

DOCKET NO. D-1977-087 CP-3

DELAWARE RIVER BASIN COMMISSION

**Kent County Levy Court
Kent County Regional Wastewater Treatment Plant
Kent County, Delaware**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Kent County Levy Court on February 17, 2012 (Application), for review of a wastewater treatment plant (WWTP) approval. National Pollutant Discharge Elimination System (NPDES) Permit No. DE0020338 for this project was previously approved by the Delaware Department of Natural Resources and Environmental Control (DNREC) on November 1, 2006.

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 Kent County Planning Division has been notified of pending action. A public hearing on this project was held by the DRBC on July 11, 2012.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to approve the docket holder's existing 16.3 million gallons per day (mgd) Kent County Levy Court WWTP. The WWTP was previously approved by the DRBC via Docket No. D-77-87 CP-2 on July 18, 2007; however, the docket holder did not submit an application for renewal prior to the docket expiring on November 1, 2011.

2. Location. The project WWTP is located approximately 3,000 feet northeast of the intersection of U.S. Route 113 and Route 120 in the unincorporated area of Kent County, Delaware. The WWTP will continue to discharge treated wastewater to The Gut, which is a tidal tributary to the Murderkill River, itself a tidal tributary to the Delaware River Water Quality Zone 6 at River Mile 23.0 – 6.4 – 0.8 (Delaware River – Murderkill River – the Gut).

The project outfall is located in the Murderkill River Watershed as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	38° 59' 49.34"	-75° 26' 19.5"

3. Area Served. The existing WWTP will continue to serve the domestic, commercial, and industrial users in Kent County, southern portions of New Castle County, and portions of Sussex County in and near Milford.

For the purpose of defining the Area Served, sections 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 16.3 mgd WWTP treats domestic, commercial and industrial sanitary wastewater through an activated sludge treatment process..

b. Facilities. The WWTP is a secondary treatment facility with biological aeration. The sequence of treatment is as follows; screening structure, grit removal, two 10 mgd extended aeration basins in parallel, secondary clarifiers and UV disinfection. The screenings and clarifier underflow are sent to solids handling processes which are followed by temporary on-site storage.

The project facilities aren't located in the 100-year floodplain.

Emergency power is provided by standby diesel generators.

Wasted sludge solids will continue to be dewatered and dried to produce Class-A biosolids, which is land applied on local farms.

c. Water withdrawals. The potable water supply in the project service area is provided by a number of utilities. They include the City of Dover, the City of Milford, the City of Smyrna and the Camden-Wyoming Water and Sewer Authority.

d. NPDES Permit / DRBC Docket. The NPDES Permit No. DE0020338, effective November 1, 2006 approved includes final effluent limitations for the project discharge of 16.3 mgd to surface waters that are tidal, and can be either fresh or salt water in the vicinity of the discharge. The designated uses for this portion of the river are: industrial water supply; primary contact recreation; secondary contact recreation; fish, aquatic life and wildlife; and agricultural water supply. 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 (Discharge to The Gut)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit
Total Suspended Solids	20 mg/l (85% minimum removal*)	As required by NPDES Permit
Enterococcus	33 colonies per 100 ml	As required by NPDES Permit
BOD (5-Day at 20° C)(5/1 to 10/31) (11/1 to 4/30)	1,001 lbs/day 18.4 mg/l (85% minimum removal*)	As required by NPDES Permit

* DRBC Requirement

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

OUTFALL 001(Discharge to The Gut)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	Monitor and Report*	One Per Quarter ** (WWTPs)
Ammonia-Nitrogen	35 mg/l	One Per Month

* DRBC Requirement

** See Condition II.r. in the Decision Section

e. **Relationship to the Comprehensive Plan.** The DRBC included the Kent County Levy Court WWTP in the Comprehensive Plan on June 23, 1967 with Docket No. D-67-73 CP. Subsequent approvals under Section 3.8 of the Compact were for Docket No. D-67-73 CP Phase II on May 27, 1971. Docket No. D-77-87 CP was approved on August 11, 1983. Docket No. 77-87 CP-2 was approved on July 18, 2007.

B. FINDINGS

The purpose of this docket is to approve the docket holder's existing 16.3 mgd Kent County Levy Court WWTP. No modifications to the WWTP are proposed.

On July 18, 2007, the Commission approved DRBC Docket No. D-1977-087 CP-2 for an upgrade of the Kent County Levy Court WWTP. The docket holder did not submit an application for renewal prior to the docket expiring on November 1, 2011.

Upstream of the project site, near USGS Gauge No. 01484000 (Felton, DE), the tidal Murderkill River has an estimated seven-day low flow with a recurrence interval of ten years of 1.16 mgd (1.8 cfs). The ratio of this low flow to the average design wastewater discharge from the Kent County WWTP (16.3 mgd / 25.2 cfs) is 0.07 to 1.

There are no surface water intakes for public water supply downstream of the project discharge.

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 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-1977-087 CP-3 below:

a. The project described in Docket No. D-1977-087 CP-2 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1977-087 CP-3; and

b. Docket No. D-1977-087 CP-2 is terminated and replaced by Docket No. D-1977-087 CP-3; and

c. The project and the appurtenant facilities described in Section A “Physical Features” of this docket shall be added to 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 DNREC 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*.

d. The docket holder shall comply with the requirements contained in the Effluent Table(s) in Section A.4.d. of this docket. The docket holder shall submit the required monitoring results directly to the DRBC Project Review Section. 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 discharge of wastewater shall not increase the ambient temperatures of the receiving waters by more than 4°F from September to May and 1.5°F from June to August , nor shall such discharge result in stream temperatures exceeding 86°F. (Tidal Discharges to Zone 6)

i. 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.

j. The docket holder shall make wastewater discharge in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

k. 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).

l. 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.

m. 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.

n. A complete application for the renewal of this docket, or a notice of intent to cease the operations (withdrawal, discharge, etc.) approved by this docket by the expiration date, must be submitted to the DRBC at least 12 months prior to the expiration date below (unless permission has been granted by the DRBC for submission at a later date), using the appropriate DRBC application form. 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 this docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

o. 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.

p. 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.

q. 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.

r. 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.

s. 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: July 11, 2012

EXPIRATION DATE: July 11, 2017