

DOCKET NO. D-2008-006 CP-4

DELAWARE RIVER BASIN COMMISSION

Discharge to Special Protection Waters

**Municipal Authority of the Borough of Morrisville
Water Filtration Plant Discharge
Lower Makefield 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 June 30, 2022, for approval of the existing docket holder's Water Filtration Plant (WFP) and its filter backwash and sedimentation basin supernatant discharge. The Pennsylvania Department of Environmental Protection (PADEP) issued National Pollutant Discharge Elimination System (NPDES) Permit No. PA0051292 for this discharge.

The Application was reviewed for inclusion in the Comprehensive Plan and for approval under Section 3.8 of the *Delaware River Basin Compact*. The Bucks County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on November 9, 2022.

A. DESCRIPTION

1. **Purpose.** The purpose of this docket is to renew the approval of the docket holder's existing WFP and its related discharge. The WFP treats up to 6.0 million gallons per day (mgd) for public water supply and discharges up to 0.15 mgd of filter backwash and sedimentation basin supernatant.

2. **Location.** The project WFP is located at the intersection of East Ferry and River Roads in Lower Makefield Township, Bucks County, Pennsylvania. The WFP will continue to discharge directly to Delaware River Water Quality Zone 1E, at River Mile 134.6, which is designated as Significant Resource Waters in the Lower Delaware Special Protection Waters (SPW) area.

The WFP discharge is located in the Delaware River Watershed, as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 13' 17"	74° 47' 07"

3. **Area Served.** The docket holder's WFP supplies drinking water to the Borough of Morrisville, as well as portions of Lower Makefield and Falls Townships, all located in Bucks County, Pennsylvania. For the purpose of defining the Area Served, the Type of Discharge and Service Area sections 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 **Design Criteria.** The docket holder's WFP treats up to 6.0 mgd of water withdrawn from a surface water intake on the Delaware River utilizing dual media filtration, and chemical treatment and settling in sedimentation basins. Filter backwash and sedimentation basin solids are conveyed to onsite holding lagoons, prior to the intermittent discharge of up to 0.15 mgd from the lagoons back to the Delaware River via Outfall 001.

5. **Facilities.** The WFP facilities consist of 2 sedimentation basins, 4 dual media filters, and 5 holding lagoons.

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

The docket holder's WFP is staffed 24 hours per day, and therefore is not required have a remote alarm system that continuously monitors plant operations in accordance with the Commission's SPW requirements.

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

Portions of the existing project facilities are located in the 100-year flood zone. The docket holder has indicated that the facilities located in the 100-year flood zone are flood-proofed 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 NPDES Permit No. PA0051292.

6. **Water Withdrawals.** The potable water supply for this facility is from the docket holder's public water distribution system and is described in detail in Docket No. D-1974-072 CP, which was approved on April 23, 1975.

7. **NPDES Permit.** NPDES Permit No. PA0051292 was issued by the PADEP includes final effluent limitations for the project discharge of 0.15 mgd to surface waters classified by the PADEP as Warm Water Fishes (WWF) and Migratory Fishes (MF). 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 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 0.15 mgd.

8. **Relationship to the Comprehensive Plan.** The docket holder's WFP was added to the Comprehensive Plan upon approval of Docket No. D-2008-006 CP-1 on May 14, 2008. The WFP approval was continued in Docket Nos. D-2008-006 CP-2 and D-2008-006 CP-3 which were approved on September 12, 2012, and June 14, 2017, respectively. This docket, D-2008-006 CP-4 continues the WFP in the Comprehensive Plan.

B. **FINDINGS**

The docket holder applied to renew the approval of their existing WFP and its related discharge. The WFP treats up to 6.0 mgd for public water supply and discharges up to 0.15 mgd of filter backwash and sedimentation basin supernatant. No modifications to the WFP are proposed.

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 WFP discharges to the drainage area to the Lower Delaware SPW. The docket holder's WFP 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 condition C.3. has been included in this docket.

2. **Other**

Near the project site, the Delaware River has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of 801 mgd (1,240 cfs). The ratio of this low flow to the average design filter backwash discharge from the water filtration plant is 5,340 to 1.

The nearest surface water intake of record for public water supply is located on the Delaware River approximately 0.25 River Miles downstream of the docket holder's WFP and is operated by the City of Trenton.

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 meeting the effluent requirements as set forth in the Commission's *WQR*.

C. DECISION

Effective on the approval date for Docket No. D-2008-006 CP-4 below, the project described in Docket No. D-2008-006 CP-3 is removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-2008-006 CP-4; Docket No. D-2008-006 CP-3 is terminated and replaced by Docket No. D-2008-006 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 (Delaware River Water Quality Zone 1E)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES permit
Total Suspended Solids	20 mg/l	As required by NPDES permit
CBOD5 (at 20° C) Effluent	10 mg/l	As required by NPDES permit

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

OUTFALL 001 (Delaware River Water Quality Zone 1E)		
PARAMETER	LIMIT	MONITORING
CBOD ₅ (at 20° C) Influent	Monitor & Report Percent Removal	Monthly

Other Conditions

2. 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*.
3. 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.
4. 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.
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 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 or not 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.
6. The docket holder is permitted to treat and discharge effluent 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 Section C. **DECISION.**
7. The facility and operational records shall be available at all times for inspection by the DRBC.

- 8.** The facility shall be operated at all times to comply with the requirements of the Commission's *WQR*.
- 9.** 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.
- 10.** 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.
- 11.** The docket holder shall discharge effluent in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.
- 12.** 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).
- 13.** 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.
- 14.** 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).
- 15.** 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).
- 16.** 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).
- 17.** 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.

18. 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: December 7, 2022

EXPIRATION DATE: January 31, 2028