

DOCKET NO. D-2002-029 CP-3

DELAWARE RIVER BASIN COMMISSION

**Upper Gwynedd-Towamencin Municipal Authority
Wastewater Treatment Plant Renewal
Towamencin Township, Montgomery County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by the Upper Gwynedd-Towamencin Municipal Authority (UGTMA or docket holder) on July 15, 2013 (Application), for renewal of the docket holder's existing wastewater treatment plant (WWTP) and its related discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0039004 for this facility was issued by the Pennsylvania Department of Environmental Protection (PADEP) on February 20, 2009, effective on March 1, 2009.

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 Montgomery County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on June 10, 2014.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to renew approval of the docket holder's existing 6.5 million gallon per day (mgd) WWTP and its related discharge. There are no modifications to the existing WWTP proposed.

2. Location. The project WWTP is located on Kriebel Road between its intersections with Bustard Road and Greens Lane Road in Towamencin Township, Montgomery County, Pennsylvania. The WWTP will continue to discharge to Towamencin Creek, which is tributary to Skippack Creek, which is tributary to Perkiomen Creek, which is tributary to the Schuylkill River, at River Mile 92.47 – 32.3 – 3.0 – 7.6 – 1.4 (Delaware River – Schuylkill River – Perkiomen Creek – Skippack Creek – Towamencin Creek).

The project outfalls are located in the Schuylkill River Watershed as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
003 (normal)	40° 13' 45"	75° 21' 38"

002 (high stream flow)	40° 13' 46"	75° 21' 06"
001 (emergency)	40° 13' 46"	75° 21' 06"

3. Area Served. The docket holder's WWTP will continue to serve portions of Towamencin and Upper Gwynedd Townships in Montgomery County, Pennsylvania. Included in the service area of the WWTP is the Merck West Point pharmaceutical facility (Merck facility), from which the UGTMA WWTP currently receives an annual average flow of 130,000 gpd of pre-treated, industrial waste. The Merck facility is a light industrial/manufacturing use, batch-operation facility and sources of the industrial wastewater are office, utility, laboratory, and vaccine production buildings and a pharmaceutical finishing facility. The equipment in the pharmaceutical building is vacuum cleaned; wastewater is generated from post-vacuum rinsing and cleaning of the building. Merck pretreats its wastewater onsite to inactivate, neutralize, and equalize the flow prior to leaving the Merck property. The UGTMA WWTP is contracted to receive up to 183,661 gpd from the Merck facility.

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 existing WWTP will continue to utilize an advanced secondary level treatment system consisting of various physical, biological and chemical processes, including trickling filters and an activated sludge treatment system, addition of ferric chloride and polymer to enhance solids settling, chlorine disinfection, and dechlorination. The WWTP is designed to treat an annual average flow of 6.5 mgd and has the hydraulic capacity to treat up to 7.3 mgd.

The WWTP discharges to Towamencin Creek through Outfall 003, which is located just downstream from a dam, unless stream flow is substantial, in which case two (2) upstream outfalls (Outfalls 001 & 002) are utilized.

b. Facilities. The existing WWTP facilities consist of two (2) parallel treatment units and includes the following facilities: three (3) comminutors and a manually-cleaned bar screen, six (6) rotating screens, eight (8) pre-aeration tanks, eight (8) aeration tanks, six (6) intermediate settling tanks, eight (8) final settling tanks, 13 chlorine contact tanks, and a sodium bisulfate dechlorination unit.

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

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 a series of groundwater wells owned and operated by North Penn Water Authority. The groundwater withdrawal is described in detail in Docket No. D-1992-044 CP-3, which was approved by the DRBC on December 7, 2005.

d. **NPDES Permit / DRBC Docket.** PADEP issued NPDES Permit No. PA0039004 for the project discharge on February 20, 2009, which includes final effluent limitations for the project discharge of 6.5 mgd to surface waters classified by the PADEP as trout stocking fishery (TSF). 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

OUTFALLS 001, 002, & 003 (Towamencin Creek)		
PARAMETER	LIMIT	MONITORING
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)		
5/01-10/31	10 mg/l (85% minimum removal*)	As required by NPDES permit
11/01-4/30	20 mg/l (85% minimum removal*)	
Ammonia-Nitrogen		
5/01-10/31	1.0 mg/l	As required by NPDES permit
11/01-4/30	2.0 mg/l	
Fecal Coliform	200 colonies per 100 ml as a geo. avg.	As required by NPDES permit

* DRBC Requirement

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

OUTFALLS 001, 002, & 003 (Towamencin Creek)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids *	Monitor & Report	Monthly

* See DECISION Conditions II.m. & II.q.

e. **Relationship to the Comprehensive Plan.** The WWTP was first added to the Comprehensive Plan on June 24, 1964 via Docket No. D-1964-061 CP-1, which approved the construction of the WWTP (1.0 mgd design flow). The WWTP approval was modified/renewed as described in the following dockets:

DOCKET NO.	APPROVAL DATE	WWTP MODIFICATION
D-1972-109 CP-1	April 25, 1973	Expansion (1.0 to 6.5 mgd)
D-1973-206 CP-1	January 24, 1974	Interim re-rating (prior to above expansion)
D-2002-029 CP-1	March 3, 2004	Hydraulic re-rate (6.5 to 7.3 mgd)
D-2002-029 CP-2	December 8, 2011	Renewal

B. FINDINGS

The purpose of this docket is to renew the approval of the docket holder's existing 6.5 mgd WWTP. There are no modifications to the existing WWTP proposed.

Total Dissolved Solids (TDS)

The docket holder was required by Docket No. D-2002-029 CP-2 to perform quarterly total dissolved solids (TDS) monitoring and to meet an effluent concentration limit of 1,000 mg/l. Condition C.II.d. of Docket No. D-2002-029 CP-2 states:

“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 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.”

The docket holder has indicated that it did not perform TDS monitoring prior to the last three (3) quarters of 2013. The monitoring submitted for the three quarters in 2013 indicated exceedences of the 1,000 mg/l effluent limit in two of the three quarters. Based on this information, the docket holder is required to:

1. Perform TDS monitoring once per month (an increase from the previous quarterly monitoring). After two years of monitoring, the docket holder may submit a written request to the Executive Director for reduced monitoring if the results indicate compliance with the Commission’s basin wide effluent requirements of no greater than 1000 mg/l.
2. Perform a trackdown study that investigates the possible causes of elevated TDS and possible solutions which may be implemented to reduce the concentrations in the effluent, and submit a progress report on the trackdown study within one year of docket approval (by June 11, 2015).
3. If the monitoring results indicate that the effluent TDS continues to exceed 1000 mg/l, the docket holder shall complete and submit DRBC’s TDS Determination Questionnaire within one year of docket approval (by June 11, 2015);

See DECISION Condition II.m. of this docket.

At the project site, the Towamencin Creek has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of 0.25 mgd (0.39 cfs). The ratio of this low flow to the hydraulic design capacity of the WWTP (7.3 mgd) is approximately 0.03:1.

The nearest downstream surface water intake of record for public water supply is located approximately 12 miles downstream of the docket holder’s WWTP on Perkiomen Creek, and is owned and operate by 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-2002-029 CP-3 below:

a. The project described in Docket No. D-2002-029 CP-2 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-2002-029 CP-3; and

b. Docket No. D-2002-029 CP-2 is terminated and replaced by Docket No. D-2002-029 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*.

d. The docket holder shall comply with the requirements contained in Effluent Tables 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 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. The docket holder shall perform a trackdown study in accordance with the FINDINGS section of this docket, and submit a progress report for the study by June 11, 2015. If the WWTP effluent monitoring results indicate that the effluent exceeds 1000 mg/l TDS, the docket holder shall complete and submit DRBC's "TDS Determination Questionnaire" by June 11, 2015..

n. 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.

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: June 11, 2014

EXPIRATION DATE: June 30, 2019