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DOCKET NO. D-2025-002-1

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

**Palisades School District
Wastewater Treatment Plant
Nockamixon 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, 2025 (Application), for approval of the docket holder's existing wastewater treatment plant (WWTP), upgrades to the WWTP, and its discharge. The Pennsylvania Department of Environmental Protection (PADEP) issued National Pollutant Discharge Elimination System (NPDES) Permit No. PA0029530 for this discharge. The PADEP issued Water Quality Management (WQM) Permit No. 0989460 for proposed upgrades to the WWTP.

The Application was reviewed for 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 6, 2025.

A. DESCRIPTION

1. **Purpose.** The purpose of this docket is to approve the docket holder's existing 0.0215 million gallons per day (mgd) WWTP, upgrades to the WWTP, and its discharge.
2. **Location.** The docket holder's WWTP is located at Old Easton Road in Nockamixon Township, Bucks County, Pennsylvania. The WWTP will continue to discharge treated effluent to an unnamed tributary to Gallows Run, at River Mile 172.32 – 1.73 – 0.63 – (Delaware River – Gallows Run – UNT to Gallows Run) and is located in the drainage area to the Lower Delaware Special Protection Waters (SPW).

The location of the WWTP outfall is as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 32' 1.00"	75° 10' 49.00"

3. **Area Served.** The docket holder's WWTP will continue to serve Durham Nockamixon Elementary School, Palisades Middle School, and Palisades High School located in Nockamixon Township, Bucks County, Pennsylvania. 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 0.0215 mgd WWTP utilizes extended aeration treatment process with chlorine disinfection. The proposed upgrades consist of replacing the existing WWTP with a 0.0215 Membrane Bio Reactor (MBR) treatment system and UV light disinfection.

5. **Facilities.** The existing WWTP utilizes influent screening/comminutor, aeration tank, equalization tank, settling/chlorine contact tank and a sludge holding tank.

The proposed upgrades consist of replacing the existing WWTP with an MBR treatment system, replacing the existing chlorine disinfection system with Ultraviolet (UV) disinfection, construction of an influent pump station to pump influent into the MBR, rehabilitation of outfall riprap, and other necessary modifications related to the upgrades. The existing aeration/sludge tank, equalization tank, and settling/chlorine contact tanks will be removed. Existing pumps, blowers, and process piping associated with these structures will also be removed. The influent manhole, effluent manhole, and standby generator are proposed to be retained and reused. Process controls and blowers will be removed from the existing buildings. The buildings are proposed to be retained for nontreatment uses. The new MBR package plant is proposed to be installed above grade, adjacent to the location of the existing tanks that will be removed. The existing comminutor and coarse screen will be retained. An influent pump station will be constructed downstream of the influent screen/comminutor to lift gravity flows into the MBR plant. UV light disinfection will replace the existing chlorine disinfection. The existing discharge from Manhole-32 to Outfall 001 will be retained.

The docket holder's WWTP discharges to waters classified as SPW and is required to have available standby power. The existing and proposed 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 and proposed 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 existing and proposed WWTP in accordance with Commission SPW requirements.

The project's existing and proposed facilities are located within the regulatory floodway, (Zone AE) of an unnamed tributary to Gallows Run, as mapped on FEMA panel 42017C0066J.of. The WWTP includes prior non-conforming structures and new structures. According to Section 6.5.2 of the *DRBC Administrative Manual-Part III Basin Regulation-Flood Plain Regulations* adopted November 10, 1976 by the Commission, these structures may not be expanded, except that they may be modified, altered or repaired to incorporate flood proofing measures provided such measures do not raise the level of the 100-year flood, and if destroyed or damaged by any means, including a flood, to the extent of 50 percent or more of its market value at that time, may not be restored, repaired, reconstructed or improved except in conformity with the provisions of these regulations as described in Condition C.9 in the DECISION Section.

Wasted sludge will continue to be hauled off-site for disposal in accordance with the NPDES Permit No. PA0029530.

6. Water Withdrawals. The potable water supply in the project service area is provided by three (3) non-transient-noncommunity water systems, one associated with each school facility served by the plant. The withdrawals are operated at a withdrawal rate below the DRBC groundwater withdrawal review threshold and are not subject to Commission review and approval.

7. NPDES Permit / DRBC Effluent Requirements. NPDES Permit No. PA0029530 issued by the PADEP includes final effluent limitations for the project discharge to surface waters classified by the PADEP as supporting cold water fishes and migratory fishes (CWF, MF). 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 0.0215 mgd.

B. FINDINGS

The docket holder applied for approval of their existing 0.0215 mgd WWTP and its discharge. Recent structural inspection of the WWTP revealed several deficiencies in the process equipment, thus, the docket holder proposes upgrades to the existing WWTP. The proposed upgrades consist of replacing the existing WWTP with a new Membrane Reactor (MBR) treatment system, replacing the existing chlorine disinfection system with Ultraviolet (UV) disinfection, constructing an influent pump station to pump influent into the MBR, rehabilitation of outfall riprap, and other necessary modifications related to the upgrades.

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.

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 and the NPSPCP requirement is applicable at this time.

As noted above in A.3. the docket holder's area served is located entirely in Nockamixon Township. This township has enacted and is actively implementing non-point source/stormwater control ordinance adopting the Township of Nockamixon Ordinance No. 162. Compliance with the Township of Nockamixon Ordinance No. 162 adopted September 21, 2023 generally meets 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 Nockamixon Township. Prior to allowing connections from any new service areas or any new developments not in compliance with this Ordinance 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. (See C. DECISION condition C.23)

In accordance with Section 3.10.3A.2.f.1) of the Commission's *WQR*, following consultation between the PADEP and Commission staff, The Commission has determined that the requirements under Section 3.10.3A.2.d.8) , for evaluation of natural wastewater treatment system alternatives and demonstrations of No Measurable Change (NMC) to Existing Water Quality (EWQ) described within the Commission's *WQR* is not applicable to the proposed project since the WWTP will continue to discharge to waters that drain to a water storage impoundment (Lake Nockamixon) where time of travel and relevant hydraulic and limnological factors such as available assimilative capacity preclude a direct impact on SPW.

2. Other

At the docket holder's WWTP discharge, the UNT to Gallows Run has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of 0.142 mgd (0.222 cfs). The ratio of

this low flow to the hydraulic design wastewater discharge rate from the 0.0215 mgd WWTP is 6.6 to 1 (0.142 mgd/0.0215 mgd).

The nearest surface water intake of record for public water supply is located on the Delaware River approximately 26.47 River Miles downstream of the docket holder's WWTP and is operated by Bucks County Water and Sewer Authority New Hope.

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-2025-002-1, 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 (UNT to Gallows Run) (Before Upgrades)		
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

OUTFALL 001 (UNT to Gallows Run) (Before Upgrades)		
PARAMETER	LIMIT	MONITORING
Dissolved Oxygen	5 mg/l (minimum at all times)	As required by NPDES Permit
CBOD ₅ (at 20° C)	25 mg/l	As required by NPDES Permit
CBOD ₅ (at 20° C) Influent	Monitor & Report (85% Minimum Removal)	As required by NPDES Permit
Ammonia Nitrogen (5-1 to 10-31) (11-1 to 4-30)	13 mg/l 20 mg/l	As required by NPDES Permit
Fecal Coliform	200 colonies per 100 ml as a geo. avg.	As required by NPDES Permit
Phosphorus	Monitor & Report	As required by NPDES Permit
Total Nitrogen	Monitor & Report	As required by NPDES Permit

EFFLUENT TABLE C-2: DRBC Parameters Included in NPDES Permit

OUTFALL 001 (UNT to Gallows Run) (After Upgrades)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit
Total Suspended Solids	10 mg/l	As required by NPDES Permit
Dissolved Oxygen	6 mg/l (minimum at all times)	As required by NPDES Permit
CBOD ₅ (at 20° C) (5-1 to 10-31) (11-1 to 4-30)	10 mg/l 20 mg/l	As required by NPDES Permit
CBOD ₅ (at 20° C)	85% Minimum Removal	As required by NPDES Permit
Ammonia Nitrogen (5-1 to 10-31) (11-1 to 4-30)	1.5 mg/l 4.5 mg/l	As required by NPDES Permit
Fecal Coliform	50 colonies per 100 ml as a geo. avg.	As required by NPDES Permit
Phosphorus	2 mg/l	As required by NPDES Permit
Total Nitrogen	Monitor & Report	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-3: DRBC Parameters Not Included in NPDES Permit

OUTFALL 001 (UNT to Gallows Run) (Before & After Construction)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	Monitor & Report	One Per Quarter *
CBOD ₅ (at 20° C) Influent	Monitor & Report	Monthly

* See DECISION Condition C.7.

2. 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.

3. 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

4. Sound practices of excavation, backfill and reseeded shall be followed to minimize erosion and deposition of sediment in streams.

5. The project's existing and proposed facilities are located within the floodway. these structures may not be expanded, except that they may be modified, altered or repaired to incorporate flood proofing measures provided such measures do not raise the level of the 100-year flood, and if destroyed or damaged by any means, including a flood, to the extent of 50 percent or more of its market value at that time, may not be restored, repaired, reconstructed or improved except in conformity with the provisions of these regulations.

6. 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*.

7. 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.

8. 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.

9. 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

submission 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.

10. 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.

11. 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.

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

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

14. 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.

15. 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.

16. 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.

17. 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).

18. 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.

19. 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).
20. 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).
21. 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).
22. 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.
23. 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.
24. 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: May 31, 2030