

DOCKET NO. D-1977-041 CP-4

DELAWARE RIVER BASIN COMMISSION

**Lehigh County Authority
Lynn Township Wastewater Treatment Plant
Lynn Township, Lehigh County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by K.L. Fulford Associates, Inc. on behalf of Lehigh County Authority (LCA) on December 8, 2017 (Application), for review and renewal of its existing Lynn Township Wastewater Treatment Plant (WWTP) and its discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0070254 for this facility was issued by Pennsylvania Department of Environmental Protection (PADEP) on January 9, 2014.

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 Lehigh Valley Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on August 15, 2018.

A. DESCRIPTION

- 1. Purpose.** The purpose of this docket is to renew approval of the docket holder's existing 0.08 million gallons per day (mgd) Lynn Township WWTP and its discharge.
- 2. Location.** The LCA Lynn Township WWTP will continue to discharge treated effluent to Ontelaunee Creek at River Mile 92.47 – 86.7 – 21.5 – 8.7 (Delaware River – Schuylkill River – Maiden Creek – Ontelaunee Creek), via Outfall No. 001, in Lynn Township, Lehigh County, Pennsylvania as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 40' 53"	75° 45' 58"

- 3. Area Served.** The WWTP will continue to serve Lynn Township, Lehigh County, Pennsylvania. The service area is approximately 3,000 acres, and includes multiple properties neighboring the WWTP, the Village of New Tripoli, numerous properties along Route 309, and the Northwestern Lehigh School District's Main Campus. 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 0.08 mgd WWTP utilizes an activated sludge treatment system with a Modified Ludzak-Ettinger (MLE) process.

b. Facilities The existing WWTP facilities consist of an influent pump station, mechanical screen, an equalization tank, two conventional activated sludge units utilizing the MLE process, alum addition and alkalinity adjustment, ultraviolet light (UV) disinfection and post aeration. Each activated sludge unit includes a selector, a coarse bubble aeration tank and a clarifier. Sludge handling consists of three sludge holding tanks and a sludge thickener.

The project facilities are located in the flood hazard area (FEMA-designated 100-year flood zone). The docket holder has flood-proofed up to the flood hazard protection elevation (one foot above 100-year flood elevation). The docket holder has accomplished this by raising the tops of the tanks above the flood protection elevation.

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 privately-owned wells, and a several small developments serviced by their own water treatment plants.

d. Effluent Requirements. EFFLUENT TABLES A-1 & A-2 below contain effluent requirements for DRBC parameters that must be met as a condition of this approval (See DECISION Condition C.II.c.). NPDES Permit No. PA0070254, issued by the PADEP on January 9, 2014, includes effluent limitations for the project discharge of 0.3 mgd to surface waters classified by the PADEP as a Cold Water Fishery (CWF). The LCA has submitted an application for their NPDES permit and are awaiting approval. 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 Ontelaunee Creek)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required in NPDES permit
Total Suspended Solids	30 mg/l	As required in NPDES permit
CBOD ₅ (5-Day at 20 °C)(5-1 to 10-31) (11-1 to 4-30)	15 mg/l 25 mg/l	As required in NPDES permit
Ammonia Nitrogen (5-1 to 10-31) (11-1 to 4-30)	4.0 mg/l 12.0 mg/l	As required in NPDES permit
Fecal Coliform (5-1 to 9-30) (10-1 to 4-30)	200 colonies per 100 ml 2,000 colonies per 100 ml	As required in NPDES permit

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

OUTFALL 001 (Discharge to the Ontelaunee Creek)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	1,000 mg/l	Quarterly
CBOD ₅ (5-Day at 20 °C)	85% minimum removal	Monthly

* See DECISION Condition C.II.q.

e. **Relationship to the Comprehensive Plan.** The existing WWTP was included in the Comprehensive Plan via DRBC Docket Nos. D-1977-041 CP-1, D-1977-041 CP-2 and D-1977-041 CP-3, issued on July 1, 1977, July 14, 2010 and September 12, 2013, respectively. Issuance of this docket will continue the WWTP and its discharge in the Comprehensive Plan.

B. FINDINGS

The purpose of this docket is to renew the approval of the docket holder’s existing 0.08 mgd Lynn Township WWTP. No modifications to the WWTP are proposed.

Near the project site, the Ontelaunee Creek has an estimated seven-day low flow with a recurrence interval of ten years of 0.28 mgd (0.43 cfs). The ratio of this low flow to the average design wastewater discharge (0.08 mgd / 0.15 cfs) from the WWTP is 3.5 to 1.

The nearest public water supply of record located approximately 27 river miles downstream of the project discharge is operated by the Reading Area Water Authority (RAWA), on the Lake Ontelaunee.

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-1977-041 CP-4 below:

a. The project(s) described in Docket No. D-1977-041 CP-3 is removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-1977-041 CP-4; and

b. Docket No. D-1977-041 CP-3 is terminated and replaced by Docket No. D-1977-041 CP-4; 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. The facility and operational records shall be available at all times for inspection by the DRBC.

b. The facility shall be operated at all times to comply with the requirements of the Commission’s *WQR*. (tidal discharges)

c. 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/pr/info.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.

d. 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*.

e. 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.

f. 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

g. 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.

h. 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.

i. 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).

j. 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.

k. The docket holder is responsible for timely submittal to the DRBC of a docket renewal application on the appropriate application form including the appropriate docket application filing fee (see 18 CFR 401.43) at least 6 months in advance of the docket expiration date set forth below. The docket holder will be subject to late filed renewal surcharges 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, 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.

l. The docket holder shall be subject to applicable DRBC regulatory program fees, in accordance with duly adopted DRBC resolutions and/or regulations (see 18 CFR 401.43).

m. This approval is transferable by request to the DRBC Executive Director provided that the project purpose and area served approved by the Commission in this docket will not be materially altered because of the change in project ownership. The request shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 CFR 401.43).

n. The docket holder shall request a name change of the entity to which this approval is issued if the name of the entity to which this approval is issued changes its name. The request for name change shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 CFR 401.43).

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. 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

APPROVAL DATE: September 13, 2018

EXPIRATION DATE: September 13, 2023