

DOCKET NO. D-1987-046 CP-2

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

**Borough of Northampton
Wastewater Treatment Plant
Northampton Borough, Northampton County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by the Borough of Northampton (docket holder) on December 16, 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. PA0031127 for the project discharge was issued by the Pennsylvania Department of Environmental Protection (PADEP) on June 5, 2012.

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 Lehigh Valley 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 1.5 million gallon per day (mgd) WWTP and its related discharge. No modifications to the WWTP are proposed.
- 2. Location.** The docket holder's WWTP is located on Lerchenmiller Drive, just north of its intersection with Main Street, in the Borough of Northampton, Northampton County, Pennsylvania. The WWTP will continue to discharge to Hokendauqua Creek, which is tributary to the Lehigh River, at River Mile 183.7 – 22.1 – 0.3 (Delaware River – Lehigh River – Hokendauqua Creek) and is located in the drainage area to the section of the non-tidal Delaware River known as the Lower Delaware, which is classified as Special Protection Water (SPW).

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

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40 ° 40' 50"	75 ° 29' 24"

3. Area Served. The docket holder's WWTP will continue to serve the Borough of Northampton and a portion of Allen Township, in Northampton 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 1.5 mgd WWTP will continue to utilize an Intermittent Cycle Extended Aeration System (ICEAS), which is a form of a sequencing batch reactor (SBR) treatment system. The WWTP also features ultraviolet light (UV) disinfection.

b. Facilities. The WWTP facilities consist of a self-cleaning arc bar screen, an aerated grit removal chamber, an aerated equalization chamber, three (3) ICEAS basins, a post-equalization tank, and a UV disinfection tank. Sludge handling facilities include two (2) aerated sludge holding tanks with mixers, and a belt filter press.

The docket holder's wastewater treatment facility discharges to waters classified as SPW and is required to have available emergency power. The existing WWTP has a diesel generator installed capable of providing emergency power. (SPW)

The docket holder's wastewater treatment facility is not staffed 24 hours per day, and shall have a remote alarm system that continuously monitors plant operations in accordance with the Commission's SPW requirements. The existing WWTP has a SCADA system installed that continuously monitors plant operations. (SPW)

The docket holder has not prepared and implemented an emergency management plan (EMP) in accordance with Commission SPW requirements for the existing WWTP. The docket holder is required as part of this docket approval to prepare and submit an EMP to the DRBC for approval within six (6) months of approval of this docket (See DECISION Condition II.n.). (SPW)

The docket holder's existing wastewater treatment facility does not discharge to Outstanding Basin Waters (OBW), and is not required to have a nonvisible discharge plume in accordance with the Commission's SPW requirements. (SPW)

The docket holder's existing wastewater treatment facility is not a direct discharger to OBW or Significant Resource Waters (SRW) and is not required to provide "Best Demonstrable Technology" (BDT) as a minimum level of treatment in accordance with the Commission's SPW requirements. (SPW)

Several of the existing facilities are located in the flood hazard area (FEMA-designated 100-year flood zone). The facilities are located outside the floodway and are flood-proofed up to the flood hazard protection elevation (100-year flood elevation plus one foot).

Waste 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 surface water intakes owned and operated by the Northampton Borough Municipal Authority. The water withdrawal is described in detail in Docket No. D-2004-013 CP-2, which was approved on March 11, 2015.

d. NPDES Permit / DRBC Docket. PADEP issued NPDES Permit No. PA0031127 for the project discharge on June 5, 2012, which includes effluent limits for the project discharge to surface waters classified as cold water fishery (CWF). The following average monthly effluent limits and monitoring requirements, based on a flow of 1.5 mgd, are for DRBC parameters 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 (Hokendauqua Creek)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6.0 to 9.0 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)	25 mg/l (85% minimum removal)	As required by NPDES permit
Ammonia-Nitrogen	14.5 mg/l	As required by NPDES permit
Fecal Coliform		As required by NPDES permit
5/1 – 9/30	200 colonies per 100 ml as a geo. avg.	
10/1 – 4/30	2,000 colonies per 100 ml as a geo. avg.	

EFFLUENT TABLE A-2: DRBC parameters not included in NPDES permit

OUTFALL 001 (Hokendauqua Creek)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	1,000 mg/l	Quarterly
Nitrate + Nitrite as N	Monitor & Report	Monthly
Total Nitrogen	Monitor & Report	Monthly
Total Phosphorous	Monitor & Report	Monthly
Dissolved Oxygen (D.O.)	Monitor & Report	Monthly

* See Condition II.r. in DECISION section

e. Relationship to the Comprehensive Plan. The docket holder’s WWTP was added to the Comprehensive Plan via Docket No. D-1987-046 CP-1 on March 23, 1988. This docket (D-1987-046 CP-2) renews the approval of the WWTP and its discharge.

B. FINDINGS

This docket renews the approval of the docket holder's existing 1.5 mgd WWTP.

In 1992, the DRBC adopted SPW requirements, as part of the DRBC *Water Quality Regulations (WQR)*, designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap has been classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area. (Upper/Middle SPW)

On July 16, 2008, the DRBC approved amendments to its Water Quality Regulations (WQR) that provide increased protection for waters that the Commission classifies as SPW. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for SPW designation. (Lower SPW)

Article 3.10.3A.2.e.1). and 2). of the Commission's WQR states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of SPW must submit for approval a Non-Point Source Pollution Control Plan (NPSPCP) that controls the new or increased non-point source loads generated within the portion of the docket holder's service area which is also located within the drainage area of SPW. The service area of the docket holder is located within in the drainage area to the SPW. Since this project does not entail additional construction and expansion of (facilities/service area) (i.e., there aren't any new or increased non-point source loads associated with this approval), the NPSPCP requirement is not applicable at this time. Accordingly, DECISION Condition II.m. has been included in this docket.

At the project WWTP discharge location, the Hokendauqua Creek has a seven-day low flow with a recurrence interval of ten years (Q7-10 flow) of 2.3 mgd (3.5 cfs). The ratio of this low flow to the design waste water discharge from the 1.5 mgd (2.33 cfs) WWTP is approximately 1.5 to 1.

The nearest surface water intake of record for public water supply downstream of the project discharge is located on the Lehigh River approximately 5 miles downstream of the project discharge, and is operated by the City of Allentown.

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 *WQR*.

C. DECISION

I. Effective on the approval date for Docket No. D-1987-046 CP-2 below:

a. The project described in Docket No. D-1987-046 CP-1 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1987-046 CP-2; and

b. Docket No. D-1987-046 CP-1 is terminated and replaced by Docket No. D-1987-046 CP-2 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 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 make wastewater discharge in such a manner as to avoid injury or damage to fish, wildlife, and/or other aquatic life 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. Prior to allowing connections from any new service areas or any new developments, the docket holder shall either submit and have approved by the Executive Director of the DRBC a NPSPCP in accordance with Section 3.10.3.A.2.e, or receive written confirmation from the Executive Director of the DRBC that the new service area is in compliance with a DRBC approved NPSPCP.

n. The docket holder shall prepare and submit an emergency management plan (EMP) within six (6) months of docket approval (by December 10, 2015).

o. 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.

p. 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.

q. 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.

r. 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.

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 10, 2015

EXPIRATION DATE: June 30, 2022