

DOCKET NO. D-2010-025 CP-2

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

**Pennsylvania American Water Company
Stony Garden Water Filtration Plant
Hamilton Township, Monroe County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by the Pennsylvania American Water Company (PAWC or docket holder) on November 6, 2013 (Application), for the renewal of the docket holder's existing Stony Garden water filtration plant (WFP) and its discharge. On July 2, 2014, the docket holder amended the Application to include the construction of two (2) new storage lagoons that will aid in fewer discharges from the WFP. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0064343 for this facility was issued by the Pennsylvania Department of Environmental Protection (PADEP) on November 6, 2009, effective December 1, 2009. The PADEP is expected to renew the NPDES Permit shortly. The PADEP issued Water Quality Management (WQM) Permit No. 4514401 for the lagoons on April 21, 2014.

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 Monroe County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on September 9, 2014.

A. DESCRIPTION

- 1. Purpose.** The purpose of this docket is to renew approval of the docket holder's existing 0.1679 million gallons per day (mgd) WFP and its discharge, as well as approve the construction of two (2) new storage lagoons that will reduce discharge frequency from the WFP.
- 2. Location.** The WFP will continue to discharge treated effluent to Ross Common Creek intermittently at River Mile 183.66 – 36.32 – 20.7 – 0.06 (Delaware River – Lehigh River – Aquashicola Creek – Ross Common Creek) via Outfall No. 001, within the drainage area to the Lower Delaware Special Protection Waters (SPW), in the Hamilton Township, Monroe County, Pennsylvania as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 52' 06"	75° 17' 46"

3. Area Served. The docket holder's WFP supplies drinking water to the Boroughs of Nazareth, Pen Argyl, Wind Gap, Stockertown, and Tatamy, plus portions of the Townships of Forks, Palmer, Bushkill, Upper Nazareth, Lower Nazareth, and Plainfield, all located in Northampton County, Pennsylvania. The WFP also supplies drinking water to Ross Township, Monroe County, Pennsylvania. The WFP processes up to 3 mgd of water, with a resulting filter backwash discharge of up to 0.1679 mgd. Water treated by the WFP is withdrawn from a combination of up to two reservoirs, three springs, and nine wells. Each of these water sources is described in Docket No. D-77-47 CP.

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 will continue to operate its existing 0.1679 mgd WFP. The WFP typically recycles the filtered water back to the head of the WFP, discharging to Ross Common Creek less than 10% of the time. The proposed lagoons are expected to reduce the number of discharges each year even further.

b. Facilities. The existing WFP consists of three (3) up-flow clarifiers, three (3) multimedia filters, a settling/holding tank, and a sludge drying bed. Treated backwash is discharged to Ross Common Creek intermittently from the settling/holding tank. Finished water is treated with alum coagulation and filtration and disinfected with chlorination prior to conveyance to the distribution system.

The upgraded WFP will consist of three (3) up-flow clarifiers, three (3) multimedia filters, two (2) storage lagoons, a settling/holding tank, and a sludge drying bed. Treated backwash and drinking water quantity will not be affected by the addition of the two lagoons.

The docket holder's wastewater treatment facility discharges to waters classified as SPW and is required to have available emergency power. The existing WFP has a generator installed capable of providing emergency 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 WFP has a remote alarm system installed that continuously monitors plant operations.

The docket holder's existing/upgraded wastewater treatment facility has prepared and implemented an emergency management plan (EMP) in accordance with Commission SPW requirements.

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

A submersible sludge pump is used periodically to remove settled solids from the bottom of the settling/holding tank for drying prior to pick up and disposal by a licensed hauler for disposal at a state-approved facility. The two proposed lagoons will provide additional volume for wastewater settling and solids storage and wasted sludge will also be disposed of by the same hauler.

c. **Water withdrawals.** The groundwater and surface water withdrawals for this facility are described in detail in Docket No. D-77-47 CP, which was approved by the Commission on January 13, 1988.

d. **NPDES Permit / DRBC Docket.** NPDES Permit No. PA0064343 was issued by the PADEP on November 6, 2009 (effective December 1, 2009) and includes final effluent limitations for the project discharge of 0.1679 mgd to surface waters classified by the PADEP as a cold water fishery (CWF). 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 (WFP)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9	As required by NPDES Permit
Total Suspended Solids	30 mg/l	As required by NPDES Permit

The requirements in EFFLUENT TABLE A-2 are not listed in the NPDES Permit, but are Commission basin-wide and/or SPW specific parameters that were included in Docket No. D-2010-025 CP-1 and must continue to be met as a condition of this docket approval. Commission staff have requested PADEP include these parameters in their renewed Permit (See DECISION Condition II.d.).

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

OUTFALL 001 (WFP)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	1,000 mg/l	2/Year
Nitrate as N (5/1 – 9/30)	Monitor & Report	Quarterly
Total Nitrogen (5/1 – 9/30)	Monitor & Report	Quarterly
Phosphorous (5/1 – 9/30)	Monitor & Report	Quarterly

* See DECISION Condition II.s.

e. **Cost.** The overall cost of this project is estimated to be \$2,075,700 (See DECISION Condition II.i.).

f. **Relationship to the Comprehensive Plan.** The Stony Garden WFP was included in the Comprehensive Plan as part of Docket No. D-81-50 CP on January 25, 1984.

Issuance of Dockets Nos. D-77-47 CP and D-2010-025 CP-1 on January 13, 1988 and March 2, 2011, respectively, continued the WFP in the Comprehensive Plan. Issuance of this docket will also continue approval of the WFP 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 0.1679 mgd WFP and its discharge, as well as approve the construction of two new storage lagoons that will reduce discharge frequency from the WFP. The proposed construction does not meet the Commission's definition of substantial alterations or additions [Section 3.10.3A.2.a.16) of the Commission's *WQR*].

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.

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 within in the drainage area to the SPW. Since this project does entail additional construction of facilities (i.e., there are new or increased non-point source loads associated with this approval), the NPSPCP requirement is applicable at this time. Accordingly, DECISION Conditions II.o. and II.t. have been included in this docket.

According to the United States Geological Survey (USGS) Streamstats program Ross Common Creek at the docket holder's WFP discharge has an estimated seven-day low flow with a recurrence interval of ten years (Q_{7-10}) of 0.2 mgd (0.31 cfs). The ratio of this low flow to the hydraulic design wastewater discharge from the 0.1679 mgd WFP is 1.2 to 1.

The nearest surface water intake of record for public water supply other than that of the Stony Garden WFP is located on Aquashicola Creek approximately 19 River Miles downstream of the docket holder's WFP, and is operated by the Palmerton Municipal 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 *WQR*.

C. DECISION

I. Effective on the approval date for Docket No. D-2010-025 CP-2 below:

a. The project described in Docket No. D-2010-025 CP-1 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-2010-025 CP-2; and

b. Docket No. D-2010-025 CP-1 is terminated and replaced by Docket No. D-2010-025 CP-2; 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 and 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 electronically to the DRBC Project Review Section via email aemr@drbc.state.nj.us on the **Annual Effluent Monitoring Report Form** located at this web address: <http://www.state.nj.us/drbc/programs/project/application/index.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.

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. 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.

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

h. 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.

i. 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.

j. The WFP 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 WFP shall expire. If the modification approval expires 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.

k. 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.

l. 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.

m. 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.

n. 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.

o. The docket holder's NPSPCP meets the general requirements of Article 3.10.3.A.2.e.1) of the Commission's *WQR*.

p. 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.

q. 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.

r. 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.

s. 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.

t. Prior to the docket holder initiating any substantial alterations or additions to the existing WFP 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.

BY THE COMMISSION

DATE APPROVED: September 10, 2014

EXPIRATION DATE: November 30, 2019