#### DOCKET NO. D-1965-076 CP-13

#### **DELAWARE RIVER BASIN COMMISSION**

# Forest Park Water (North Penn and North Wales Water Authorities) Water Filtration Plant Chalfont Borough, Bucks County, Pennsylvania

### **PROCEEDINGS**

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) on April 25, 2023, 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. PA0056804 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 and Montgomery County Planning Commissions have been notified of pending action on this docket. A public hearing on this project was held by the DRBC on May 8, 2024.

## A. <u>DESCRIPTION</u>

- 1. <u>Purpose.</u> The purpose of this docket is to renew the approval of an existing discharge of up to 1.987 million gallons per day (mgd) of filter backwash from the Forest Park Water Filtration Plant (WFP) to Pine Run, a tributary to Neshaminy Creek. No modification or expansion of the treatment facility is proposed. No expansion of the Point Pleasant Pumping Station is proposed.
- **Location.** The docket holder's Forest Park WFP is located on Park Avenue in Chalfont Borough, Bucks County, Pennsylvania. The WFP will continue to discharge filtered backwash to Pine Run through Outfall No. 1 located at River Mile 115.63 40.0 0.1 (Delaware River Neshaminy Creek Pine Run) and Outfall No. 2 at River Mile 115.63 40.0 0.2 (Delaware River Neshaminy Creek Pine Run).

The WFP discharge is located in the Pine Run Watershed, as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001 (from wastewater lagoon)	40° 17 <sup>'</sup> 25 <sup>"</sup>	75° 12 <sup>°</sup> 12 <sup>°°</sup>
002 (from equalization basin)	40° 17 <sup>°</sup> 28 <sup>"</sup>	75° 12 <sup>'</sup> 10 <sup>''</sup>

- 3. Area Served. The docket holder's WFP processes up to 1.987 mgd of surface water for public water supply in the docket holder's public supply distribution service area which currently includes a subsidiary allocation area of central and lower Bucks and Montgomery Counties, Pennsylvania. A service area map was included with the renewal Application. 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. <u>Design Criteria.</u> The docket holder's WFP treats up to 1.987 mgd of water withdrawn from their Delaware River intake, utilizing influent equalization, clarification and sludge processing. Process wastewater from the treatment plant includes filter backwash, granular activated carbon contactor backwash and rinse, basin drain flow, and related overflow. The process wastewater is routed to the equalization basins and/or lagoon, then the treated process wastewater is then discharged to Pine Run just upstream from its confluence with the North Branch Neshaminy Creek. Sludge from the clarifiers will be pumped to the existing sludge thickener.
- **5.** <u>Facilities.</u> The WFP facility consists of two chemically assisted clarifiers that include floating plate settlers and sludge removal equipment, a wastewater transfer pumping station, a sludge thickener, three centrifuges, two package plate settler units and a lagoon.

The project facilities are above the 100-year flood zone.

Wasted sludge will continue to be hauled off-site by a licensed hauler to be applied to Bucks County farmland for beneficial use.

- **Mater Withdrawals.** The potable water supply in the project service area is provided by the North Penn and North Wales Water Authorities distribution systems. The North Penn Water Authority (NPWA) withdrawal is described in detail in Docket No. D-1992-044 CP-4, which was approved on September 16, 2015. The North Wales Water Authority (NWWA) withdrawal is described in detail in Docket No. D-1990-006 CP-4, which was approved on September 9, 2021.
- 7. NPDES Permit. NPDES Permit No. PA0052159 was issued by the PADEP includes final effluent limitations for the project discharge to surface waters classified by the PADEP as Trout Stocking Fishes (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 Nos. 001 and 002 are based on a discharge rate of 1.94 mgd.
- **Relationship to the Comprehensive Plan.** The Neshaminy Creek Watershed Project was included in the Comprehensive Plan on October 26, 1966 by Docket No. D-1965-076 CP and was supplemented as described below. This docket was supplemented by Docket No. D-1965-076 CP-2, approved on January 25, 1967, which addresses the potable water supply project aspects of the Neshaminy Creek Watershed Work Plan in more detail, includes reference to the multi-purpose reservoir (PA-617) that was to be constructed on the North Branch Neshaminy Creek, which could utilize water diverted from the Delaware River. This docket was amended by Docket No. D-1965-076 CP-3 on March 17, 1971 to designate an additional diversion source on Delaware River (a

proposed intake at Yardley, PA) and other uses of diversion water (proposed nuclear power station at Limerick, PA), as well as the approval for supplemental water diversion to North Branch Neshaminy Creek for water supply purposes. An application by the Bucks County Commissioners to construct a dam on Pine Run, upstream from the Forest Park Water WFP emergency Pine Run intake, was approved by Docket No. D-1965-076 CP-4 on April 25, 1973, but the project was designated as a flood control dam (PA-616). Supplements (5) through (7) of Docket No. D-1965-706 CP were subsequently approved by the DRBC but were related to flood control dams in other areas of the Neshaminy Basin.

The Forest Park Water WFP was added to the Comprehensive Plan on January 29, 1971 as described in DRBC Docket No. D-1970-242 CP. The project proposed the construction of a water filtration plant with an initial capacity of 20 mgd, expandable to an ultimate capacity of 120 mgd for serving the water supply needs of the central Bucks and central Montgomery Counties, Pennsylvania. However, a plant of this capacity was never constructed.

Docket No. D-1965-076 CP-8 was approved by the DRBC on February 18, 1981. The docket described, in extensive detail, revisions to the Neshaminy Watershed Plan and approved the surface water withdrawals and related facilities for the Forest Park Water WFP. modifications proposed in the docket did not alter the main purpose of the project that was previously included in the Comprehensive Plan. One significant change was the decrease in the quantity of water needed to meet projected demands in the service area during the life of the project. The docket described that the Forest Park Water WFP would be designed for an initial capacity of 20 mgd with a planned future expansion to 40 mgd by the year 2010, which is a reduction in plant's original size as proposed in Docket No. D-1970-242. The docket also included allocations of water allowed to be withdrawn from the Delaware River Point Pleasant Pumping Station (maximum of 48.8 mgd for use by the Neshaminy Water Resources Authority (NWRA) (now owned by Forest Park Water) and up to 46.2 mgd for use by PECO (now owned by Exelon). Additionally, the docket required the docket holder to maintain a minimum flow of 5.3 mgd from March 1 to June 15, and a minimum of 2.73 mgd the remainder of the year, in North Branch Neshaminy Creek, as measured at the Forest Park intakes. After accounting for augmentation and evaporative and seepage losses, up to 39.5 mgd of the water withdrawn from the Delaware River for water supply purposes would be available for use at the Forest Park Water WFP.

On August 12, 1988, DRBC determined that an interim plant proposed for Docket No. D-1988-033 CP would have a non-substantial effect upon the water resources of the basin. The interim plant and later the existing Forest Park Water WFP and related facilities were constructed by the docket holder. An inflatable rubber dam was constructed at the North Branch Neshaminy Creek intake, rather than the originally planned concrete structure. A pre-Compact, low head dam that once served the Forest Park amusement park, now serves the emergency intake on Pine Run.

Docket No. D-1965-076 CP-9 approved on March 16, 2005, approved modifications that improved treatment and discharge of process wastewater from the Forest Park Water WFP that was expanded from a capacity of 30 mgd to 40 mgd chiefly through the installation of a new membrane filtration system. The docket also contained condition C.II.l. that stated:

"The docket holder shall restrict usage of North Branch Neshaminy Creek withdrawal to a total of 40 mgd, which shall be comprised of a maximum of 39.5 mgd of Point Pleasant diversion water plus 0.5 mgd of natural drainage on North Branch Neshaminy Creek or Pine Run, on an emergency basis, during low streamflow conditions."

Docket No. D-1965-076 CP-10, approved on September 26, 2007, renewed the approval of the discharge of up to 2.0 mgd of treated effluent from the Forest Park Water WFP.

Bucks County Water and Sewer Authority (BCWSA) Docket No. D-2012-021 CP-1 approved a subsidiary water allocation for BCWSA of up to 10.0 mgd of potable water through an existing interconnection with NWWA. Docket No. D-1965-076 CP-11 amended the service area included in D-1965-076 CP-8 to include the subsidiary allocation area of Lower Bucks County and Lower Moreland Township in Montgomery County. The approval of the WFP was continued in Docket No. D-1965-076 CP-12 approved on December 12, 2018. This docket (D-1965-076 CP-13) 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 1.987 mgd for public water supply and discharges filter backwash to Pine Run via Outfalls 001 and 002. No modifications to the WFP are proposed. No expansion of the Point Pleasant Pumping Station is proposed.

Near the docket holder's WFP, Pine Run has an estimated seven-day low flow with a recurrence interval of ten years (Q<sub>7-10</sub>) of 0.22 mgd (0.34 cfs). The flow data was obtained from USGS Gauge Station No. 01464720. The ratio of this low flow to the average design filter backwash discharge from the water filtration plant is 0.11 to 1, but the discharge helps to maintain adequate perennial flow in the stream. The docket holder does have the capability of recycling the treated process wastewater (lagoon supernatant) to the raw water pumping station at the Forest Park Water WFP.

The nearest surface water intake of record for public water supply is located on the Neshaminy Creek approximately 31 River Miles downstream of the docket holder's WFP and is operated by Aqua Pennsylvania (Aqua PA).

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. <u>DECISION</u>

Effective on the approval date for Docket No. D-1965-076 CP-13 below, the project described in Docket No. D-1965-076 CP-12 is removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-1965-076 CP-13; Docket No. D-1965-076 CP-12 is terminated and replaced by Docket No. D-1965-076 CP-13; 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**

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 (Pine Run)			
PARAMETER	LIMIT	MONITORING	
pH (Standard Units)	6 to 9 at all times	As required by NPDES permit	
Total Suspended Solids	40 mg/l	As required by NPDES permit	

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

OUTFALL 001 (Pine Run)			
PARAMETER	LIMIT	MONITORING	
Total Dissolved Solids*	1,000 mg/l *	Quarterly	

<sup>\*</sup> See DECISION Condition C.3

# **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. The docket holder may request 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.
- **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 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 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 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*.
- 7. 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).
- 8. 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*.
- **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 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.
- 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, in order 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.

21. In accordance with 18 C.F.R. 401.8. of the Commission's *Rules of Practice and Procedure* (*RPP*), if at any future time the Project is changed substantially from the Project as described in this docket, it will be deemed to constitute a new and different project for the purposes of Article 11 of the *Delaware River Basin Compact* and will require Commission amendment of the Comprehensive Plan. In accordance with the same section of the *RPP*, whenever a change to the Project is made, the sponsor must advise the Executive Director, who will determine whether the change is deemed substantial for purposes of this provision.

#### BY THE COMMISSION

APPROVAL DATE: June 5, 2024

**EXPIRATION DATE:** August 31, 2029

**Expected NPDES Expiration Date**