

DOCKET NO. D-1979-018 CP-6

DELAWARE RIVER BASIN COMMISSION

Ground Water Protected Area

Borough of Doylestown

Groundwater Withdrawal

Borough of Doylestown, Bucks County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) on January 31, 2019 for renewal of an allocation of groundwater and review of a groundwater water withdrawal project (Application). The project wells were reviewed under the Pennsylvania Safe Drinking Water Act for a public water supply construction permit and approved by the Pennsylvania Department of Environmental Protection (PADEP) on January 3, 1980 (Permit No. 0979501).

The Application was reviewed for continued in the Comprehensive Plan and for approval under Section 3.8 and for a withdrawal permit under Section 10.3 of the *Delaware River Basin Compact*. The Bucks County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on May 15, 2019.

A. DESCRIPTION

- 1. Purpose.** The purpose of this docket is to renew the approval of an existing supply of groundwater for public water supply from existing Wells 7, 8, 9, 10 and 12. The total allocation of groundwater will decrease from 50.6 million gallons per 30 days (mg/30 days) to 48.0 million gallons per month (mgm). The approval will also remove Well 13 from the docket.
- 2. Location.** The project wells are completed in the Stockton Formation and are located in the Neshaminy Creek Watershed in the Borough of Doylestown, Bucks County, Pennsylvania. The Neshaminy 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 wells serve the Borough of Doylestown in Bucks County, Pennsylvania, as shown on a map entitled "Water System Plan" submitted with the Application. The docket holder also bulk sales water to Doylestown Township in Bucks County, Pennsylvania on a regular basis. For the purpose of defining Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISION section of this docket.

4. **Design criteria.** The docket holder supplies potable water to an estimated population of 8,700 via 2,558 domestic connections, 524 commercial connection, 9 industrial connections and 59 other public connections. The average and maximum groundwater demand for this project are 0.660 million gallons per day (mgd) and 1.092 mgd, respectively. The docket holder projects an average and maximum water demand of 0.731 mgd and 1.345 mgd, respectively, by the year 2029. The docket holder is not requesting an increase in groundwater withdrawal allocation from that contained in its prior approval. The allocation of 48.0 mgm should be sufficient to meet the future demands.

5. **Facilities.** The docket holder's existing wells have the following characteristics:

WELL NO.	DEPTH (FEET)	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED
7	272	35'/8"	350	1949
8	397	35'/12	250	1952
9	400	38'/10"	350	1957
10	400	38'/10"	350	1967
12	400	45'/10"	200	1976

All water service connections are metered.

All wells are metered.

Prior to entering the distribution system, groundwater from all the wells is treated by chlorination.

The project facilities are above the 100-year flood elevation.

The water system is presently interconnected with Doylestown Township Municipal Authority distribution system.

6. **Other.** Wastewater is conveyed to Bucks County Water & Sewer Authority's Green Street and Harvey Avenue sewage treatment facilities which received approval most recently under Section 3.8 of the *Compact* by DRBC Docket Nos. D-2000-022 CP and D-1999-013 CP-3 on November 15, 2000 and March 11, 2015 respectively. The PADEP issued its most recent NPDES Permit No. PA0021181 (Green Street WWTP) on June 18, 2014 and NPDES Permit No.

PA0021172 (Harvey Avenue WWTP) on December 22, 2014. The treatment facilities have adequate capacity to receive wastewater from the proposed project.

7. **Relationship to the Comprehensive Plan.** The Borough of Doylestown's wells were previously included in the Comprehensive Plan by Resolution R-62-14 and as follows:

Docket No.	Date Approved	Approved Wells
D-1969-123 CP	June 25, 1969	Spring intake, 7, 8, 9 and 10
D-1976-071 CP	November 10, 1976	Spring intake, 7, 8, 9, 10 and 12
D-1979-018 CP	January 23, 1980	7, 8, 9, 10, 12 and 13
D-1979-018 CP Renewal	July 24, 1985	7, 8, 9, 10, 12 and 13
D-1979-018 CP Renewal 2	March 27, 1991	7, 8, 9, 10, 12 and 13
D-1979-018 CP Renewal 3	February 28, 1996	7, 8, 9, 10, 12 and 13
D-1979-018 CP-5	October 22, 2009	7, 8, 9, 10, 12 and 13

Issuance of this docket will continue the withdrawal project in the Comprehensive Plan.

B. FINDINGS

1. Ground Water Protected Area

The project is located within the Southeastern Pennsylvania Ground Water Protected Area delineated by the DRBC pursuant to *Compact* Section 10.2. Tests conducted by the docket holder indicate the operation of this project will not create a local water shortage. The project is designed to conform to the requirements of the *Water Code*, *Water Quality Regulations* and *Ground Water Protected Area Regulations (GWPAR)* of the DRBC.

Review and analysis of the application pursuant to Section 6.D. of the *GWPAR* result in the following:

1. The withdrawal is consistent with the Commission's Comprehensive Plan and the policies and purposes of these regulations.
2. Opportunities to satisfy water requirements on a timely basis from existing available supplies and facilities have been explored and are being utilized.
3. The withdrawal, in conjunction with other withdrawals in the applicable ground water basin, should not exceed withdrawal limits of the ground water basin, aquifer or aquifer system.
4. The withdrawal should not significantly impair or reduce the flow of perennial streams in the area.
5. Existing ground and surface water withdrawals should not be adversely impacted, or will be otherwise assured of adequate supplies in accordance with the requirements of Section

10 of the *GWPAR*. There have been no reported complaints of well interference since the 1997 approval of this renewal project. No adverse impact is anticipated due to continued operation of this project.

6. The withdrawal should not cause substantial, permanent adverse impact to the overlying environment.

7. The docket holder adopted and will implement conservation and management programs as required by Section 7 of the *GWPAR*.

The project does not conflict with the Comprehensive Plan, and is designed to prevent substantial adverse impact to the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The Borough of Doylestown's Wells 7, 8 and 10 are located in the Tohickon-Beaver-Morgan Creeks subbasin (Subbasin No. 39), where total net annual ground water withdrawal (456.9 million gallons per year (mgy)) is significantly less than the withdrawal limit set in Section 6.I of the *GWPAR* (1,541 mgy). The docket holder is requesting a monthly allocation of up to 29.8 mgm (357.6 mgy), a fraction of which will be returned to groundwater. However, even if no water from this project were returned to groundwater, the total net annual groundwater withdrawal from this subbasin would remain well below the withdrawal limits set in Section 6.I of the *GWPAR*. Therefore, the withdrawals from Wells 7, 8 and 10, in conjunction with other withdrawals in the subbasin, are in accordance with the requirements of Section 6.I of the *GWPAR*.

The Borough of Doylestown's Wells 9 and 12 are located in the Warwick Neshaminy Creek subbasin (Subbasin No. 5), where total net annual groundwater withdrawal (217.19 mgy) is less than the withdrawal limit set in Section 6.I of the *GWPAR* (1,181.29 mgy). The docket holder is requesting a monthly allocation of up to 18.53 mgm (222.4 mgy), a fraction of which will be returned to groundwater. Even if no water from this project were returned to groundwater, the total net annual groundwater withdrawal from this subbasin would remain below the withdrawal limits set in Section 6.I of the *GWPAR*. Therefore, the withdrawals from Wells 9 and 12 in conjunction with other withdrawals in the subbasin are in accordance with the requirements of Section 6.I of the *GWPAR*.

2. 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. The docket holder submitted their most recent Water Audit on March 20, 2019.

The DRBC 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*.

C. DECISION

Effective on the approval date for Docket No. D-1979-018 CP-6 below, the project described in Docket No. D-1979-018 CP-5 is removed from the Comprehensive Plan to the extent that they are not included in Docket No. D-1979-018 CP-6; Docket No. D-1979-018 CP-5 is terminated and replaced by Docket No. D-1979-018 CP-6; and the project and the appurtenant facilities described in in Section A.4. (Design Criteria) and A.5. (Facilities) shall be continued in the Comprehensive Plan. The project and appurtenant facilities as described in in Section A.4. (Design Criteria) and A.5. (Facilities) are approved subject to the following conditions, pursuant to Section 3.8 of the *Compact*:

Monitoring and Reporting

1. 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.

2. 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.

3. The docket holder shall continue to 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.

4. The docket holder is responsible for timely submittal to the DRBC of a docket renewal application on the appropriate application form including the appropriate docket application filing fee (see 18 CFR 401.43) at least 6 months in advance of the docket expiration date set forth below. The docket holder will be subject to late filed renewal surcharges 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, 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.

Other Conditions

5. During any month, the combined withdrawal from all well sources shall not exceed 48.0 million gallons (576 mgy). No well shall be pumped above the maximum rate and monthly allocation as indicated below:

WELL NO.	MAXIMUM RATE (GPM)	MONTHLY ALLOCATION (MGM)
7	350	10.6
8	250	9.6
9	350	9.6
10	350	9.6
12	200	8.93

6. The well and operational records shall be available at all times for inspection by the DRBC.

7. The well shall be operated at all times to comply with the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

8. The wells shall be equipped with readily accessible capped ports and minimum ½ inch inner diameter (ID) drop pipes so that water levels may be measured under all conditions. Existing wells are to be similarly equipped, where possible, with readily accessible ports and ½ inch ID drop pipes as repairs or modifications are made at each existing well.

9. The project withdrawals shall be metered by means of an automatic continuous recording device, flow meter, or other method, and shall be measured to within 5 percent of actual flow. Meters or other methods of measurement shall be subject to approval and inspection by the PADEP as to the type, method, installation, maintenance, calibration, reading and accuracy. 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.

10. Each new water service connection shall include a water meter in accordance with the DRBC's Resolution No. 87-7 (Revised).

11. 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).

12. The docket holder shall implement to the satisfaction of the PADEP, a drought or other water supply emergency plan.

13. 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.

14. 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.

15. 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*.

16. The docket holder shall be subject to applicable DRBC regulatory program fees, in accordance with duly adopted DRBC resolutions and/or regulations. (see 18 CFR 401.43).

17. This approval is transferable by request to the DRBC Executive Director provided that the project purpose and area served approved by the Commission in this docket will not be materially altered because of the change in project ownership. The request shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 CFR 401.35).

18. The docket holder shall request a name change of the entity to which this approval is issued if the name of the entity to which this approval is issued changes its name. The request for name change shall be submitted on the appropriate form and be accompanied by the appropriate fee (see 18 CFR 401.35).

19. 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.

20. If the monitoring required herein or any other relevant data or information demonstrates that the operation of this project is interfering with or otherwise impairing existing uses of ground or surface water, or if the docket holder receives a complaint from an existing ground or surface water user within the zone of influence of the withdrawal alleging such interference or impairment, the permit holder shall immediately notify the Executive Director, and unless excused by the Executive Director, shall investigate the demonstrated or alleged impacts. For purposes of this condition, notification shall mean either (a) electronic transmittal of written notice to the Executive Director via email (using addresses posted on the DRBC website); or (b) written notice to the Executive Director and a telephone call to the Project Review Section at 609-883-9500, ext. 216. (Oral notification must always be accompanied by immediate written notification directed to the Executive Director.) In addition, the docket holder shall provide written notice to all potentially affected water users of the docket holder's responsibilities under this condition. **Any well or surface water supply that is impaired as a result of the docket holder's**

project withdrawal shall be repaired, replaced or mitigated at the docket holder's expense. The scope of the options to consider for repair, replacement and/or mitigation shall not be limited solely to those that are owned, operated, or controlled by the project sponsor. An investigation report and/or mitigation plan prepared and certified by a licensed professional engineer and/or a licensed professional geologist shall be submitted to the Executive Director as soon as practicable following notice of the demonstrated or alleged impairment consistent with this paragraph. The Executive Director shall make the final determination regarding the scope and sufficiency of the investigation and the extent of any mitigation measures that may be required. Where ground and surface waters are rendered unavailable, unusable, or unsuitable for the pre-existing use, the Executive Director may direct the docket holder to take interim actions to mitigate such impacts, pending completion of the investigative report and any long-term repair, replacement or mitigation.

21. 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.

22. 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: June 12, 2019

EXPIRATION DATE: June 12, 2029