

DOCKET NO. D-1999-063 CP-3

DELAWARE RIVER BASIN COMMISSION

**Chalfont-New Britain Township Joint Sewerage Authority
Wastewater Treatment Plant Re-Rate
Doylestown Township, Bucks County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by CKS Engineers, Inc., on behalf of the Chalfont-New Britain Township Joint Sewerage Authority (CNBTJSA or docket holder) on August 19, 2014 (Application) for a re-rate of the docket holder's existing wastewater treatment plant (WWTP) and its related discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0025917 A-1 for this facility was issued by the Pennsylvania Department of Environmental Protection (PADEP) on November 2, 2015.

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 Bucks 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

1. Purpose. The purpose of this docket is to renew the approval of and to re-rate the hydraulic capacity of the docket holder's existing WWTP from 6.0 million gallon per day (mgd) to 7.0 mgd. The WWTP will remain at an average annual design flow of 4.625 mgd. The docket holder has performed design calculations demonstrating that the existing WWTP can treat a hydraulic design capacity up to 7.0 mgd without performing modifications to the WWTP.

2. Location. The project WWTP is located off of Upper State Road, just south of its intersection with Tamanend Avenue, in Doylestown Township, Bucks County, Pennsylvania. The WWTP will continue to discharge to Neshaminy Creek at River Mile 115.63 - 37.4 (Delaware River – Neshaminy Creek) via Outfall No. 001.

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

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 17' 20"	75° 10' 50"

3. **Area Served.** The docket holder's WWTP will continue to serve the Borough of Chalfont and New Britain Township, Bucks 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 WWTP will continue to utilize an Orbal oxidation ditch /activated sludge treatment process. The WWTP is designed to treat an average annual design flow of 4.625 mgd. This docket also approves a design re-rate of the hydraulic design capacity from 6.0 mgd to 7.0 mgd. No modifications to the WWTP are proposed.

b. **Facilities.** The WWTP facilities consist of influent flow monitoring and an influent pumping station, screening, a grit and grease removal unit, two (2) equalizations basins, an Orbal oxidation ditch, four (4) final settling tanks, a final clarifier, ultraviolet light (UV) disinfection, and cascade aeration. Existing sludge handling facilities include dissolved air floatation thickeners, three (3) anaerobic digesters, two (2) dewatering centrifuges, and a bio-solids dryer and storage unit.

The docket holder has performed an evaluation demonstrating that the existing WWTP can treat a hydraulic capacity up to 7.0 mgd without performing modifications to the exiting WWTP.

Prior facilities and processes for the WWTP have been described in DRBC Docket No. D-1999-063 CP-2, approved by the DRBC on July 11, 2012.

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.

Wasted sludge will continue to be digested and dried for beneficial re-use offsite at a state approved facility.

c. **Water withdrawals.** The potable water supply in the project service area is provided by wells owned and operated by Aqua, Pennsylvania, as described in detail in DRBC Docket No. D-1993-083 CP-2, approved on December 9, 2009, and by private wells.

d. **NPDES Permit / DRBC Docket.** PADEP issued NPDES Permit No. PA0025917 A-1 for the project discharge on November 2, 2015, which includes final effluent

limitations for the project discharge of 4.625 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 (Neshaminy 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)		As required by NPDES permit
5/01-10/31	12 mg/l (85% minimum removal)	
11/01-4/30	24 mg/l (85% minimum removal)	
Ammonia-Nitrogen		As required by NPDES permit
5/01-10/31	2.0 mg/l	
11/01-4/30	6.0.0 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.

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

OUTFALL 001 (Neshaminy 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-1969-101 CP-1 on August 27, 1969. The WWTP was modified under the following dockets:

DOCKET NO.	DRBC APPROVAL DATE	WWTP MODIFICATION
D-1970-165 CP-1	January 24, 1973	Expansion (1.4 to 2.0 mgd)
D-1982-050 CP-1	January 26, 1983	Upgrades / Improvements
D-1986-035 CP-1	December 23, 1986	Expansion (2.0 to 3.8 mgd)
D-1986-035 CP-Rev	September 28, 1988	Re-rate (2.0 to 4.0 mgd, superseded previous docket)
D-1999-063 CP-1	March 7, 2000	Hydraulic Capacity Re-rate
D-1999-063 CP-2	July 11, 2012	Expansion / Upgrade

This docket (D-1994-063 CP-3) renews approval of the WWTP and continues the project in the Comprehensive Plan.

B. FINDINGS

This docket renews the approval of and approves a re-rate of the hydraulic capacity of the docket holder's existing WWTP from 6.0 mgd to 7.0 mgd. The WWTP will remain at an average annual design flow of 4.625 mgd. This is a design hydraulic re-rate only. No modifications to the WWTP are proposed.

At the project site, Neshaminy Creek has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of 0.83 mgd (1.3 cfs). The ratio of this low flow to the hydraulic design capacity of the WWTP (6.0 mgd) is approximately 0.14 to 1.

The nearest downstream surface water intake of record for public water supply is located approximately 29 miles downstream of the docket holder's WWTP on Neshaminy Creek, and is owned and 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 *Water Quality Regulations (WQR)*.

C. DECISION

I. Effective on the approval date for Docket No. D-1999-063 CP-3 below:

a. The project described in Docket No. D-1999-063 CP-2 is removed from the Comprehensive Plan to the extent it is not included in Docket No. 1999-063 CP-3; and

b. Docket No. D-1999-063 CP-2 is terminated and replaced by Docket No. D-1999-063 CP-3.

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: September 30, 2019