

DOCKET NO. D-1985-036 CP-3

DELAWARE RIVER BASIN COMMISSION

Pennsylvania Groundwater Protected Area

**Hatfield Township Municipal Authority
Wastewater Treatment Plant
Hatfield 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 GHD Consulting Engineers, LLC on behalf of the Hatfield Township Municipal Authority (HTMA or docket holder) on October 10, 2014 (Application), for renewal of the docket holder's existing wastewater treatment plant (WWTP) and its discharge, as well as approval to re-rate the WWTP. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0026247 for this project was issued by the Pennsylvania Department of Environmental Protection (PADEP) on September 26, 2012, effective October 1, 2012. The PADEP issued a draft NPDES Permit on March 30, 2015 for the re-rated WWTP. The PADEP is expected to finalize the NPDES Permit shortly. The PADEP is then expected to issue a Water Quality Management (WQM) Permit for the re-rate.

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 Montgomery County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on June 9, 2015.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to renew approval of the docket holder's existing 8.37 million gallons per day (mgd) WWTP and its discharge. This docket also approves a re-rate for the facility to hydraulically treat 10.68 mgd with no proposed construction in order to stay in compliance with PADEP's hydraulic overloading condition. The PADEP and DRBC have based previous effluent limitations on a loading associated with an effluent discharge rate of 6.43 mgd. The re-rated WWTP will continue to have effluent limitations based upon loadings associated with an effluent discharge rate of 6.43 mgd.

2. **Location.** The WWTP will continue to discharge treated effluent to West Branch Neshaminy Creek at River Mile 115.63 – 40.01 – 4.0 (Delaware River – Neshaminy Creek – West Branch Neshaminy Creek) via Outfall No. 001, within the Commission’s designated Southeastern Pennsylvania Groundwater Protected Area (GWPA), in Hatfield Township, Montgomery County, Pennsylvania as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 16’ 32.46”	75° 15’ 8.8”

3. **Area Served.** The docket holder’s WWTP will continue to serve municipal and industrial/commercial customers in Hatfield Township and Hatfield Borough, both located in Montgomery 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 will continue to operate its existing WWTP, which is being re-rated from 8.37 mgd to 10.68 mgd. The PADEP and DRBC are continuing to base effluent limitations on loadings associated with an effluent discharge rate of 6.43 mgd.

b. **Facilities.** The WWTP consists of a screen/grit chamber, two (2) primary clarifiers, two (2) countercurrent aeration tanks, two (2) secondary clarifiers, and an ultraviolet disinfection unit. Sludge is dewatered with centrifuges and incinerated on site.

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

Ash from the incinerator 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 supplied by the North Penn Water Authority (NPWA), which was last approved by the Commission via Docket No. D-92-44 CP-3 on December 7, 2005.

d. **NPDES Permit / DRBC Docket.** NPDES Permit No. PA0026247 was issued by the PADEP on September 26, 2012 (effective October 1, 2012) and includes final effluent limitations for the project discharge of 6.43 mgd to surface waters classified by the PADEP as warm water, migratory fisheries (WWF/MF). Finalization of the renewed NPDES Permit is expected shortly. The following average monthly effluent limitations are among those listed in the current 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 for Existing Condition

OUTFALL 001 (Existing WWTP)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9	As required by NPDES Permit
Total Suspended Solids	30 mg/l 1,609 lbs/day	As required by NPDES Permit
CBOD5 (5-1 to 10-31)	10 mg/l 536 lbs/day	As required by NPDES Permit
(11-1 to 4-30)	20 mg/l 1,073 lbs/day	
(1-1 to 12-31)	85% minimum removal	
Ammonia Nitrogen (5-1 to 10-31)	2.0 mg/l, 107 lbs/day	As required by NPDES Permit
(11-1 to 4-30)	6.0 mg/l, 322 lbs/day	
Fecal Coliform	200 colonies per 100 ml as a geo. avg.	As required by NPDES Permit

The requirement in EFFLUENT TABLE A-2 is not listed in the current NPDES Permit as a limit (it is listed as a Monitor & Report), but data supplied to the Commission over the previous docket cycle as part of the docket holder's annual effluent monitoring report (AEMR) submissions (See DECISION Condition II.d.) warrant Commission staff recommending its basin-wide limit be applied. This limitation must be met as a condition of this docket approval starting July 1, 2015. The PADEP has already included this modification in the draft renewal. Commission staff have requested PADEP continue to include this amended parameter in their renewed Permit.

EFFLUENT TABLE A-2: DRBC Parameter Not Included in Current NPDES Permit for Existing WWTP and Re-rated WWTP

OUTFALL 001 (Existing & Re-rated WWTP)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	1,000 mg/l	Monthly

* See DECISION Condition II.q.

The requirements in EFFLUENT TABLE A-3 are not listed in the current NPDES Permit, but are expected to be in the amended Permit following approval of the draft NPDES Permit amendment regarding the re-rate. These limitations are Commission basin-wide parameters that must be met as a condition of this docket approval. Commission staff have requested PADEP continue to include these parameters in their amended Permit. These limitations go into effect upon approval of the PADEP's WQM Permit for the re-rate (See DECISION Condition II.d.).

EFFLUENT TABLE A-3: DRBC Parameters Expected to be Included in NPDES Permit for Re-rated WWTP

OUTFALL 001 (Re-rated WWTP)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9	Daily
Total Suspended Solids	30 mg/l 1,609 lbs/day	Daily
CBOD5 (5-1 to 10-31)	10 mg/l 536 lbs/day	Daily
(11-1 to 4-30)	20 mg/l 1,073 lbs/day	
(1-1 to 12-31)	85% minimum removal	
Ammonia Nitrogen (5-1 to 10-31)	1.8 mg/l, 107 lbs/day	Daily
(11-1 to 4-30)	5.5 mg/l, 322 lbs/day	
Fecal Coliform	200 colonies per 100 ml as a geo. avg.	4/Week
Total Dissolved Solids*	1,000 mg/l	Monthly

* See DECISION Condition II.p.

The PADEP has required effluent limitations or reporting for phosphorous, dissolved oxygen (DO), nitrate-nitrite as nitrogen, total kjeldahl nitrogen (TKN), and chronic toxicity for Outfall No. 001. DRBC does not require monitoring, nor does it place effluent limitations on phosphorous, DO, nitrate-nitrite as nitrogen, and TKN outside of Special Protection Waters. Furthermore, the DRBC does not currently have chronic toxicity requirements outside of the Delaware Estuary.

e. **Cost.** There are no construction costs associated with this WWTP renewal.

f. **Relationship to the Comprehensive Plan.** The 2.5 mgd HTMA WWTP was originally included in the Comprehensive Plan as part of Docket No. D-64-96 CP on January 17, 1965. Docket No. D-74-186 CP continued that approval and approved a re-rate to 3.6 mgd on July 23, 1975. Docket No. D-85-36 CP continued that approval and approved an expansion to 8.37 mgd, but based effluent limitations on loadings associated with a 6.43 mgd discharge flow on October 30, 1985. Docket No. D-1985-036 CP-2 continued approval of the 8.37 mgd HTMA WWTP, with effluent limitations based upon loadings associated with a 6.43 mgd discharge flow. Issuance of this docket will continue approval of the 8.37 mgd WWTP and its associated 6.43 mgd discharge, as well as re-rate the WWTP to 10.68 mgd with effluent concentration limitations based upon a discharge flow of 6.98 mgd and loading limitations based upon 6.43 mgd in the Comprehensive Plan (See DECISION Condition I.c.).

B. FINDINGS

The purpose of this docket is to renew approval of the docket holder's existing 8.37 mgd WWTP and its discharge. This docket also approves a re-rate for the facility to hydraulically treat 10.68 mgd with no proposed construction in order to stay in compliance with PADEP's

hydraulic overloading condition. The PADEP and DRBC have based previous effluent limitations on a loading associated with an effluent discharge rate of 6.43 mgd. The re-rated WWTP will continue to have effluent limitations based upon loadings associated with an effluent discharge rate of 6.43 mgd and concentrations based upon a flow of 6.98 mgd.

Docket No. D-1985-036 CP-2 established that at the docket holder's WWTP discharge, the West Branch Neshaminy Creek has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of 0.27 mgd (0.42 cfs). The ratio of this low flow to the hydraulic design wastewater discharge from the re-rated 10.68 mgd WWTP is 39.5 to 1.

The nearest surface water intake of record for public water supply is located on Neshaminy Creek approximately 34 River Miles downstream of the docket holder's WWTP, and is operated 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-1985-036 CP-3 below:

a. The projects described in Dockets Nos. D-64-96 CP, D-74-186 CP, and D-1985-036 CP-2 are removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-1985-036 CP-3; and

b. Dockets Nos. D-64-96 CP, D-74-186 CP, and D-1985-036 CP-2 are terminated and replaced by Docket No. D-1985-036 CP-3; 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 and WQM Permits, 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 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 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.

q. 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 10, 2015

EXPIRATION DATE: September 30, 2022