# DOCKET NO. D-2002-023 CP-6

### DELAWARE RIVER BASIN COMMISSION

### **Discharge to a Tributary of Special Protection Waters**

# Municipal Authority of the Township of Westfall Wastewater Treatment Plant Westfall Township, Pike County, Pennsylvania

## **PROCEEDINGS**

This docket is issued in response to an application submitted to the Delaware River Basin Commission (DRBC or Commission) on December 11, 2017 (Application), for renewal of the docket holder's existing wastewater treatment plant (WWTP) and its discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0061611 for this discharge was issued by the Pennsylvania Department of Environmental Protection (PADEP) on December 20, 2013.

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 Pike County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on February 13, 2019.

### A. DESCRIPTION

**1.** <u>**Purpose**</u>. The purpose of this docket is to renew approval of the docket holder's existing 0.374 million gallons per day (mgd) WWTP and its discharge.

2. <u>Location</u>. The docket holder's WWTP is located at Westfall Town Drive in Westfall Township, Pike County, Pennsylvania. The WWTP will continue to discharge treated effluent to Water Quality Zone 1C of the Delaware River at River Mile 252.5 via Outfall No. 001, within the drainage area to the Middle Delaware Special Protection Waters (SPW).

The WWTP outfall discharges in the Middle Delaware SPW Watershed as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	41° 21' 4"	74° 42' 54"

**3.** <u>Area Served</u>. The docket holder's WWTP will continue to serve Westfall Township in Pike County, Pennsylvania. For the purpose of defining the Area Served, Section B (Type of

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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 Section C. DECISION.

**4.** <u>**Design Criteria**</u>. The docket holder's 0.374 mgd WWTP utilizes a sequencing batch reactor (SBR) treatment process with ultraviolet (UV) disinfection.

5. <u>Facilities</u>. The WWTP facilities consist of a screw screen, a manual bar screen, six influent equalization tanks, an SBR influent pump station with two submersible pumps. The SBR system includes two reactor units. Each reactor consists of a floating decanter connected to a decant equalization tank with pumps and an aerobic digestor with diffusers. The facilities also include a traveling bridge filtration system and a backwash pump station. The WWTP disinfection system consists of an open channel UV light system and a post-aeration tank with fine-bubble diffusers.

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

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 remote alarm system installed that continuously monitors plant operations.

The docket holder has prepared and implemented an emergency management plan (EMP) for the existing WWTP in accordance with Commission SPW requirements.

The docket holder's existing wastewater treatment facility is required to provide "Best Demonstrable Technology" (BDT) as a minimum level of treatment.

Several of the WWTP facilities are in the 100-year flood fringe. Prior to any future construction or modifications to the WWTP, during the design phase, the docket holder must demonstrate that the facilities are either outside of the or proofed to at least 1 foot above the 100-year elevation and satisfy all other requirements of a special permit in accordance with the Commission's Floodplain Regulations (*FPR*) (See condition C.21).

Wasted sludge will continue to be hauled off-site by a licensed hauler for disposal at a state approved facility.

6. <u>Water Withdrawals</u>. The potable water supply in the project service area is provided by two groundwater withdrawals and distribution systems owned by Pennsylvania American Water Company and Matamoras Municipal Authority. The groundwater withdrawals are described in detail in Docket Nos. D-2006-025 CP-2 and D-1981-078 CP-9, which were approved on September 13, 2017 and December 12, 2018, respectively.

7. <u>NPDES Permit / DRBC Effluent Requirements</u>. NPDES Permit No. PA0061611 was issued by the PADEP on December 20, 2013 and includes final effluent limitations for the project discharge of 0.374 mgd to surface waters, classified by the PADEP as supporting migratory fishes

(MF) and warm water fishes (WWF). EFFLUENT TABLES C-1 & C-2 included in condition C.1. contain 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 0.374 mgd.

8. <u>Relationship to the Comprehensive Plan</u>. The docket holder's WWTP was included in the Comprehensive Plan upon the approval of Docket No. D-2002-023 CP on March 19, 2003. The WWTP was renewed and modified under the following dockets:

DOCKET NO.	DATE	APPROVAL
D-2002-023 CP-2	July 16, 2008	Renewal for 0.30 mgd
D-2002-023 CP-3	September 21, 2011	Re-Rate (0.30 to 0.374 mgd)
D-2002-023 CP-4	March 7, 2012	Upgrades/Improvements
D-2002-023 CP-5	December 4, 2013	Renewal for 0.374 mgd

Issuance of this docket (D-2002-023 CP-6) will continue its approval within the Comprehensive Plan (See Section C. DECISION).

#### B. <u>FINDINGS</u>

The purpose of this docket is to renew the approval of the docket holder's existing 0.374 mgd WWTP and its related discharge.

#### 1. <u>Special Protection Waters (SPW)</u>

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.

On July 16, 2008, the DRBC approved amendments to its *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 and clarity on definitions and terms were updated for the entire program.

The docket holder's WWTP discharges to the drainage area to the Middle Delaware SPW. The docket holder's WWTP discharge is required to comply with the SPW requirements, as outlined in Article 3.10.3A.2. of the *WQR*.

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DRBC staff monitored in-stream water quality for this stretch of the Delaware River from May through September in the year 1992 to establish existing water quality (EWQ) in accordance with the Upper and Middle Delaware SPW designation. The docket holder previously provided Commission staff with 1992 effluent data. From that data submitted, Commission staff utilized data from the months of May through September in order to establish grandfathered loads for the docket holder's WWTP that correlate to the in-stream data gathered by DRBC staff within the corresponding period.

Commission staff determined as part of the approval for Dockets Nos. D-2002-023 CP-3 that requiring the docket holder to continue to hold the load associated with the 0.3 mgd expansion was warranted despite the facility being re-rated to 0.374 mgd. Those effluent limits were calculated utilizing a weighted average for the WWTP taking into consideration the flow and loads for the WWTP as of 1992 and the allowable BDT flows and loads as approved in Docket No. D-2002-23 CP-2. Table A-1 below is a summary of the loadings and flows utilized to establish the overall effluent limitations found in EFFLUENT TABLE C-2.

	Flow (mgd)	CBOD <sub>5</sub>	TSS	Phosphorous	Ammonia	Nitrate	Total Nitrogen
GF (lbs/day)	0.023	4.67	4.65	0.29	0.58	0.28	0.86
NGF (lbs/day)	0.277	23.12	23.12	4.62	3.47	17.34	23.12
Total (lbs/day)	0.300	27.79	27.77	4.91	4.05	17.62	23.98

**Table A-1: Total Allowable Loads** 

GF – Grandfathered Load

NGF – Non-Grandfathered Load

Total – Allowable Load

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 in the drainage area to the SPW. Since this project does not entail additional construction and expansion of (facilities/service area) and there are no new or increased non-point source loads associated with this approval, the NPSPCP requirement is not applicable at this time (See conditions C.2 and C.3).

## 2. <u>Other</u>

At the docket holder's WWTP discharge, the Delaware River has an estimated seven-day low flow with a recurrence interval of ten years ( $Q_{7-10}$ ) of 457 mgd (707 cfs). The ratio of this low flow to the hydraulic design wastewater discharge from the 0.374 mgd WWTP is 1,890 to 1.

The nearest surface water intake of record for public water supply is located on the Delaware River approximately 70 River Miles downstream of the docket holder's WWTP and is operated by the Easton Suburban Water Authority.

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. <u>DECISION</u>

Effective on the approval date for Docket No. D-2002-023 CP-6 below, the project described in Docket No. D-2002-023 CP-5 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-2002-023 CP-6; Docket No. D-2002-023 CP-5 is terminated and replaced by Docket No. D-2002-023 CP-6; and the project and appurtenant facilities described in Section A. <u>DESCRIPTION</u> of this docket are 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**

The docket holder shall comply with the requirements contained in the EFFLUENT 1. TABLES below. 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 this web at 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. 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.

OUTFALL 001 (Discharging to the Middle Delaware SPW)			
PARAMETER	MONITORING		
pH (Standard Units)	6 to 8.5 at all times	As required by NPDES Permit	
Total Suspended Solids*	10 mg/l SEE EFFLUENT TABLE C-2	As required by NPDES Permit	
Dissolved Oxygen	6.0 mg/l (minimum at all times)	As required by NPDES Permit	
CBOD <sub>5</sub> (at 20° C)*	10 mg/l (85% minimum removal) SEE EFFLUENT TABLE C-2	As required by NPDES Permit	
BOD <sub>5</sub> (at 20° C) Influent	Monitor & Report	As required by NPDES Permit	
Ammonia Nitrogen*	1.5 mg/l SEE EFFLUENT TABLE C-2	As required by NPDES Permit	
Fecal Coliform	50 colonies per 100 ml as geo. avg	As required by NPDES Permit	
Nitrate as N*	7.5 mg/l SEE EFFLUENT TABLE C-2	As required by NPDES Permit	
Total Nitrogen*	10 mg/l SEE EFFLUENT TABLE C-2	As required by NPDES Permit	
Total Kjeldahl Nitrogen	Monitor & Report	As required by NPDES Permit	
Phosphorus*	2.0 mg/l SEE EFFLUENT TABLE C-2	As required by NPDES Permit	

**EFFLUENT TABLE C-1**: DRBC Parameters Included in NPDES Permit

\* DRBC effluent load limits for these parameters are included in EFFLUENT TABLE C-2 as they are more stringent than Outfall 001 load limits in current NPDES Permit PA0061611.

The following monitoring requirements and average monthly effluent limits are for DRBC parameters not listed in the NPDES Permit:

<b>EFFLUENT TABLE C-2</b> :	DRBC Parameters Not Included in NPDES Permit
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OUTFALL 001 (Discharging to the Middle Delaware SPW)			
PARAMETER	PARAMETER LIMIT		
Flow	Monitor & Report	Monthly	
Total Suspended Solids	10 mg/l 27.77 lbs/day	Monthly	
Total Dissolved Solids	1,000 mg/l	Quarterly	
CBOD <sub>5</sub> (at 20° C)	10 mg/l (85% Minimum Removal) 27.79 lbs/day	Monthly	
Ammonia Nitrogen	1.5 mg/l 4.05 lbs/day	Monthly	
Nitrate as N	7.5 mg/l 17.62 lbs/day	Monthly	

OUTFALL 001 (Discharging to the Middle Delaware SPW)			
PARAMETER	LIMIT	MONITORING	
Total Nitrogen	10 mg/l 23.98 lbs/day	Monthly	
Phosphorus	2.0 mg/l 4.91 lbs/day	Monthly	
Total Kjeldahl Nitrogen	Monitor & Report	Monthly	

### **Other Conditions**

2. 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.

**3.** Prior to the docket holder initiating any substantial alterations or additions to the existing WWTP as defined in Section 3.10.3A2.a.16) of the Commission's *WQR*, an application must be submitted and approved by the Commission. Such an application shall be submitted prior to final design to ensure that the Commission can provide the docket holder with draft effluent limitations for SPW specific parameters as guidance for design as to not require duplication of work or cause a substantial expenditure of public funds without Commission approval. The docket holder is encouraged to contact the Commission staff during the planning stages to identify the potential effluent limitations required to meet the no measurable change parameters under SPW.

4. 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.

**5.** 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).

6. 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).

7. 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.

**8.** 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.

9. The discharge of wastewater shall not increase the ambient temperatures of the receiving waters by more than  $5^{\circ}$ F, nor shall such discharge result in stream temperatures exceeding  $87^{\circ}$ F.

**10.** 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.

**11.** 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.

**12.** 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.

**13.** 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).

**14.** 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, to ensure proper control, use and management of the water resources of the Basin.

**15.** 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).

16. 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.

**17.** 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.

**18.** 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*.

**19.** 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.

**20.** 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.

**21.** The project facilities are located in the flood fringe portion of the 100-year floodplain. Prior to any future work being performed at the WWTP, the docket holder will need to include the Commission during the design phase to ensure that all units of the facility are relocated outside the floodplain or flood-proofed in accordance with the Commission's *Flood Plain Regulations (FPR)*.

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

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

# BY THE COMMISSION

APPROVAL DATE: March 13, 2019

EXPIRATION DATE: December 31, 2023