#### DOCKET NO. D-1989-055 CP-3

#### DELAWARE RIVER BASIN COMMISSION

# Pottstown Borough Authority Wastewater Treatment Plant Borough of Pottstown, Montgomery County, Pennsylvania

#### **PROCEEDINGS**

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Cardno BCM on behalf of the Pottstown Borough Authority (PBA or docket holder) on September 12, 2014 (Application), for renewal of the docket holder's existing wastewater treatment plant (WWTP) and its discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0026786 for this facility was issued by the Pennsylvania Department of Environmental Protection (PADEP) on October 19, 2009, amended on January 27, 2014, and last made effective February 1, 2014. Renewal of the NPDES Permit is expected shortly.

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 December 9, 2014.

# A. <u>DESCRIPTION</u>

- 1. <u>Purpose</u>. The purpose of this docket is to renew approval of the docket holder's existing 15.6 million gallons per day (mgd) WWTP and its discharge. The PADEP and DRBC have based effluent limitations for the WWTP on an annual average discharge flow of 12.85 mgd.
- **Location**. The WWTP will continue to discharge treated effluent to the Schuylkill River at River Mile 92.47 51.3 (Delaware River Schuylkill River) via Outfall No. 001, in the Borough of Pottstown, Montgomery County, Pennsylvania as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 14' 2.6"	75° 37' 41.6"

3. <u>Area Served</u>. The docket holder's WWTP will continue to serve the Borough of Pottstown and the Townships of Lower Pottsgrove, Upper Pottsgrove, and West Pottsgrove, all located in Montgomery County, Pennsylvania. Additionally, the docket holder's WWTP accepts leachate from six landfills within the basin. The six landfills and their locations are listed below. 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.

Landfill	Location
GROWS	Falls Township, Bucks County
Tullytown	Falls Township, Bucks County
New Morgan	New Morgan Borough, Berks
	County
Western Berks	Cumru Township, Berks
	County
Waste Management –	West Pottsgrove Township,
Pottstown	Montgomery County
Delaware County Solid Waste	Earl Township, Berks County
Authority	

# 4. Physical Features.

- **a.** <u>Design Criteria</u>. The docket holder will continue to operate its existing 15.6 mgd WWTP. The PADEP and DRBC have based effluent limitations for the WWTP on an annual average discharge flow of 12.85 mgd.
- **b.** <u>Facilities</u>. The WWTP consists of two (2) mechanical screens/comminutors, two (2) grit removal tanks, two (2) pre-aeration tanks, eight (8) aeration tanks, two (2) final settling/clarification tanks, two (2) rotary drum thickeners, two (2) aerobic sludge digesters, two (2) centrifuges, an indirect thermal dryer, two (2) chlorine contact/dechlorination tanks, and a parshall flume.

The project facilities are located within the 100-year flood zone. The facilities are flood-proofed to 1.5 feet above the 100-year flood elevation [0.5 feet more than required by the Commission's *Flood Plain Regulations (FPR)*].

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

- c. <u>Water withdrawals</u>. The potable water supply in the project service area is supplied by the docket holder's distribution system, which was approved on September 23, 1964 via Docket No. D-64-36. Renewal of the withdrawal and distribution system are also expected at the December 10, 2014 Commission Hearing via Docket No. D-1964-036 CP-2.
- **d.** NPDES Permit / DRBC Docket. NPDES Permit No. PA0026786 was amended by the PADEP on January 27, 2014 (effective February 1, 2014) and includes final effluent

limitations for the project discharge of 12.85 mgd to surface waters classified by the PADEP as a warm water, migratory fishery (WWF/MF). 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 (WWTP)				
PARAMETER	LIMIT	MONITORING		
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit		
Total Suspended Solids	30 mg/l	As required by NPDES Permit		
CBOD <sub>5</sub> (at 20° C) (5-1 to 10-31)	20 mg/l (85% minimum removal)	As required by NPDES Permit		
(11-1 to 4-30)	25 mg/l (85% minimum removal)			
Ammonia Nitrogen (5-1 to 10-31)	8.0 mg/l	As required by NPDES Permit		
(11-1 to 4-30)	16.0 mg/l			
Fecal Coliform	200 colonies per 100 ml as a geo.	As required by NPDES Permit		
	avg.			
Total Dissolved Solids*		As required by NPDES Permit		
(Avg. Monthly Flow <= 8.935 mgd)	3,000 mg/l (200,290 lbs/day)			
(Avg. Monthly Flow > 8.935 mgd)	2.238 mg/l (240.000 lbs/day)			

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

The requirement in EFFLUENT TABLE A-2 is not listed in the NPDES Permit, but is a Commission basin-wide parameter that must be met as a condition of this docket approval due to the WWTP's acceptance of leachate. Commission staff have requested PADEP include this parameter in their next Permit. Monitoring shall begin January 1, 2015 for this parameter (See DECISION Condition II.d.).

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

OUTFALL 001 (WWTP)				
PARAMETER	LIMIT	MONITORING		
Color	Monitor & Report	Monthly		

The PADEP has required the docket holder to meet a minimum effluent limitation of 5.0 mg/l for dissolved oxygen on a daily basis, as well as monitor and report both total phosphorous and total nitrogen on a weekly basis. The DRBC does not require monitoring, nor does it place effluent limitations on these parameters outside of Special Protection Waters.

- e. <u>Cost</u>. There are no construction costs associated with this WWTP renewal.
- **f.** Relationship to the Comprehensive Plan. The docket holder's 8.5 mgd WWTP was originally included in the Comprehensive Plan upon approval of Addendum No. 1 on July 25, 1962 and continued as part of Docket No. D-70-110 CP on June 11, 1970. The docket holder's WWTP then expanded to 15.6 mgd following approval of Docket No. D-89-55 CP on March 28, 1990. Issuance of this docket will continue approval of the 15.6 mgd WWTP in the Comprehensive Plan (See DECISION Condition I.c.).

<sup>\*</sup> See DECISION Condition II.p.

# **B.** FINDINGS

The purpose of this docket is to renew approval of the docket holder's existing 15.6 mgd WWTP and its discharge. The PADEP and DRBC have based effluent limitations for the WWTP on an annual average discharge flow of 12.85 mgd.

# Total Dissolved Solids

The Commission's basin-wide total dissolved solids (TDS) effluent limit is 1,000 mg/l [Section 3.10.4D.2. of the Commission's *Water Quality Regulations* (*WQR*)]. The Commission's basin-wide in-stream TDS criteria is that 1) the receiving stream's resultant TDS concentration be less than 133% of the background (Section 3.10.3B.1.b. of the Commission's *WQR*). and 2) the receiving stream's resultant TDS concentration be less than 500 mg/l (Section 3.10.3B.2. of the Commission's *WQR*).

The 133% of the background TDS requirement is for the protection of aquatic life. The 500 mg/l TDS requirement is to protect the use of the receiving stream as a drinking water source. The EPA's Safe Drinking Water Act's secondary standard for TDS is 500 mg/l.

Docket No. D-1989-055 CP-2 was approved by the Commission on July 14, 2010 and included a TDS variance of 3,000 mg/l when discharge flows from the WWTP were less than or equal to 8.935 mgd and 2,235 mg/l when discharge flows from the WWTP were greater than 8.935 mgd. This docket continues approval of the variance.

#### Other

According to the United States Geological Survey (USGS) Streamstats program the Schuylkill River at the docket holder's WWTP discharge has an estimated seven-day low flow with a recurrence interval of ten years ( $Q_{7-10}$ ) of 182 mgd (281 cfs). The ratio of this low flow to the hydraulic design wastewater discharge from the 15.6 mgd IWTP/WWTP is 11.67 to 1.

The nearest surface water intake of record for public water supply is located on the Schuylkill River approximately 6.5 River Miles downstream of the docket holder's WWTP, and is operated by the Pennsylvania American Water Company.

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 *WQR*.

#### **C. DECISION**

- I. Effective on the approval date for Docket No. D-1989-055 CP-3 below:
- a. The project described in Docket No. D-1989-055 CP-2 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1989-055 CP-3; and
- b. Docket No. D-1989-055 CP-2 is terminated and replaced by Docket No. D-1989-055 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 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.
- 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 <u>electronically</u> to the DRBC Project Review Section via email <u>aemr@drbc.state.nj.us</u> on the **Annual Effluent Monitoring Report Form** located at this web address: <a href="http://www.state.nj.us/drbc/programs/project/application/index.html">http://www.state.nj.us/drbc/programs/project/application/index.html</a>. 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.
- 1. 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: December 10, 2014

**EXPIRATION DATE:** October 31, 2019