

DOCKET NO. D-2000-066 CP-3

DELAWARE RIVER BASIN COMMISSION

**Avondale Borough
Wastewater Treatment Plant
Avondale Borough, Chester County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Consulting Engineers & Surveyors, Inc. on behalf of Avondale Borough (Avondale or docket holder) on July 28, 2017 (Application), for renewal of the docket holder's existing wastewater treatment plant (WWTP) and its discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0025488 for this facility was issued by the Pennsylvania Department of Environmental Protection (PADEP) on July 1, 2013 effective August 1, 2013.

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 May 16, 2018.

A. DESCRIPTION

- 1. Purpose.** The purpose of this docket is to renew approval of the docket holder's existing 0.5 million gallons per day (mgd) WWTP and its discharge.
- 2. Location.** The WWTP discharge will continue to discharge treated effluent to an unnamed tributary (UNT) to East Branch White Clay Creek, referred to as Indian Run at River Mile 70.2 – 10.0 – 15.9 – 7.6 – 0.1 (Delaware River – Christina River – White Clay Creek – East Branch White Clay Creek – UNT East Branch White Clay Creek) via Outfall No. 001, in Avondale Borough, Chester County, Pennsylvania as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	39° 49' 21"	75° 47' 6"

3. **Area Served.** The docket holder's WWTP will continue to serve New Garden Township and Avondale Borough located in Chester County, Pennsylvania. For the purpose of defining the Area Served, Section B (Type of Discharge) and Section D (Service Area) 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. **Physical Features.**

a. **Design Criteria.** The docket holder's 0.50 mgd WWTP utilizes oxidation ditch treatment process with chlorine disinfection. The WWTP is designed to treat an average annual flow of 0.50 mgd and has a hydraulic design capacity of 0.65 mgd.

b. **Facilities.** The WWTP facilities consist of a grinding screen with grit removal, a three-ring orbital batch reactor for biological nutrient removal, two final clarifier tanks, an aerobic sludge digester, a chlorine contact tank with post aeration, and a sludge holding tank.

Several of the WWTP facilities are located in the 100-year floodplain. The docket holder indicated in the Application that the WWTP facilities located in the floodplain are not located in the floodway and 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 by a licensed hauler for disposal at a state approved facility.

c. **Water withdrawals.** The potable water supply in the project service area is provided by groundwater wells owned and operated by the docket holder. The groundwater withdrawal is not approved by the DRBC. Condition C.II.s. in the DECISION section of this docket requires the docket holder to submit a docket application to the DRBC for approval of the existing water withdrawal within 90 days of this docket approval (by September 14, 2018)

d. **Effluent Requirements.** EFFLUENT TABLES A-1 and A-2 below contain effluent requirements for DRBC parameters that must be met as a condition of this approval (See DECISION Condition C.I.d.). NPDES Permit No. PA0025488 was issued by the PADEP on July 1, 2013 (effective August 1, 2013) and includes final effluent limitations for the project discharge of 0.50 mgd to surface waters classified by the PADEP as supporting migratory fishes (MF) and cold water fishes (CWF). 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 A-1: DRBC Parameters Included in NPDES Permit

OUTFALL 001 (Discharging to UNT East Branch White Clay Creek)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit
Total Suspended Solids	18 mg/l	As required by NPDES Permit
CBOD ₅ (at 20° C) (5-1 to 10-31)	15 mg/l	As required by NPDES Permit
(11-1 to 4-30)	25 mg/l	
Ammonia Nitrogen (5-1 to 10-31)	1.2 mg/l	As required by NPDES Permit
(11-1 to 4-30)	3.6 mg/l	
Fecal Coliform	200 colonies per 100 ml as a geo. avg.	As required by NPDES Permit

The requirements in EFFLUENT TABLE A-2 are not listed in the NPDES Permit, but are Commission basin-wide parameters.

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

OUTFALL 001 (Discharging to UNT East Branch White Clay Creek)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	Monitor & Report*	Quarterly
CBOD ₅ (at 20° C) Influent	Monitor & Report	Same as CBOD ₅ monitoring required in existing NPDES Permit
CBOD ₅ (at 20° C)	85% Minimum Removal	Same as CBOD ₅ monitoring required in existing NPDES Permit

* See DECISION Condition C.II.s

e. **Relationship to the Comprehensive Plan.** The Avondale Borough WWTP was added to the Comprehensive Plan on November 28, 1966 via Docket No. D-1966-224 CP-1. The project was continued in the Comprehensive Plan and upgrades to the WWTP were approved on October 2, 1991, December 9, 1992 and March 3, 2004, via Docket Nos. D-1991-029 CP, D-1992-045 CP-1, and D-2000-066 CP, respectively. The WWTP was continued in the Comprehensive Plan with the issuance of a renewed approval on December 10, 2014, via D-2000-066 CP-2. Issuance of this docket will continue the approval of the existing WWTP in the Comprehensive Plan (See DECISION Condition C.I.c.).

B. FINDINGS

The purpose of this docket is to renew the approval of the docket holder's existing 0.50 mgd WWTP. No modifications to the existing WWTP are proposed.

At the docket holder's WWTP discharge, UNT East Branch White Clay Creek (previously referred to as Indian Run) has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of 0.64 mgd (1.2 cfs). The ratio of this low flow to the hydraulic design wastewater discharge from the 0.65 mgd WWTP is 0.98 to 1.

The nearest surface water intake of record for public water supply is located in Newark, DE on White Clay Creek approximately 13 River Miles downstream of the docket holder's WWTP, and is operated by the City of Newark.

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 *Water Quality Regulations (WQR)*.

C. DECISION

I. Effective on the approval date for Docket No. D-2000-066 CP-3 below:

a. The project described in Docket No. D-2000-066 CP-2 is removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-2000-066 CP-2; and

b. Docket No. D-2000-066 CP-2 is terminated and replaced by Docket No. D-2000-066 CP-2; and

c. The project and the appurtenant facilities described in Section A "Physical Features" of this docket shall be continued in the Comprehensive Plan.

II. The project and appurtenant facilities as described in Section A "Physical Features" of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP in its NPDES Permit.

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

c. The facility shall be operated at all times to comply with the requirements of the Commission's *WQR* and Flood Plain Regulations (*FPR*).

d. The docket holder shall comply with the requirements contained in the EFFLUENT TABLES in Section A.4.d. of this docket. 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.

e. 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*.

f. 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.

g. 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.

h. The docket holder is permitted to treat and discharge wastewaters 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.

i. 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.

j. 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).

k. 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.

l. 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.

m. 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).

n. 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).

o. 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).

p. 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.

q. 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.

r. 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.

s. The docket holder shall submit an application for approval for its groundwater supply wells within 90 days of the approval of this docket September 14, 2018.

t. Nothing in this docket constitutes a defense to any penalty action for past conduct of the docket holder or ongoing activity not authorized by this approval. In particular, renewal of this docket does not resolve violations – whether in the past or continuing – of provisions of the Delaware River Basin Compact (“Compact”) or any rule, regulation, order or approval duly issued by the Commission or the Executive Director pursuant to the Compact. The Commission reserves its right to take appropriate enforcement action against the docket holder, including but not limited to recovery of financial penalties consistent with Section 14.17 of the Compact, for any and all such prior or continuing violations.

u. 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.

v. Prior to the docket holder initiating any substantial alterations or additions to the existing WWTP as defined in Section 3.10.3A2.a.16) of the Commission’s *WQR*, an application must be submitted and approved by the Commission. Such an application shall be submitted prior to final design to ensure that the Commission can provide the docket holder with draft effluent limitations for SPW specific parameters as guidance for design as to not require duplication of work or cause a substantial expenditure of public funds without Commission approval. The docket holder is encouraged to contact the Commission staff during the planning stages to identify the potential effluent limitations required to meet the no measurable change parameters under SPW.

BY THE COMMISSION

APPROVAL DATE:

EXPIRATION DATE: July 31, 2023