DOCKET NO. D-2001-042 CP-4

DELAWARE RIVER BASIN COMMISSION

Lower Perkiomen Valley Regional Sewer Authority
Oaks Wastewater Treatment Plant
Upper Providence Township, Montgomery County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by the Lower Perkiomen Valley Regional Sewer Authority (LPVRSA or docket holder) on June 28, 2013 (Application), for renewal of the docket holder's existing Oaks wastewater treatment plant (WWTP) and its discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0026964 for this facility was issued by the Pennsylvania Department of Environmental Protection (PADEP) on June 4, 2009, effective July 1, 2009. 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 June 10, 2014.

A. DESCRIPTION

- 1. <u>Purpose</u>. The purpose of this docket is to renew approval of the docket holder's existing 20 million gallons per day (mgd) Oaks WWTP and its discharge. The PADEP and DRBC have based effluent limits on an average annual discharge of 14.25 mgd.
- **Location**. The WWTP will continue to discharge treated effluent to the Schuylkill River at River Mile 92.47 32.35 (Delaware River Schuylkill River) via Outfall No. 001, in Upper Providence Township, Montgomery County, Pennsylvania as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 07' 15"	75° 27' 30"

Area Served. The docket holder's WWTP will continue to serve Upper Providence, Lower Providence, Perkiomen, and Skippack Townships, as well as Collegeville and Trappe Boroughs, all in Montgomery 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. <u>Physical Features</u>.

- **a.** <u>Design Criteria</u>. The docket holder will continue to operate its existing 20 mgd WWTP. The PADEP and DRBC have based effluent limits on an average annual discharge of 14.25 mgd.
- **b.** <u>Facilities</u>. The existing WWTP consists of an influent pumping station, a grit removal facility, two (2) comminutors, six (6) primary settling tanks, three (3) aeration tanks, four (4) final settling tanks, a sludge holding/equalization tank, two (2) belt filter presses, two (2) dual chamber chlorine contact tanks, and a post-aeration cascading outfall for dechlorination.

The project facilities are not located in the 100-year floodplain.

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 Aqua America, Pennsylvania American Water Company, and individual on-lot wells.
- d. NPDES Permit / DRBC Docket. NPDES Permit No. PA0026964 was issued by the PADEP on June 4, 2009 (effective July 1, 2009) and includes final effluent limitations for the project discharge of 14.25 mgd to surface waters classified by the PADEP as a warm water, migratory fishery (WWF/MF). Renewal of the NPDES Permit is expected shortly. 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 (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 ₅ (at 20° C) (5-1 to 10-31)	18 mg/l	As required by NPDES Permit		
(11-1 to 4-30)	22.5 mg/l	-		
Ammonia Nitrogen (5-1 to 10-31)	7.2 mg/l	As required by NPDES Permit		
(11-1 to 4-30)	8.1 mg/l			
Fecal Coliform (5-1 to 9-30)	200 colonies per 100 ml as a geo.	As required by NPDES Permit		
	avg.			
(10-1 to 4-30)	2000 colonies per 100 ml as a geo.			

OUTFALL 001 (WWTP)				
PARAMETER	LIMIT	MONITORING		
	avg.			
Total Dissolved Solids*	1,000 mg/l	As required by NPDES Permit		

^{*} See DECISION Condition II.p.

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. Commission staff have requested PADEP include this parameter in their Permit.

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

OUTFALL 001 (WWTP)				
PARAMETER	LIMIT	MONITORING		
CBOD ₅ (at 20° C)	85% minimum removal	Same as CBOD ₅ frequency in the NPDES Permit		

The PADEP has required monitoring of Phosphorous (TP) and a 5.0 mg/l effluent minimum concentration for Dissolved Oxygen (DO) for the docket holder's WWTP to ensure instream water quality is being preserved. The DRBC does not require TP or DO effluent limits/monitoring outside of Special Protection Waters (SPW).

- **e. Cost**. There are no construction costs associated with this WWTP renewal.
- **f.** Relationship to the Comprehensive Plan. The 2.0 mgd Oaks WWTP was included in the Comprehensive Plan upon approval of Docket No. D-64-16 CP on January 27, 1965. A series of expansions to the WWTP resulting in the existing 20 mgd facility were approved by the Commission via Dockets Nos. D-72-76 CP, D-77-84 CP, D-87-6 CP, D-2001-42 CP, and D-2001-42 CP-2 on August 23, 1972, September 3, 1981, February 25, 1987, September 3, 2003, and January 19, 2005, respectively. The DRBC continued approval of the 20 mgd Oaks WWTP in the Comprehensive Plan upon approval of Docket No. D-2001-042 CP-3 on December 9, 2009. Issuance of this docket will continue approval of the 20 mgd Oaks WWTP in the Comprehensive Plan (See DECISION Condition I.c.).

B. FINDINGS

The purpose of this docket is to renew approval of the docket holder's existing 20 mgd Oaks WWTP and its discharge. The PADEP and DRBC have based effluent limits on an average annual discharge of 14.25 mgd.

At the docket holder's WWTP discharge, the Schuylkill River has an estimated sevenday low flow with a recurrence interval of ten years (Q_{7-10}) of 198 mgd (309 cfs). The ratio of this low flow to the hydraulic design wastewater discharge from the 20 mgd WWTP is 10 to 1.

The nearest surface water intake of record for public water supply is located approximately 8 River Miles downstream of the docket holder's WWTP on the Schuylkill River 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 *Water Quality Regulations (WQR)*.

C. <u>DECISION</u>

- I. Effective on the approval date for Docket No. D-2001-042 CP-4 below:
- a. The project described in Docket No. D-2001-042 CP-3 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-2001-042 CP-4; and
- b. Docket No. D-2001-042 CP-3 is terminated and replaced by Docket No. D-2001-042 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. 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 directly to the DRBC Project Review Section. 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.
- 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. 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: June 11, 2014

EXPIRATION DATE: June 30, 2019