

DOCKET NO. D-2008-2-1

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

**Pennsylvania American Water Company
Water Filtration Plant Discharge
Yardley Borough, Bucks County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Pennsylvania American Water Company (PAWC) on December 27, 2008 (Application), for review of the Yardley Water Treatment Plant. The Pennsylvania Department of Environmental Protection (PADEP) issued National Pollutant Discharge Elimination System (NPDES) Permit No. PA0027634 for this project on August 15, 2007, effective September 1, 2007.

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Bucks County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on September 24, 2008.

A. DESCRIPTION

- 1. Purpose.** The purpose of this project is to approve the existing discharge of up to 0.402 million gallons per day (mgd) of filter backwash from the docket holder's water filtration plant (WFP).
- 2. Location.** The WFP discharges to an unnamed tributary of Brock Creek, which is a tributary to the Lower Delaware Special Protection Waters (SPW) Area, which has been classified as Significant Resource Waters. The WFP discharge is located at river mile 137.5 – 3.13 (Delaware River – Brock Creek).

The project outfall is located in the Brock Creek Watershed as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 13' 25"	74° 50' 53"
002	40° 13' 25"	74° 50' 52.3"

3. **Area Served.** The Yardley WFP supplies drinking water to the Borough of Yardley, Falls Township, and Lower Makefield Township. The WFP processes up to 6.0 mgd, with a resulting filter backwash discharge of up to 0.402 mgd.

For the purpose of defining the Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISION section of this docket.

4. **Physical features.**

a. **Design criteria.** Outfalls 001 and 002 discharge treated filter backwash and supernatant to two holding basins (lagoons) located at the docket holder's water filtration plant. Each basin is designed to release 0.402 mgd. However, only one basin discharges to Brock Creek each day, keeping the total discharge for the plant at 0.402 mgd..

b. **Facilities.** The docket holder's water filtration plant discharges backwash to waters which are tributary to SPW and is required to have available emergency power.

The docket holder's water filtration plant is not staffed 24 hours per day. The docket holder has a remote alarm system that continuously monitors plant operations.

The docket holder's existing water filtration plant has not prepared and implemented an emergency management plan suitable to Commission standards.

c. **Water withdrawals.** The water withdrawal for this facility from the Delaware River is described in detail in Docket No. D-1995-53 CP, which was approved on June 26, 1996.

d. **NPDES Permit / DRBC Docket.** The NPDES Permit No. PA0027634 approved by PADEP on August 15, 2007, includes final effluent limitations for the project discharge of 0.402 mgd to surface waters classified by the PADEP as Warm Water Fishery (WWF). 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 Lagoons		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES permit
Total Suspended Solids	20 mg/l (85% minimum removal*)	As required by NPDES permit

* DRBC Requirement

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

OUTFALL Lagoons		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids *	1,000 mg/l **	Quarterly *
Ammonia-Nitrogen *	Monitor & Report Only *	Quarterly *
Total Phosphorus *	Monitor & Report Only *	Quarterly *
Nitrate-Nitrogen *	Monitor & Report Only *	Quarterly *

* DRBC Requirement

** See Condition II. r.

B. FINDINGS

On January 19, 2005, September 26, 2005, September 27, 2006, September 26, 2007, and May 14, 2008, the DRBC approved interim amendments to its *Water Quality Regulations* that provide increased protection for waters that the Commission classifies as SPW. On July 16, 2008, the DRBC approved permanent amendments to its *Water Quality Regulations* that included the portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area as SPW. (Lower SPW)

The docket holder’s existing WFP backwash discharge is located in the drainage area to the Lower Delaware SPW.

Since the docket holder is not requesting an increase in flow, and this docket approves an existing project that is not a substantial alteration, the docket holder was not required to demonstrate No-Measurable-Change (NMC) to Existing Water Quality (EWQ). However, the docket holder has monitoring requirements contained in the Effluent Tables in Section A.4.d. of this docket that will be used in the future to support NMC to EWQ determinations if it becomes necessary.

Article 3.10.3A.2.e.1) and 2) of the *Water Quality Regulations, Administrative Manual - Part III*, states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of Special Protection Waters must submit for approval a Non-Point Source Pollution Control Plan that controls the new or increased non-point source loads generated

within the portion of the applicant's service area which is also located within the drainage area of Special Protection Waters. The service area of the docket holder is located within in the drainage area to the Special Protection Waters. Since this project does not entail additional construction and expansion of facilities/service area (i.e., there aren't any new or increased non-point source loads associated with this approval), the non-point source pollution control plan requirement is not applicable at this time. Accordingly, Special Condition II. m. has been included in the Decision section of this docket.

Article 3.10.3A.2.d. of the *Water Quality Regulations, Administrative Manual – Part III*, requires existing wastewater treatment facilities discharging to SPW to have available standby power, a remote alarm system and an emergency management plan in place for their facility prior to the expiration of their next NPDES permit. The docket holder is required to comply with this requirement by August 31, 2012, the expiration date of their recently issued NPDES permit (Condition II. n.).

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 *Water Quality Regulations* of the DRBC.

The nearest surface water intake of record for public water supply downstream of the project discharge is operated by the docket holder (Docket Nos. D-63-21 and D-95-53 CP-1), as the intake for this WFP is downstream of the outfall. The next closest public water supply intake is operated by the City of Trenton.

C. DECISION

I. Effective on the approval date for Docket No. D-2008-2-1 below, the project and appurtenant facilities as described in the 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. Commission approval of this docket is contingent on the PADEP's approval of the NPDES permit.

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 *Water Quality Regulations* of the DRBC.

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 DRBC required monitoring results directly to DRBC (Project Review Section). The monitoring results shall be submitted annually absent any observed limit violations. If a DRBC effluent limit is violated, the docket holder shall submit the results and provide a written explanation within 30 days of the violation the action(s) the docket holder has taken to correct the violation and protect against a future violation.

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. The docket holder is permitted to treat and discharge the categories of wastewaters defined in the "Area Served" section of this docket.

j. 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.

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. 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 Non-Point Source Pollution Control Plan (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.

n. The docket holder shall provide for emergency power, install remote alarm controls and prepare an emergency management plan (EMP) if they are currently non-existent at the facility by August 31, 2012 (expiration of NPDES permit). The docket holder shall certify in writing to the Commission that it has complied with this condition by August 31, 2012. (SPW projects only).

o. A complete application for the renewal of this docket, or a notice of intent to cease the operations (withdrawal, discharge, etc.) approved by this docket by the expiration date, must be submitted to the DRBC at least 12 months prior to the expiration date below (unless permission has been granted by the DRBC for submission at a later date), using the appropriate DRBC application form. 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 this docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

p. 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.

q. The docket holder and any other person aggrieved by a reviewable action or decision taken by the Executive Director or Commission pursuant to this docket may seek an administrative hearing pursuant to Articles 5 and 6 of the Commission's *Rules of Practice and Procedure*, and after exhausting all administrative remedies may seek judicial review pursuant to Article 6, section 2.6.10 of the *Rules of Practice and Procedure* and section 15.1(p) of the Commission's *Compact*.

r. 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.

BY THE COMMISSION

DATE APPROVED:

EXPIRATION DATE: August 31, 2012

DRAFT