

**DOCKET NO. D-2007-002 CP-4**

**DELAWARE RIVER BASIN COMMISSION**

**East Brandywine Township Municipal Authority  
Applecross Wastewater Treatment Plant  
East Brandywine Township, Chester County, Pennsylvania**

**PROCEEDINGS**

This docket is issued in response to an application submitted to the Delaware River Basin Commission (DRBC or Commission) on October 16, 2019 (Application) for renewal of the docket holder's existing wastewater treatment plant (WWTP) and its discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0244333 for this discharge was issued by the Pennsylvania Department of Environmental Protection (PADEP) on March 22, 2017.

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 Chester County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on August 12, 2020.

**A. DESCRIPTION**

- 1. Purpose.** The purpose of this docket is to renew approval of the docket holder's existing 0.30 million gallons per day (mgd) Applecross WWTP and its discharges to surface water and land.
- 2. Location.** The docket holder's Applecross WWTP (also referred to as Overlook Road Farm WWTP) is located on Bolero Drive in the Applecross development in East Brandywine Township, Chester County, Pennsylvania. The WWTP will continue to discharge treated effluent through one or any combination of the following: 1) re-use of treated effluent via spray irrigation pumping on the Applecross Golf Course from storage lagoons, 2) land discharge via two drip disposal fields, 3) surface water discharge to Beaver Creek at River Mile 70.73 – 1.77 – 20.22 – 8.7 – 6.1 (Delaware River – Christina River – Brandywine Creek – East Brandywine Creek – Beaver Creek).

The WWTP surface water outfall and land discharges are located in the Brandywine Creek Watershed as follows:

DISCHARGE	LATITUDE (N)	LONGITUDE (W)
Outfall No. 001	40° 01' 44"	75° 46' 39"
Golf Course/Spray Irrigation Location	40° 01' 35"	75° 47' 00"
Drip Field Location	40° 01' 50"	75° 46' 37"

3. **Area Served.** The docket holder's WWTP will continue to serve the Applecross residential development in East Brandywine Township, Chester County, Pennsylvania, and also provides excess capacity for portions of East Brandywine Township. 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 Section C. DECISION.

4. **Design Criteria.** The docket holder's 0.3 mgd WWTP utilizes a sequencing batch reactor (SBR) treatment system with ultraviolet light (UV) disinfection. The WWTP is approved by PADEP Water Quality Management (Part II) Permit No. 1506407 for a design hydraulic capacity of 0.3 mgd and an average annual flow of 0.136 mgd. The NPDES permit bases effluent limitations for the surface water discharge to Beaver Creek on an effluent discharge rate of 0.137 mgd.

5. **Facilities.** The WWTP facilities consist of an influent screen, an equalization tank, 3 100,000 gallon-per-day (gpd) SBR tanks, a decant equalization tank, a tertiary filter, a UV disinfection system, a filtrate tank, a sludge holding tank, and a control building with chemical feed equipment. Treated effluent is conveyed to 3 storage lagoons (20.34 million-gallon total capacity) located throughout the Applecross Golf Course. The ponds are connected to a spray irrigation pump system that applies effluent to the golf course. Excess treated effluent is conveyed to 2 drip disposal areas or discharged to surface waters (Beaver Creek).

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

Wasted sludge will continue to be hauled off-site for disposal.

6. **Water Withdrawals.** The potable water supply in the project service area is supplied by the Aqua Pennsylvania – Great Valley Division, as described in Docket No. D-2003-033 CP-1 approved on April 21, 2004.

7. **NPDES / DRBC Effluent Requirements.** NPDES Permit No. PA0244333 was issued by the PADEP on March 22, 2017 and 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 TABLES C-1 & C-2 included in Section C.1. 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 0.137 mgd.

8. **Relationship to the Comprehensive Plan.** The project WWTP and its discharge was incorporated into the DRBC Comprehensive Plan via Docket No. D-2007-002 CP-1 on September 26, 2007 and renewed via Docket Nos. D-2007-002 CP-2 and D-2007-002 CP-3 on March 13,

2013 and June 14, 2017, respectively. Issuance of this docket (D-2007-002 CP-4) renews and continues the WWTP in the Comprehensive Plan.

## **B. FINDINGS**

The docket holder submitted an application to renew approval of their existing 0.3 mgd WWTP and its discharges to land and surface water.

At the docket holder's WWTP discharge, Beaver Creek has an estimated seven-day low flow with a recurrence interval of ten years ( $Q_{7-10}$ ) of 0.09 mgd (0.14 cfs). The ratio of this low flow to the hydraulic design wastewater discharge from the 0.30 mgd WWTP is 0.3 to 1.

The nearest surface water intake of record for public water supply is located on East Branch Brandywine Creek approximately 10 River Miles downstream of the docket holder's WWTP and is operated by the 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 are in compliance 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- D-2007-002 CP-4 below, the project described in Docket No. D- D-2007-002 CP-3 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D- D-2007-002 CP-4; Docket No. D- D-2007-002 CP-3 is terminated and replaced by Docket No. D- D-2007-002 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.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**

<b>OUTFALL NO. 001 (Beaver Creek)</b>		
<b>PARAMETER</b>	<b>LIMIT</b>	<b>MONITORING</b>
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 (5-Day at 20° C)	10 mg/l 85% minimum removal	As required by NPDES permit
Ammonia Nitrogen	3.0 mg/l	As required by NPDES permit
Fecal Coliform	200 colonies per 100 ml	As required by NPDES permit
BOD (5-Day at 20° C) Influent	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-2: DRBC Parameters Not Included in NPDES Permit**

<b>OUTFALL NO. 001 (Beaver Creek)</b>		
<b>PARAMETER</b>	<b>LIMIT</b>	<b>MONITORING</b>
Total Dissolved Solids*	Monitor & Report	Quarterly

\* See Condition C.3. below.

### **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 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.
4. 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.

**5.** 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.

**6.** 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.

**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 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.

**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 CFR 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 CFR 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 CFR 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: September 10, 2020**

**EXPIRATION DATE: March 31, 2027**