

**DOCKET NO. D-2012-011 CP-3**

**DELAWARE RIVER BASIN COMMISSION**

**City of Lewes Board of Public Works  
Wastewater Treatment Plant  
City of Lewes, Sussex County, Delaware**

**PROCEEDINGS**

This docket is issued in response to an application submitted to the Delaware River Basin Commission (DRBC or Commission) on December 23, 2020 (Application), for renewal of the docket holder's existing wastewater treatment plant (WWTP) and its discharge. The discharge is permitted by the Delaware Department of Natural Resources and Environmental Control (DNREC) in National Pollutant Discharge Elimination System (NPDES) Permit No. DE0021512. 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 Sussex County Planning & Zoning Department has been notified of pending action. A public hearing on this project was held by the DRBC on May 12, 2021.

**A. DESCRIPTION**

- 1. Purpose.** The purpose of this docket is to renew approval of the docket holder's existing 1.5 million gallons per day (mgd) WWTP and its discharge.
- 2. Location.** The docket holder's WWTP is located at American Legion Road in the City of Lewes, Sussex County, Delaware. The WWTP will continue to discharge treated effluent to Lewes Rehoboth Canal, a tidal tributary to Water Quality Zone 6 of the Delaware River, at River Mile 0.82 – 2.00 (Delaware River – Lewes-Rehoboth Canal).

Specific location information has been withheld for security reasons.

- 3. Area Served.** The docket holder's WWTP will continue to serve areas of Sussex County located in and around the City of Lewes, Delaware as defined in the Application. 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. Design Criteria.** The docket holder's 1.5 mgd WWTP utilizes a membrane bioreactor (MBR) treatment process with ultraviolet (UV) light disinfection.
- 5. Facilities.** The WWTP facilities consist of a 5-millimeter (mm) band screen, grit removal, flow equalization, 2 mm band screen, membrane biofiltration process, and ultraviolet

disinfection. Wasted sludge is stabilized, dried on porous asphalt drying beds and will continue to be handled in accordance with NPDES Permit No. DE0021512.

Several of the project facilities are located in the vicinity of the 100-year floodplain. The Commission's Flood Plain Regulations (*FPR*) has requirements for treatment facilities in the flood plain; however, the FPR only apply in the non-tidal portion of the Delaware River Basin. Since the project WWTP is located in the tidal portion of the basin, the FPR do not apply to the project WWTP.

**6. Water withdrawals.** The potable water supply in the project service area is provided by the docket holder.

The docket holder's water withdrawal is described in detail in Docket No. D-1985-054 CP RENEWAL, which was approved on September 27, 1995.

**7. NPDES Permit / DRBC Effluent Requirements.** NPDES Permit No. DE0021512 issued by the DNREC includes final effluent limitations for the project discharge to surface waters classified by the DNREC as tidal salt water body supporting industrial water supply; primary contact recreation; secondary contact recreation; and Fish Aquatic Life and Wildlife (FALW). EFFLUENT TABLE C-1 included in Section C. DECISION Condition C.1. of this docket, contains effluent requirements for DRBC parameters that must be met as a condition of this approval. Effluent requirements for Outfall No. 001 are based on a discharge rate of 1.5 mgd.

**8. Relationship to the Comprehensive Plan.** The existing WWTP was added to the Comprehensive Plan by Docket No. D-2012-011 CP-1 on December 5, 2012. The WWTP approval was renewed by Docket No. D-2012-011 CP-2 on December 14, 2016. Issuance of this docket will renew and continue the WWTP and its discharge in the Comprehensive Plan.

## **B. FINDINGS**

The docket holder submitted an application to renew approval of their existing 1.5 mgd WWTP and its discharge.

The WWTP has an interconnection agreement with Sussex County. Effluent from Sussex County is sent to and treated at the WWTP. The average summer flows are approximately 0.89 mgd with winter flows averaging 0.55 mgd approximately. The docket holder has agreed to accept 0.075 mgd in the summertime and 0.35 mgd in the wintertime. The additional flows allow a target of 1 mgd consistently through the year, which is a benefit to the Board of Public Works (BPW). Sussex County land applies their effluent. Wintertime is a critical time for the county as plant growth declines and taking the larger quantity of influent at that time is a key benefit for them. The wastewater comes from a lift station at the Wolfe Runne development which receives wastewater from many developments. The wastewater is residential.

### **DRBC Effluent Quality Requirements**

Section 4.30.4 of the Commission's *Water Quality Regulations (WQR)* contains effluent quality requirement for Ammonia and the requirement to provide effective disinfection. The DRBC effluent limit for Ammonia in tidal waters is 35 mg/l as a 30-day average (Section 4.30.5.D) and 20 mg/l in non-tidal waters. Demonstration of compliance with DRBC's basin-wide Ammonia effluent limit of 20 mg/l for tidal dischargers can be achieved by the WWTP meeting the Total Nitrogen effluent limit of 8 mg/l contained in NPDES Permit No. DE0021512 for the WWTP, since Ammonia is a component of Total Nitrogen.

Effective disinfection is defined by the WQR as fecal coliform not exceeding 200 colonies per 100 milliliters as a geometric average (Section 4.30.4.); however, DRBC accepts other indicator organism methods such as analysis for Enterococcus or *E. coli* of demonstrating effective disinfection. Demonstration of compliance with DRBC's basin-wide Fecal Coliform effluent limit of 200 colonies per 100 mL can be achieved by the WWTP meeting the Enterococcus effluent limit of 10 colonies per 100 mL contained in NPDES Permit No. DE0021512 for the WWTP.

Zone 6 stream quality objectives do not explicitly include Total Dissolved Solids (TDS) even though Zone 6 is an interstate water. While the DRBC's basin-wide TDS requirements are generally not applied in Zone 6, the Commission reserves the right, in accordance with the WQR and the *Rules of Practice and Procedure*, to apply the basin-wide TDS requirements in Zone 6 when and where it determines that the requirements are necessary to protect water uses in Zone 6.

## **2. Other**

At the docket holder's WWTP discharge, the Lewes-Rehoboth Canal is tidal and no seven-day low flow with a recurrence interval of ten years ( $Q_{7-10}$ ) value has been calculated.

There are no surface water intakes of record for public water supply downstream of the docket holder's WWTP.

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 conform with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge that meets the effluent requirements as set forth in the Commission's *Water Quality Regulations (WQR)*.

## **C. DECISION**

Effective on the approval date for Docket No. D-2012-011 CP-3 below, the project described in Docket No. D-2012-011 CP-2 is removed from the Comprehensive Plan to the

extent that it is not included in Docket No. D-2012-011 CP-3; Docket No. D-2012-011 CP-2 is terminated and replaced by Docket No. 2012-011 CP-3; and the project and the appurtenant facilities described in Section A “DESCRIPTION” of this docket shall be continued in the Comprehensive Plan. The project and appurtenant facilities as described in Section A of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

### **Monitoring and Reporting**

1. The docket holder shall comply with the requirements contained in the EFFLUENT TABLE below. The docket holder shall submit the required monitoring results electronically to the DRBC Project Review Section via email [aemr@drbc.gov](mailto:aemr@drbc.gov) on the **Annual Effluent Monitoring Report Form** located at this web address: <https://www.nj.gov/drbc/programs/project/docket-app-info.html#3>. 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 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 C-1: DRBC Parameters Included in NPDES Permit**

OUTFALL 001 (WWTP)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit
Total Suspended Solids	15 mg/l (92.5% Removal)	As required by NPDES Permit
BOD <sub>5</sub> (at 20° C)	15 mg/l (92.5% Removal)	As required by NPDES Permit
BOD <sub>5</sub> (at 20° C) Influent	Monitor and Report	As required by NPDES Permit
Total Nitrogen	8 mg/l	As required by NPDES Permit
Enterococcus	10 colonies per 100 ml as geo. avg.	As required by NPDES Permit

### **Other Conditions**

2. 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*.

3. 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.

**4.** The docket holder is permitted to treat and discharge wastewater 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.

**5.** 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.

**6.** The facility and operational records shall be available at all times for inspection by the DRBC.

**7.** The facility shall be operated at all times to comply with the requirements of the Commission's WQR.

**8.** 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.

**9.** 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.

**10.** 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.

**11.** 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).

**12.** 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.

13. 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).

14. 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).

15. 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).

16. 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.

17. 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.

**BY THE COMMISSION**

**APPROVAL DATE:**

**EXPIRATION DATE: October 31, 2028**