

DOCKET NO. D-1991-086 CP-4

DELAWARE RIVER BASIN COMMISSION

**Southeastern Pennsylvania
Ground Water Protected Area**

**Aqua Pennsylvania, Inc. – Great Valley Division
Groundwater Withdrawal
East Goshen, West Goshen and West Whiteland Townships, Chester County,
Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) on February 28, 2024 for renewal of an allocation of groundwater and review of a groundwater withdrawal project (Application). The Pennsylvania Department of Environmental Protection (PADEP) public water supply permits issued for the docket holder's water supply wells are as follows:

WELL NO.	PADEP PERMIT NO.	PADEP APPROVAL DATE
Grand Oak 4	765W29 T1	11/29/1965
Pomona Park 7	768W011 T1	12/20/1985
Highland Glen 9	768W009 T1	12/20/1985
Pottstown Pike 16	1573506 T1	4/24/1974
Hunt Country 21A, 21B, 21C and 21D	1584502	10/26/1984

The Application was reviewed for continuation of the project 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 Chester County Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on August 7, 2024.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to renew the approval of an existing supply of groundwater to the docket holder's public water supply distribution system from existing Wells Grand Oak 4, Pomona Park 7, Highland Glen 9, Pottstown Pike 16, Hunt Country 21A, 21B, 21C and 21D. The total allocation of groundwater will remain 43.264 million gallons per month (mgm).

2. **Location.** Wells Hunt Country 21A through D are completed in Baltimore Gneiss; Wells Grand Oak 4 and Pomona Park 7 are completed in Gneiss; Well Highland Glen 9 is completed in Serpentine Schist; and Pottstown Pike 16 is completed in Wissahickon Schist. Well Grand Oak 4 is located in the Chester Creek Watershed, Well Pomona Park 7 is located in the Plum Run Watershed, Wells Highland Glen 9 and Pottstown Pike 16 are located in the Broad Run Watershed and the Hunt Country Wells are located in the Ridley Creek Watershed. The project wells are located in East Goshen, West Goshen and West Whiteland Townships, all in Chester County, Pennsylvania.

Specific location information has been withheld for security reasons.

3. **Area Served.** The docket holder's distribution system supplies water to portions of West Whiteland, Uwchlan, East Bradford, East Goshen, West Goshen, Westtown and Birmingham Townships, all located in Chester County, Pennsylvania. The area served is outlined on a map entitled "Source and Service Area Plan Great Valley Division" submitted with the Application. For the purpose of defining Area Served, the Application is incorporated herein by reference consistent with conditions contained in Section C. DECISION of this docket.

4. **Design Criteria.** The docket holder's Great Valley Division supplies potable water to an estimated population of approximately 36,744 via 14,553 domestic, 1,205 commercial, 19 industrial and 1,983 other/ institutional connections. The average and maximum groundwater demand for this project are 0.82 million gallons per day (mgd) and 1.0 mgd, respectively. The docket holder projects an average and maximum water demand of 1.174 mgd and 1.396 mgd, respectively, by the year 2034. The allocation of 43.264 mgm should be sufficient to meet the future demands of the docket holder's water distribution system.

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
Grand Oak 4	134	43' / 8"	215	1965
Pomona Park 7	190	32' / 8"	66	1965
Highland Glen 9	237	60' / 8"	200	1972
Pottstown Pike 16	360	52' / 6"	174	1966
Hunt Country 21A	400	70' / 6"	68	1980
Hunt Country 21B	360	44' / 6"	31	1980
Hunt Country 21C	230	44' / 6"	94	1980
Hunt Country 21D	179	46' / 8"	121	1980

All water service connections are metered.

All wells are metered.

Prior to entering the distribution system, the groundwater is disinfected.

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

The Aqua PA – Great Valley Division water distribution system is presently interconnected with the Aqua PA Main Division system, Aqua PA West Chester Division and the Chester Water Authority. All interconnections are used on a regular basis.

6. Other. Wastewater is conveyed to the West Chester Area Municipal Authority sewage treatment facility which received approval most recently by DRBC Docket No. D-1990-072 CP on October 24, 1990. The treatment facility has adequate capacity to receive wastewater from the proposed project. The PADEP issued NPDES Permit NoPA0026018 for this facility

Wastewater is also conveyed to the Birmingham Township sewage treatment facility which received approval most recently by DRBC Docket No. D-1991-028 CP on September 25, 1991. The treatment facility has adequate capacity to receive wastewater from the proposed project. The PADEP issued NPDES Permit No. PA0053449 for this facility.

7. Relationship to the Comprehensive Plan. The docket holder's wells were previously included in the Comprehensive Plan by Dockets Nos. D-1965-041 CP, D-1965-078 CP, D-1965-166 CP, D-1968-131 CP, D-1973-214 CP, D-1978-095 CP, D-1980-088 CP, D-1981-074 CP, D-1983-028 CP, D-1984-030 CP, D-1985-019 CP and D-1991-086 CP which were approved on April 28, 1965, July 28, 1965, December 29, 1965, September 25, 1968, July 31, 1974, May 28, 1980, September 22, 1982, April 27, 1982, August 15, 1984, January 22, 1986, February 26, 1986 and August 12, 1992, respectively. The total system's approval was continued in Docket Nos. D-1991-086 CP-2 and D-1991-086 CP-3, which were approved on May 18, 2005 and March 11, 2015, respectively. Issuance of this docket will continue the public water supply distribution system 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. Historical use by the docket holder indicates the operation of this project will not create a local water shortage.

Review and analysis of the application pursuant to Section 6.D. of the *GWP*AR 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 groundwater basin, should not exceed withdrawal limits of the groundwater 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 water distribution system's original approval of this 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 docket holder's Hunt Country wells (21A, 21B, 21C and 21D) are located in the Upper Reach Ridley Creek subbasin (Subbasin No. 11), where total net annual groundwater withdrawal (115.16 mgy) is less than the withdrawal limit set in Section 6.I of the *GWPAR* (2,275 mgy). The total annual groundwater allocation from these four wells is 14.017 mgm (168.204 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 below the withdrawal limits set in Section 6.I of the *GWPAR*. Therefore, the withdrawals from the docket holder's wells, in conjunction with other withdrawals in the subbasin, are in accordance with the requirements of Section 6.I of the *GWPAR*.

The docket holder's Well Grand Oak 4 is located in the Upper Reach East Branch Chester Creek subbasin (Subbasin No. 33), where total net annual groundwater withdrawal (56.178 mgy) is less than the withdrawal limit set in Section 6.I of the *GWPAR* (2,486 mgy). The total annual groundwater allocation from Well Grand Oak 4 is 9.598 mgm (115.176 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 below the withdrawal limits set in Section 6.I of the *GWPAR*. Therefore, the withdrawals from Well Grand Oak 4, in conjunction with other withdrawals in the subbasin, are in accordance with the requirements of Section 6.I of the *GWPAR*.

The docket holder's Well Pomona 7 is located in the Upper Reach Brandywine Creek subbasin (Subbasin No. 36), where total net annual groundwater withdrawal (15.43 mgy) is less than the withdrawal limit set in Section 6.I of the *GWPAR* (2,153 mgy). The total annual groundwater allocation from Well Pomona 7 is 2.955 mgm (35.46 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 below the withdrawal limits set in Section 6.I of the *GWPAR*. Therefore, the withdrawals from Well Pomona 7, in conjunction with other withdrawals in the subbasin, are in accordance with the requirements of Section 6.I of the *GWPAR*.

The docket holder's Wells Highland Glen 9 and Pottstown Pike 16 are located in the West Valley Creek subbasin (Subbasin No. 31), where total net annual groundwater withdrawal (2506.812 mgy) is more than the withdrawal limit set in Section 6.I of the *GWPAR* (2,230 mgy). This is due to the PADEP designating a quarry withdrawal as a groundwater withdrawal. If the quarry withdrawal was removed from the withdrawals in this subbasin the total net annual withdrawal would be 790.576 mgy. The total annual groundwater allocation from Wells Highland Glen 9 and Pottstown Pike 16 is 16.694 mgm (200.328 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 below the withdrawal limits set in Section 6.I of the *GWPAR*. Therefore, the withdrawals from Wells Highland Glen 9 and Pottstown Pike 16, 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 (WC)* 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 25, 2024.

3. Other Findings

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*.

The project is designed to conform to the requirements of the *Water Code (WC)*, *Water Quality Regulations (WQR)* and *Ground Water Protected Area Regulations (GWPAR)* of the DRBC.

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.

C. DECISION

Effective on the approval date for Docket No. D-1991-086 CP-4 below, the project described in Docket No. D-1991-086 CP-3 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1991-086 CP-4; Docket No. D-1991-086 CP-3 is terminated and replaced by Docket No. D-1991-086 CP-4; 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. The docket holder shall continue to report to the PADEP all surface and groundwater sources described in this docket in accordance with the Pennsylvania Regulations (Title 25 - Environmental Protection, [25 PA. CODE CH. 110], Water Resources Planning).

2. 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.

3. A long-term monitoring program is required to obtain data on ground water and surface water hydrologic conditions in the project area. The docket holder shall continue to implement the long-term monitoring program as submitted by the docket holder in a letter dated April 5, 2005. This program will include the following:

1. **Groundwater Level Monitoring** – The docket holder shall monitor nine (9) wells identified in the above referenced letter to estimate annual ground water fluctuations caused by seasonal changes and/or production well pumping and detect water level declines that may affect the performance of public and private wells in the area of the Aqua PA production wells.
2. **Reports** - All monitoring data, including records required in Conditions “2.” and “3.” herein shall be submitted to the Commission annually, due by April 1. The docket holder is

encouraged to submit the annual report electronically. The report shall be prepared by a hydrogeologist and shall assess the effects of well withdrawals on hydrologic conditions in the area. This report shall include an evaluation of the monitoring data required by this docket approval and such information as deemed appropriate by the hydrogeologist or required by the Executive Director.

3. The Executive Director may modify the monitoring program or temporarily suspend or modify this docket at any time if review of the hydrologic data and/or any other information indicates such action is necessary or appropriate.

4. 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.

5. In accordance with DRBC Resolution No. 2009-1 and Section 2.1.8 of the WC, 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.

6. The docket holder shall implement to the satisfaction of the PADEP, a 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.

7. 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.

Other Conditions

8. During any month, the combined withdrawal from all well sources shall not exceed 43.264 mgm or 519.168 mgy. No well shall be pumped above the maximum rate and monthly allocation as indicated below:

WELL NO.	INSTANTANEOUS ALLOCATION (GPM)*	MONTHLY ALLOCATION (MILLION GALLONS)
Grand Oak 4	215	9.598
Pomona 7	66	2.955
Highland Glen 9	200	8.928
Pottstown Pike 16	174	7.766
Hunt Country 21A	68	3.036
Hunt Country 21B	31	1.384
Hunt Country 21C	94	4.196
Hunt Country 21D	121	5.401

*Based on a 24-Hour Average

9. In accordance with 18 C.F.R. 401.8. of the Commission's *Rules of Practice and Procedure (RPP)*, if at any future time the Project is changed materially from the Project as described in this docket, it will be deemed to constitute a new and different project for the purposes of Article 11 of the Delaware River Basin *Compact* and will require Commission amendment of the Comprehensive Plan. In accordance with the same section of the *RPP*, whenever a change to the Project is made, the sponsor must advise the Executive Director, who will determine whether the change is deemed materially for purposes of this provision.

10. Section 2.3.10 of the Commission's *Rules of Practice and Procedure* (18 C.F.R. 401.41), limiting the Commission's approval to five years in the absence of an expenditure of substantial funds by the project sponsor in reliance on the approval, is hereby waived for good cause shown in accordance with Section 2.9.3 (18 C.F.R. 401.123) of the same regulations. This approval shall expire on the expiration date set forth below unless prior thereto the docket holder has applied to the Commission to renew or extend this approval.

11. 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 DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. If the docket holder has not applied to renew the docket or the DRBC is unable to reissue the docket before the expiration date below, the terms and conditions of the current docket will remain fully effective and enforceable pending the renewal of the docket.

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

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

14. 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.

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

16. 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).

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

18. 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.

19. 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.

20. 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*.

21. 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).

22. 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 401.43).

23. 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 401.43).

24. 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 ensure the proper control, use and management of the water resources of the Basin.

25. 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.

26. 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.

27. 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 5, 2024

EXPIRATION DATE: September 5, 2034