

DOCKET NO. D-1988-017 CP-2

DELAWARE RIVER BASIN COMMISSION

**Horsham Water & Sewer Authority
Park Creek Wastewater Treatment Plant
Horsham 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 Carroll Engineering Corporation (Carroll) on behalf of the Horsham Water & Sewer Authority (HWSA or docket holder) on October 21, 2011 (Application), for review of an expansion to the Park Creek wastewater treatment plant (WWTP) and movement of the WWTP's outfall. Supplemental information was received by the Commission on November 29, 2012. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0051985 for this project was approved by the Pennsylvania Department of Environmental Protection (PADEP) on February 13, 2012, effective March 1, 2012. An amended Permit is currently in draft form and was last put out to notice on November 26, 2012. Issuance of the NPDES Permit Amendment that includes effluent limitations for the expansion of the Park Creek WWTP is expected shortly. The PADEP is currently reviewing the Water Quality Management (WQM) Permit application that was submitted by Carroll on November 20, 2012 for the expansion. Issuance of the WQM 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 March 5, 2013.

A. DESCRIPTION

- 1. Purpose.** The purpose of this docket is to renew approval of the existing 1.3 million gallons per day (mgd) Park Creek WWTP and to approve the expansion and operation to 2.79 mgd. Effluent limits from PADEP and the Commission are currently based upon an average annual flow of 1.0 mgd and will be based upon an average annual flow of 2.25 mgd once the expansion is complete.
- 2. Location.** The WWTP will continue to discharge treated effluent to Park Creek at River Mile 115.63 - 24.1 - 9.0 - 1.1 (Delaware River - Neshaminy Creek - Little Neshaminy Creek -

Park Creek) via Outfall No. 001, in Horsham Township, Montgomery County, Pennsylvania as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001 (existing)	40° 13' 00"	75° 09' 30"
001 (proposed)	40° 13' 00"	75° 09' 34.84"

3. Area Served. The Park Creek WWTP will continue to serve Horsham and portions of Upper Dublin Townships, Montgomery County, Pennsylvania, as well as portions of Warrington Township, Bucks County, Pennsylvania as delineated on the Comprehensive Wastewater Facilities Plan map that was part of 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. Physical Features.

a. Design Criteria. The docket holder operates the existing 1.3 mgd Park Creek WWTP. This docket approves the expansion to 2.79 mgd and the relocation of the outfall. Effluent limits from PADEP and the Commission are currently based upon an average annual flow of 1.0 mgd and will be based upon an average annual flow of 2.25 mgd once the expansion is complete.

b. Facilities. The existing Park Creek WWTP consists of a screen/grinder chamber, a raw sewage pump station, an influent equalization tank, two (2) parallel A²O treatment units consisting of A²O tanks and secondary clarifiers, an aerobic digester, and an ultraviolet disinfection system.

The expanded Park Creek WWTP will consist of a screen/grinder chamber, a raw sewage pump station, an equalization tank, three (3) parallel A²O treatment units, three (3) secondary clarifiers, a coagulation/flocculation tank, three (3) discfilter units, chemical feed systems, two (2) aerobic digester, a sludge dewatering system, and an ultraviolet disinfection system.

The project facilities aren't 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. Water withdrawals. The potable water supply in the project service area is supplied by the docket holder. The groundwater withdrawal is described in detail in Docket No. D-97-16 CP-3, which was approved by the Commission on December 10, 2008.

d. NPDES Permit / DRBC Docket. NPDES Permit No. PA0051985 was approved by the PADEP on February 13, 2012 (effective March 1, 2012). An amended Permit is currently in draft form and was last put out to notice on November 26, 2012. The draft Permit amendment

includes effluent limitations for both the existing discharge of 1.0 mgd and proposed 2.25 mgd discharge from the Park Creek WWTP 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 Draft NPDES Permit for the existing discharge of 1.0 mgd 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 (1.0 mgd 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
CBOD5 (5-1 to 10-31) (11-1 to 4-30)	10 mg/l (85% minimum removal*) 20 mg/l (85% minimum removal*)	As required by NPDES Permit
Ammonia Nitrogen (5-1 to 10-31) (11-1 to 4-30)	2.5 mg/l 4.0 mg/l	As required by NPDES Permit
Fecal Coliform	200 colonies per 100 ml as a geo. avg.	As required by NPDES Permit

* DRBC Requirement

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

OUTFALL 001 (1.0 mgd WWTP)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	Monitor & Report *	Quarterly **

* DRBC Requirement

** See DECISION Condition II.u.

The following average monthly effluent limits are among those listed in the Draft NPDES Permit for the proposed discharge of 2.25 mgd and meet or are more stringent than the effluent requirements of the DRBC. These effluent limits are expected to take effect on January 1, 2015.

EFFLUENT TABLE A-3: DRBC Parameters Included in NPDES Permit

OUTFALL 001 (2.25 mgd 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
CBOD5 (5-1 to 10-31) (11-1 to 4-30)	10 mg/l (85% minimum removal*) 20 mg/l (85% minimum removal*)	As required by NPDES Permit
Ammonia Nitrogen (5-1 to 10-31) (11-1 to 4-30)	2.1 mg/l 4.0 mg/l	As required by NPDES Permit
Fecal Coliform	200 colonies per 100 ml as a geo. avg.	As required by NPDES Permit

* DRBC Requirement

EFFLUENT TABLE A-4: DRBC Parameters Not Included in NPDES Permit

OUTFALL 001 (2.25 mgd WWTP)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	Monitor & Report *	Quarterly **

* DRBC Requirement

** See DECISION Condition II.u.

PADEP has required effluent limitations for Dissolved Oxygen, Phosphorous, and Nitrate + Nitrite as Nitrogen. PADEP has also required monitoring for Total Kjeldahl Nitrogen. The Commission does not require docket holders to monitor or meet effluent limitations for these parameters outside of Special Protection Waters (SPW).

e. Cost. The overall cost of this project is estimated to be \$13,006,000.

f. Relationship to the Comprehensive Plan. The 0.5 mgd Park Creek WWTP was included in the Comprehensive Plan upon approval of Docket No. D-88-17 CP on December 14, 1988. Issuance of this docket will replace the WWTP with the proposed 2.25 mgd Park Creek WWTP expansion upon approval (See DECISION Condition I.c.).

B. FINDINGS

The purpose of this docket is to renew approval of the existing 1.3 mgd Park Creek WWTP and to approve the expansion and operation to 2.79 mgd. Effluent limits from PADEP and the Commission are currently based upon an average annual flow of 1.0 mgd and will be based upon an average annual flow of 2.25 mgd once the expansion is complete.

The Park Creek WWTP has undergone many upgrades since approval of the 0.5 mgd facility on December 14, 1988. The facility expanded to 1.3 mgd in September 1997 and construction on the headworks occurred in 2005. The docket holder has been informed that each of these projects should have been reviewed by the Commission.

At the project site, Park Creek has an estimated seven-day low flow with a recurrence interval of ten years of 0.155 mgd (0.24 cfs). The ratio of this low flow to the maximum design wastewater discharge from the 2.79 mgd Park Creek WWTP is 1 to 18.

The nearest surface water intake of record for public water supply downstream of the project discharge is operated by Aqua Pennsylvania on the Neshaminy Creek approximately 25.7 river miles away.

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 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-1988-017 CP-2 below:

a. The project described in Docket No. D-88-17 CP is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1988-017 CP-2; and

b. Docket No. D-88-17 CP is terminated and replaced by Docket No. D-1988-017 CP-2; and

c. The project and the appurtenant facilities described in Section A "Physical Features" of this docket shall be added to 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 WQM Permits, 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 discharge of wastewater shall not increase the ambient temperatures of the receiving waters by more than 5°F, nor shall such discharge result in stream temperatures exceeding 87°F. (Non-tidal, Non-trout Waters)

i. Sound practices of excavation, backfill and reseedling shall be followed to minimize erosion and deposition of sediment in streams.

j. Within 10 days of the date that construction of the project has started, the docket holder shall notify the DRBC of the starting date and scheduled completion date.

k. Within 30 days of completion of construction of the approved project, the docket holder is to submit to the attention of the Project Review Section of DRBC a Construction Completion Statement (“Statement”) signed by the docket holder’s professional engineer for the project. The Statement must (1) either confirm that construction has been completed in a manner consistent with any and all DRBC-approved plans or explain how the as-built project deviates from such plans; (2) report the project’s final construction cost as such cost is defined by the project review fee schedule in effect at the time the application was made; and (3) indicate the date on which the project was (or is to be) placed in operation. In the event that the final project cost exceeds the estimated cost used by the docket holder to calculate the DRBC project review fee, the statement must also include (4) the amount of any outstanding balance owed for DRBC review. The outstanding balance will equal the difference between the fee paid to the Commission and the fee calculated on the basis of the project’s final cost, using the formula and definition of “project cost” set forth in the DRBC’s project review fee schedule in effect at the time application was made.

l. The WWTP modifications shall be completed within three years of approval of this docket or the docket holder shall demonstrate to the Executive Director that it has expended substantial funds (in relation to the cost of the project) in reliance upon this docket approval. If the modifications have not been completed within three years of Docket Approval and the docket holder does not submit a cost analysis demonstrating substantial funds have been expended, Commission approval of the modifications to the existing WWTP shall expire. If Commission approval of the modifications expire under this condition, the docket holder shall file a new application with the Commission and receive Commission approval prior to initiating construction of any modifications.

m. 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.

n. The docket holder shall make wastewater discharge in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

o. 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).

p. 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.

q. 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.

r. 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.

s. 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.

t. 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.

u. 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.

v. 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: March 6, 2013

EXPIRATION DATE: February 28, 2017