docket No. D-1988-051 CP-1 on April 26, 1989. Docket No. D-1988-051 CP-2 and D-1988-051 CP-3, renewed approval for a proposed WWTP replacement on March 7, 2012 and September 13, 2017, respectively. Issuance of this docket will renew and continue the WWTP and its discharge in the Comprehensive Plan.

B. FINDINGS

The docket holder submitted an application to renew approval of their newly upgraded 0.51 mgd WWTP and its discharge. DRBC approved the proposed WWTP in Docket No. D-1988-051 CP-3 on September 13, 2017. The construction was completed in June 2021. The upgrades completed include:

- Replacement of existing 12" influent sewer line with a new 18" sewer line.
- Construction of new WWTP influent manhole.
- Construction of existing force main to new influent manhole.
- Construction of new headworks building.
- Replacement of existing comminutor with automated mechanical screen and bypass channel with manually cleaned screen.
- Construction of grit removal system.
- Construction of wet well with a triplex submersible pumping system.
- Construction of new control building.
- Conversion of existing equalization/contact stabilization/clarifier basin to a larger equalization basin.
- Construction of triplex submersible pumping station within equalization basin.
- Construction of a four (4) gated splitter box.
- Construction of two (2) ICEAS pre-cast concrete tanks.
- Construction of two (2) aerobic digester pre-cast concrete tanks.
- Replacement of existing chlorine system with an ultraviolet light (UV) disinfection system.
- Replacement of existing sludge belt filter press with rotary press dewatering system.
- Construction of a new 24" effluent line connecting to existing outfall.
- Demolition of two (2) contact stabilization/clarifier/digester basins.
- Demolition of existing office building.
- Installation of a new emergency backup power generator.

1. Special Protection Waters

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.

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 located within the drainage area of SPW. The service area of the docket holder is located in the drainage area to the SPW. Since this project does not entail additional construction and/or expansion of facilities and service area and there are no new or increased non-point source loads associated with this approval, the NPSPCP requirement is not applicable at this time. Accordingly, Section C. DECISION Conditions C.2. and C.3. have been included in this docket.

2. Other

Near the docket holder's WWTP discharge, the Monocacy Creek has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of 0.13 mgd (0.2 cfs). The ratio of this low flow to the annual average wastewater discharge rate from the 0.51 mgd WWTP is 0.25 to 1 (0.13 mgd / 0.51 mgd).

The nearest surface water intake of record for public water supply is the Point Pleasant Intake located in the Delaware River approximately 50 River Miles downstream of the docket holder's WWTP and is operated by North Penn 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-1988-051 CP-4 below, the project described in Docket No. D-1988-051 CP-3 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1988-051 CP-4; Docket No. D-1988-051 CP-3 is terminated and replaced by Docket No. D-1988-051 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 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 (Monocacy Creek)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES permit
Total Suspended Solids (5-1 to 9-30) (10-1 to 4-30)	30 mg/l; 78 lbs/day* 30mg/l;127.6lbs/day	As required by NPDES permit
CBOD (5-Day at 20° C) (5-1 to 10-31) (11-1 to 4-30)	20 mg/l; 85% minimum removal 25 mg/l; 85% minimum removal	As required by NPDES permit
Ammonia Nitrogen (5-1 to 9-30) (10-1 to 10-31) (11-1 to 4-30)	3.0 mg/l; 7.98 lbs/day* 3.0 mg/l; 12.7 lbs/day 9.0 mg/l; 38.2 lbs/day	As required by NPDES permit
Fecal Coliform	200 colonies per 100 ml as a geo. avg.	As required by NPDES permit
Dissolved Oxygen	6.0 mg/l minimum	As required by NPDES permit
Total Phosphorous	2.0 mg/l; 8.5 lbs/day	As required by NPDES permit
Total Nitrogen (5/1 to 9/30)	51.24 lbs/day*	As required by NPDES permit
Nitrate as Nitrogen (5/1 to 9/30)	30.82 lbs/day*	As required by NPDES permit
Total Dissolved Solids	1,000 mg/l**	As required by NPDES permit

*The effluent load limits in pounds per day (lbs/day) for the WWTP for these parameters were established in DRBC Docket No. D-1988-051 CP-3 and are required to demonstrate no

measurable change to existing water quality at the Lehigh River boundary control point. The equivalent design concentrations associated with these load limits based on the design flow of 0.51 mgd are listed in TABLE C-2 below. These concentrations are for information purposes only; the docket holder will be limited to the effluent requirements in EFFLUENT TABLE C-1 above.

** See Section C. DECISION Condition C.5.

TABLE C-2: Design Concentrations for the Proposed WWTP

PARAMETER	DESIGN CONCENTRATION
Total Suspended Solids	18.3 mg/l
Ammonia Nitrogen	1.9 mg/l
Total Nitrogen	12.0 mg/l
Nitrate as N	7.2 mg/l

Other Conditions

2. 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.
3. Prior to the docket holder initiating any substantial alterations or additions to the existing WWTP as defined in Section 3.10.3A.2.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.
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 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.

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 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.

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 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.

8. 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.

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 CFR 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 CFR 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 CFR 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. 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: September 8, 2022

EXPIRATION DATE: September 30, 2029