

DOCKET NO. D-1966-096 CP-4

DELAWARE RIVER BASIN COMMISSION

**Brookhaven Borough
Wastewater Treatment Plant
Brookhaven Borough, Delaware County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Catania Engineering Associates, Inc., on behalf of Brookhaven Borough (docket holder) on October 3, 2014 (Application) for a renewal of the docket holder's existing wastewater treatment plant (WWTP) and its related discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0023949 for this facility was issued by the Pennsylvania Department of Environmental Protection (PADEP) on April 14, 2014.

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 (Compact)*. The Delaware County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on November 10, 2015.

A. DESCRIPTION

- Purpose.** The purpose of this docket is to renew approval of the docket holder's existing 0.192 million gallon per day (mgd) WWTP and its discharge. No modifications to the WWTP are proposed.
- Location.** The project WWTP is located on Bridgewater Road in the Borough of Brookhaven just east of its border with Chester Township in Delaware County, Pennsylvania. The WWTP will continue to discharge to Chester Creek at River Mile 82.93 – 4.3 (Delaware River – Chester Creek) via Outfall No. 001.

The project outfall is located in the Chester Creek Watershed as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	39° 51' 44"	75° 23' 42"

3. **Area Served.** The docket holder's WWTP will continue to serve the majority of the Borough of Brookhaven, Delaware County, Pennsylvania.

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 the DECISION Section of this docket.

4. **Physical features.**

a. **Design criteria.** The docket holder's 0.192 mgd WWTP will continue to utilize the Modified Ludzak-Ettinger (MLE) activated sludge treatment process. No modifications to the WWTP are proposed.

b. **Facilities.** The WWTP facilities consist of a grinder, bar screen, equalization tank, anoxic tank, aeration tank, final clarifier, chlorine contact tank, dechlorination tank, and post aeration tank. Sludge handling facilities include an aerobic digester.

Wasted sludge will continue to be hauled offsite by a licensed hauler for disposal at a state approved facility.

Several of the existing facilities are located in the flood hazard area (FEMA-designated 100-year flood zone). The existing tankage in the flood hazard area is located outside the floodway and is flood-proofed up to the flood hazard protection elevation (100-year flood elevation plus one foot). This is accomplished by the tops of tanks being above the flood protection elevation.

c. **Water withdrawals.** The potable water supply in the project service area is provided by a surface water intake owned and operated by the Chester Water Authority, as described in detail in DRBC Docket No. 1984-055 CP-1, approved on August 2, 1989.

d. **NPDES Permit / DRBC Docket.** PADEP issued NPDES Permit No. PA0023949 for the project discharge on April 14, 2014, which includes final effluent limitations for the project discharge of 0.192 mgd to surface waters classified by the PADEP as trout stocking fishery (TSF) and migratory fishery (MF). The following average monthly effluent limits are among those listed in the NPDES permit that meet or are more stringent than the effluent requirements of the DRBC.

EFFLUENT TABLE A-1: DRBC Parameters Included in NPDES permit

OUTFALL 001 (Chester Creek)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6.0 to 9.0	As required by NPDES permit
Total Suspended Solids	30 mg/l	As required by NPDES permit
CBOD (5-Day at 20° C)		
5/01-10/31	20 mg/l (85 % minimum removal)	As required by NPDES permit
11/01-4/30	25 mg/l (85 % minimum removal)	
Ammonia-Nitrogen		As required by NPDES permit

OUTFALL 001 (Chester Creek)		
PARAMETER	LIMIT	MONITORING
5/01-10/31	5.0 mg/l	
11/01-4/30	15.0 mg/l	
Fecal Coliform	200 colonies per 100 ml	As required by NPDES permit
Total Dissolved Solids	Monitor & Report	*

* The NPDES permit requires quarterly monitoring for TDS; however, the docket holder is required by this docket to meet an effluent limit as provided in EFFLUENT TABLE A-2 below.

The requirements in EFFLUENT TABLE A-2 are not listed in the NPDES Permit, but are Commission basin-wide parameters that must be met as a condition of this docket approval.

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

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

*See DECISION Conditions II.p.

e. **Relationship to the Comprehensive Plan.** The existing WWTP was added to the Comprehensive Plan by Docket No. D-1966-096 CP-1 on March 27, 1968. An application (D-1966-096 CP-2) for the approval of modifications to the WWTP (replacement and relocation of project outfall) was submitted to the DRBC on June 1, 1998, but the project was never approved by the Commission. Docket No. D-1966-096 CP-2 approved an upgrade to the WWTP, along with the outfall relocation, on March 3, 2010. This docket (D-1966-096 CP-4) renews approval of the WWTP and continues the project in the Comprehensive Plan.

B. FINDINGS

This docket renews approval of the docket holder's existing 0.192 mgd WWTP. No modifications to the WWTP are proposed.

At the project site, the Chester Creek has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of 10.5 mgd (16.3 cfs). The ratio of this low flow to the WWTP design flow of 0.192 mgd is 55 to 1.

There are no surface water intakes of record for public water supply located downstream of the docket holder's WWTP.

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-1966-096 CP-4 below:

a. The project described in Docket No. D-1966-096 CP-3 is removed from the Comprehensive Plan to the extent it is not included in Docket No. 1966-096 CP-4; and

b. Docket No. D-1966-096 CP-3 is terminated and replaced by Docket No. D-1966-096 CP-4.

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

II. The project and appurtenant facilities as described in the 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, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's.

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/application/index.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. Nothing in this docket approval shall be construed as limiting the authority of DRBC to adopt and apply charges or other fees to this discharge or project.

l. 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.

m. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges 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 (or the later date established by an extension that has been timely requested and approved), 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.

n. 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.

o. 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.

p. The docket holder is required to perform quarterly TDS effluent sampling in accordance with EFFLUENT TABLE A-2 in Section A.4.d. of this docket. The Docket holder may also submit a written request to substitute 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.

q. 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.

r. 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.

BY THE COMMISSION

DATE APPROVED: December 9, 2015

EXPIRATION DATE: April 30, 2019