

**DOCKET NO. D-2004-015 CP-5**

**DELAWARE RIVER BASIN COMMISSION**

**Buckingham Township  
Buckingham Village Wastewater Treatment Plant and Furlong Spray Fields  
Buckingham 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 February 28, 2025 (Application), for renewal of the docket holder’s existing Buckingham Village wastewater treatment plant (WWTP) and its seasonal discharge to surface water and spray irrigation disposal fields. The Pennsylvania Department of Environmental Protection (PADEP) issued National Pollutant Discharge Elimination System (NPDES) Permit No. PA09052353 for this discharge. The PADEP issued Water Quality Management Permit No. 0911402 for this facility on October 23, 2023.

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 February 4, 2026.

**A. DESCRIPTION**

**1. Purpose.** The purpose of this docket is to renew approval of the docket holder’s existing 0.236 million gallons per day (mgd) Buckingham Village WWTP and its seasonal discharge to Lahaska Creek and the existing Furlong lagoon treatment system and three sets of spray irrigation fields, referred to as the Kaplan, Coles, and Lindquist Spray Fields. No modifications to the WWTP and associated facilities are proposed.

**2. Location.** The docket holder’s Buckingham Village WWTP is located southeast of the intersection of State Route 263 and Route 413 and the spray fields are located adjacent to the east of State Route 263 in in Buckingham Township, Bucks County, Pennsylvania. The WWTP will continue to discharge treated effluent seasonally to Lahaska Creek at River Mile 115.6 – 23.7 – 5.7 – 0.4 (Delaware River – Neshaminy Creek – Mill Creek– Lahaska Creek).

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

<b>OUTFALL NO.</b>	<b>LATITUDE (N)</b>	<b>LONGITUDE (W)</b>
001	40° 19’ 7.7”	75° 03’ 25.2”

3. **Area Served.** The docket holder's WWTP and lagoon treatment system will continue to serve the Buckingham Village, Lahaska, Furlong, and Spring Valley sections within Buckingham 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 0.236 mgd WWTP utilizes a sequencing batch reactor (SBR) treatment process. The Buckingham Village WWTP is permitted by the PADEP (via NPDES Permit No. PA0052353) to discharge up to 0.236 mgd of treated sewage effluent to Lahaska Creek from November 1 through April 30. From May 1 through October 31, the Buckingham Village WWTP directs treated sewage effluent to the Furlong sewage treatment lagoon system for storage and treatment prior to being directed to the spray fields for land application via spray irrigation. The Furlong lagoon treatment system provides partial mixed aeration and is hydraulically designed and permitted (via PADEP's Water Quality Management Permit No. 0911402) to treat a flow up to 0.304 mgd.

The Furlong lagoon treatment system receives raw sewage from portions of the Furlong section of Buckingham Township and treated sewage from the Buckingham Village WWTP. Treated sewage from the Buckingham Village WWTP is normally stored at Furlong Lagoon No. 2 or a small lagoon associated with the Coles Spray Fields and then discharged to the spray fields located at the Furlong lagoon system or the Coles Spray Fields. Raw domestic wastewater directed to the Furlong lagoon system is treated at the sewage lagoon system for an approximate treatment time of seven weeks prior to land application via spray irrigation. The sewage lagoon system provides partial mixed aeration and has a capacity of 53.02 million gallons and storage up to 107 days.

The sewage lagoon system will continue to discharge treated sewage effluent to three (3) sets of spray fields: the Kaplan Spray Fields, the Coles Spray Fields, and the Lindquist Spray Fields. Another set of spray fields, the Yerkes Spray Fields, are currently held in reserve for future use.

The effluent is applied to the spray fields at an hourly rate of 0.1 to 0.25 inches depending upon the slope of the terrain, provided that more than 0.5 inches of rain had not fallen during the previous 24 hours. This is done to prevent ponding of effluent and run-off. A Crop Management Plan has been implemented to control fertilizing, weed growth and the designed crop height. Orchard Grass is used to remove nitrogen and tolerate high moisture conditions. Mixed hardwood areas also serve as spray application zones.

5. **Facilities.** The existing Buckingham Village WWTP facilities consist of three (3) influent pumps, two (2) screening devices, two (2) aeration tanks, two (2) rapid sand filters (currently not in service), a chlorine contact tank with a dechlorination area, two (2) effluent high-head pumps for discharge to the Furlong lagoon treatment system, an aerobic digestion tank (currently used for storage), and sludge vacuum drying beds (currently not in service). The rapid sand filters and sludge vacuum drying beds may be used in the future.

The Furlong lagoon treatment system consists of two (2) bentonite clay-lined lagoons and one (1) synthetic-lined lagoon and three (3) sets of spray fields. The first two (2) lagoons (Furlong Lagoons Nos. 1 & 2), totaling 17.6 million gallons in capacity, are located at the Furlong site and provide treatment through aeration. The third lagoon (Furlong Lagoon No. 3), providing partial aeration, polishing of wastewater, and winter storage, is 35.4 million gallons in capacity and is located at the Lindquist Spray Fields site. There is also a small storage lagoon located at the Coles Spray Fields site. The Kaplan Spray Fields are 46.3 acres in area, the Coles Spray Fields are 39.8 acres in size, and the Lindquist Spray Fields are 49.7 acres in area. The total spray field area is approximately 136 acres. The Lindquist site also includes a 3-acre wooded spray field. Effluent disinfection is achieved via a hypochlorite solution chlorination system.

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. PA09052353

**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-2003-013 CP-8, which was approved on September 7, 2023.

**7. NPDES Permit / DRBC Effluent Requirements.** NPDES Permit No. PA0052353 issued by the PADEP includes final effluent limitations for the project discharge to surface waters classified by the PADEP as supporting cold water fishes (CWF) and migratory fishes (MF). EFFLUENT TABLE C-1 included in the DECISION section of this docket, contains effluent requirements for DRBC parameters that must be met as a condition of this approval (See DECISION Condition C.1.). Effluent requirements for Outfall No. 001 are based on a discharge rate of 0.236 mgd.

**8. Relationship to the Comprehensive Plan.** The existing WWTP was added to the Comprehensive Plan by Docket No. D-1986-065 CP-1 on March 27, 1968. The WWTP approval was modified by Docket Nos. D-1998-049 CP-1 and D-2004-015 CP-1, on March 3, 2010 and October 27, 2004, respectively. Issuance of this docket will renew and continue the WWTP and the discharge to surface water and spray irrigation fields in the Comprehensive Plan.

## **B. FINDINGS**

The docket holder applied to renew the approval of their existing 0.236 mgd Buckingham Village WWTP, Furlong lagoon treatment system, and associated spray irrigation fields. No modifications to the WWTP and associated facilities are proposed.

At the project site, the Lahaska Creek has an estimated seven-day low flow with a recurrence interval of ten years ( $Q_{7-10}$ ) of 0.2 mgd (0.3 cfs). The ratio of this low flow to the WWTP design flow of 0.236 mgd is 0.85 to 1.

The nearest surface water intake of record for public water supply is located on Neshaminy Creek approximately 20 River Miles downstream of the docket holder's WWTP discharge and is operated by Aqua Pennsylvania.

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-2004-015 CP-5 below, the project described in Docket No. D-2004-015 CP-4 is removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-2004-015 CP-5; Docket No. D-2004-015 CP-4 is terminated and replaced by Docket No. D-2004-015 CP-5; 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](mailto: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 (Lahaska 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 <sub>5</sub> (at 20° C) Influent	Monitor & Report	As required by NPDES Permit
CBOD <sub>5</sub> (at 20° C)	20 mg/l	As required by NPDES Permit
CBOD <sub>5</sub> (at 20° C) Removal	Minimum 85% Removal	As required by NPDES Permit
Ammonia Nitrogen	10 mg/l	As required by NPDES Permit
Fecal Coliform	200 colonies per 100 ml as a geo. avg.	As required by NPDES Permit
Total Dissolved Solids	1,000 mg/l *	As required by NPDES Permit

\* 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 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.
  
4. 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 materially 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 materially for purposes of this provision.
  
5. 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.

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 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.

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 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.

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 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 C.F.R. 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 C.F.R. 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 C.F.R. 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 (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: March 4, 2026**

**EXPIRATION DATE: March 4, 2035**