DOCKET NO. D-1998-043 CP-3

DELAWARE RIVER BASIN COMMISSION

Pennsylvania American Water Company – Penn Water District
Groundwater Withdrawal
Spring Township, Lower Heidelberg Township, Sinking Spring Borough and
Wyomissing Borough, Berks County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an Application submitted by Gannett Fleming, Inc. on behalf of Pennsylvania American Water Company (PAWC) to the Delaware River Basin Commission (DRBC or Commission) on December 4, 2014 (Application), for a renewal and approval of an existing allocation of groundwater and review of a groundwater withdrawal project. This docket was previously approved by the Commission on December 7, 2005. The project wells were reviewed under the Pennsylvania Safe Drinking Water Act for public water supply permits and approved by the Pennsylvania Department of Environmental Protection (PADEP) on June 29, 2006 (PADEP Permit No. 3060069).

The Application was reviewed for continuation in the Comprehensive Plan and for approval under Section 3.8 of the *Delaware River Basin Compact*. The Berks County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on September 15, 2015.

A. <u>DESCRIPTION</u>

- 1. <u>Purpose.</u> The purpose of this docket is to approve the renewal of an existing supply of groundwater to the docket holder's Penn Water District public water supply system from existing Wells Nos. 12, 13, 16, 18A, 19, 20, 21, 23 and 28. The total allocation of groundwater will remain 165.33 million gallons per month (mgm). PAWC is not requesting an increase in groundwater withdrawal allocation from that contained in its prior approval.
- **Location.** The project wells are located in the Little Cacoosing Creek Watershed, Spring Township, Lower Heidelberg Township, Sinking Spring Borough and Wyomissing Borough, Berks County, Pennsylvania. The project wells are completed in the aquifers stated in the table below (Facilities). Little Cacoosing Creek near the project site is designated by the PADEP as Warm Water Fishes (WWF) and Migratory Fishes (MF).

Specific location information has been withheld for security reasons.

3. Area Served. The docket holder's Penn Water District water distribution system serves the Boroughs of Wyomissing, West Lawn and Sinking Spring; as well as Cumru, South Heidelberg, Lower Heidelberg and Spring Townships as shown on a map entitled "Water Service Area", submitted with the Application.

4. **Physical features.**

- a. <u>Design criteria.</u> PAWC Penn Water District system currently serves an estimated population of 31,119 through 11,093 domestic service connections and an additional 661 commercial, 14 industrial and 287 institutional and other connections with an average and maximum water demand of 2.33 million gallons per day (mgd) and 3.03 mgd, respectively. The docket holder projects an average and maximum water demand of 2.97 mgd and 5.33 mgd, respectively, by the year 2025. The allocation of 165.33 mgm should be sufficient to supply the docket holder's public water supply system.
 - **b. Facilities.** The existing project wells have the following characteristics:

WELL NO.	DEPTH (FEET)	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED	AQUIFER
12	308	71'/ 10"	375	1941	Richland
13	500	214'/8''	300	1956	Richland
16	447	65'/ 10"	315	1960	Millbach
18A	272	65'/ 10"	500	1965	Richland
19	350	144'/ 8''	500	1968	Ontelaunee
20	325	220'/ 10"	400	1967	Ontelaunee
21	502	135'/ 12"	325	1977	Allentown
23	325	83'/ 12''	250	1981	Hammer Creek
28	292	135'/ 10"	800	2003	Epler/ Ontelaunee

All wells and water service connections are metered.

Prior to entering the distribution system, all groundwater is disinfected via chlorination. Additional aeration treatment and sequestration agent is added at Well No. 19.

The project wellheads are located above the 100-year flood elevation.

The water system is presently interconnected with the Western Berks Water Authority distribution system. The interconnection has a 1.0 million gallon per day (mgd) capacity and is only used on an emergency basis.

System storage facilities have the capacity of 3.72 million gallons (mg), which is equivalent to approximately 1.25 days' supply.

- **c.** Other. Approximately 10 % of the wastewater is discharged to on-lot septic systems; the remaining 90% is conveyed to the following three wastewater treatment facilities:
 - Spring Township Municipal Authority sewage treatment facility most recently approved by DRBC Docket No. D-1988-077 CP-2 on May 5, 2010. The Authority has submitted a renewal application and is awaiting approval. The PADEP issued its most recent NPDES Permit No. PA0043052 on May 18, 2009 for this treatment facility. The treatment facility has adequate capacity to receive wastewater from this project. The Authority has submitted a renewal application to the PADEP and is awaiting approval.
 - Borough of Sinking Spring Municipal sewage treatment facility most recently approved by DRBC Docket No. D-1994-031 CP-2 on December 4, 2013. The Authority has submitted a renewal application and is awaiting approval. The PADEP issued its most recent NPDES Permit No. PA0028649 on January 30, 2009 for this treatment facility. The treatment facility has adequate capacity to receive wastewater from this project. The Authority has submitted a renewal application to the PADEP and is awaiting approval.
 - Reading City Fritz Island sewage treatment facility most recently approved by DRBC Docket No. D-1986-028 CP-3 on September 9, 2014. The Authority has submitted a renewal application and is awaiting approval. The PADEP issued its most recent NPDES Permit No. PA0026549 on November 25, 2013 for this treatment facility. The treatment facility has adequate capacity to receive wastewater from this project.
- **d.** Relationship to the Comprehensive Plan. The PAWC wells were included in the Comprehensive Plan via DRBC Dockets Nos. D-1965-150 CP, D-1969-001 CP, D-1979-013 CP, D-1984-060 CP, D-1998-043 CP and D-1998-043 CP-2 issued on January 26, 1966, January 15, 1969, September 26, 1979, March 25, 1992, October 27, 1999 and December 7, 2005, respectively. Issuance of this docket will continue the groundwater withdrawal project in the Comprehensive Plan.

B. FINDINGS

The docket holder was required to implement a groundwater/ surface water monitoring plan in accordance with Condition II.i of their current docket (D-1998-043 CP-2). The monitoring program included groundwater level measurements at Well No. 28, three additional off-site monitoring wells and a spring fed pond. The Commission received a groundwater/ surface water monitoring report from PAWC on July 2, 2015 which included graphical representation of all the monitoring data collected from July 2006 through April 2015, evaluated the effect of the groundwater withdrawals from Well No. 28 on the local groundwater resources, and included a request to remove the monitoring requirement from the docket. Commission staff concur with PAWC findings that pumping at Well No. 28 is not adversely impacting the local hydrologic system, and therefore not included the continuation of the monitoring program in the docket.

The docket holder estimates that the project withdrawals, used for the purpose of public water supply, result in a consumptive use of 10 percent of the total water use. The DRBC definition of consumptive use is defined in Article 5.5.1.D of the *Administrative Manual – Part III – Basin Regulations – Water Supply Charges*.

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.

Water Audits for Public Water Supply Systems Serving Greater than 100,000 gpd

Section 2.1.8 of the Water Code states that it is the policy of the Commission to establish a standardized water audit methodology for owners of water supply systems serving the public to ensure accountability in the management of water resources. Voluntary Water Audits were encouraged for public water supply systems through December 31, 2011 (Section 2.1.8.B.). Effective January 1, 2012, the owners of each public water supply system are required to implement an annual calendar year water audit program conforming to IWA/AWWA Water Audit Methodology (AWWA Water Loss Control Committee (WLCC) Water Audit Software) and corresponding AWWA guidance (Section 2.1.8.C). Water audits shall be submitted annually to the Commission by March 31. PAWC submitted their most recent Water Audit on April 14, 2014.

C. <u>DECISION</u>

- I. Effective on the approval date for Docket No. D-1998-043 CP-3 below:
- a. The project described in Docket No. D-1998-043 CP-2 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1998-043 CP-3; and
- b. Docket No. D-1998-043 CP-2 is rescinded and replaced by Docket No. D-1998-043 CP-3.

- c. The project and the appurtenant facilities described in the Section entitled "Physical features" above shall be added to the Comprehensive Plan.
- II. The project and appurtenant facilities as described in the Section A "Physical features" 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, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's.
- b. The wells and operational records shall be available at all times for inspection by the DRBC.
- c. The wells shall be operated at all times to comply with the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.
- d. During any month, the combined withdrawal from all well sources shall not exceed 165.33 million gallons. No well shall be pumped above the maximum instantaneous rate and monthly allocation as indicated below:

WELL NO.	MAXIMUM INSTANTANEOUS RATE (GPM)	MONTHY ALLOCATION (MGM)
12	375	16.74
13	300	13.392
16	315	14.062
18A	500	22.32
19	500	22.32
20	400	17.856
21	325	14.508
23	250	11.16
28	800	35.712

e. The wells shall be equipped with a readily accessible capped port and drop pipe so that water levels may be measured under all conditions.

- f. The project withdrawals shall be metered with an automatic continuous recording device that measures to within 5 percent of actual flow. An exception to the 5 percent performance standard, but no greater than 10 percent, may be granted if maintenance of the 5 percent performance is not technically feasible or economically practicable. A record of daily withdrawals shall be maintained, and monthly totals shall be reported to the PADEP annually and shall be available at any time to the Commission if requested by the Executive Director.
- g. Each new water service connection shall include a water meter in accordance with the DRBC's Resolution No. 87-7 (Revised).
- h. In accordance with DRBC Resolutions No. 87-6 (Revised) and No. 2009-1, the docket holder shall continue to implement to the satisfaction of the PADEP, the systematic program to monitor and control leakage within the water supply system. The program shall at a minimum include: periodic surveys to monitor leakage, enumerate non-revenue water and determine the current status of system infrastructure; recommendations to monitor and control leakage; and a schedule for the implementation of such recommendations. The docket holder shall proceed expeditiously to correct leakages and unnecessary usage identified by the program.
- i. In accordance with DRBC Resolution No. 2009-1 and Section 2.1.8 of the Water Code, the docket holder shall implement an annual calendar year water audit program conforming to IWA/AWWA Water Audit Methodology (AWWA Water Loss Control Committee (WLCC) Water Audit Software) and corresponding guidance. Water audits shall be submitted annually to the Commission by March 31.
- j. The docket holder shall implement to the satisfaction of the PADEP, the continuous program to encourage water conservation in all types of use within the facilities served by this docket approval. The docket holder will report to the PADEP on the actions taken pursuant to this program and the impact of those actions as requested by the PADEP.
- k. No water 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).
- 1. The docket holder shall implement its Water Conservation Plan as approved by PADEP, and shall report to the PADEP on actions taken pursuant to this program and the impact of those actions as requested by the PADEP.
- m. The docket holder shall implement to the satisfaction of the PADEP, a drought or other water supply emergency plan.
- n. No new water service connections shall be made to premises connected to sewerage systems which are not in compliance with all applicable effluent limits contained in State permits and the *Water Quality Regulations* of the Commission.
- o. 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.

- p. The docket holder is permitted to provide the water approved in this docket to the areas included in Section A.3. Area Served of this docket. Any expansion beyond those included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the *Compact*.
- q. 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.
- r. The issuance of this docket approval shall not create any private or proprietary rights in the water of the Basin, and the Commission reserves the rights to amend, alter or rescind any actions taken hereunder in order to insure the proper control, use and management of the water resources of the Basin.
- If the monitoring required herein, or any other data or information demonstrates that the operation of this project significantly affects or interferes with any domestic or other existing uses of ground or surface water, or if the docket holder receives a complaint by any existing ground or surface water users within the zone of influence of the withdrawal, the docket holder shall immediately notify the Executive Director of any complaints by any ground or surface users within the zone of influence of the withdrawal, and unless excused by the Executive Director, shall investigate such complaints. The docket holder should direct phone call notifications of potential well or surface water interference or complaints of interference to the DRBC Project Review Section at 609-883-9500, extension 216. Oral notification must always be followed up in writing directed to the Executive Director. In addition, the docket holder shall provide written notification to all potentially impacted users of wells or surface water supplies of the docket holder's responsibilities under this condition. Any ground or surface water user which is substantially adversely affected, rendered dry or otherwise diminished as a result of the docket holder's project withdrawal, shall be repaired, replaced or otherwise mitigated at the expense of the docket holder. A report of investigation and/or mitigation plan prepared by a hydrologist shall be submitted to the Executive Director as soon as practicable. The Executive Director shall make the final determination regarding the validity of such complaints, the scope or sufficiency of such investigations, and the extent of appropriate mitigation measures, if required.
- t. 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.

- u. For the duration of any drought emergency declared by either Pennsylvania or the Commission, water service or use by the docket holder pursuant to this approval shall be subject to the prohibition of those nonessential uses specified by the Governor of Pennsylvania, the Pennsylvania Emergency Management Council, PADEP, or the Commonwealth Drought Coordinator to the extent that they may be applicable, and to any other emergency resolutions or orders adopted hereafter by the Commission.
- v. 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.

BY THE COMMISSION

APPROVAL DATE: September 16, 2015

EXPIRATION DATE: September 16, 2025