

Susquehanna River Basin Commission

4423 North Front Street • Harrisburg, Pennsylvania 17110-1788 (717) 238-0423 Phone • (717) 238-2436 Fax www.srbc.net

Docket No. 20220901 Approval Date: September 15, 2022

AQUA PENNSYLVANIA, INC. FACILITY: MONROE MANOR SYSTEM

Groundwater Withdrawal (30-Day Average) of 0.482 mgd from Well 8, and Total System Withdrawal Limit (30-Day Average) of 0.600 mgd

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission has determined that no significant adverse impacts are anticipated by the operation of this project as described and conditioned herein, the project is physically feasible, and does not conflict with or adversely affect the Commission's Comprehensive Plan. Accordingly, the Commission hereby approves the project described herein in accordance with the conditions set forth below.

The project sponsor maintains and operates a public water supply system that currently includes four groundwater sources (Wells 4, 6, 7, and 8), all of which are incorporated into the total system limit. The project sponsor also maintains an emergency interconnection with Shamokin Dam Borough; receipt of water from the interconnection is not included in the total system limit. The project sponsor has indicated that Well 8 will serve to replace capacity of Wells 4 and 7. Based on information provided by the project sponsor, no other sources are operated by the project, and Wells 4 and 7 are expected to be abandoned after Well 8 is brought online. This approval authorizes the withdrawal from Well 8 at the requested rate and establishes a reduced total system limit of 0.600 million gallons per day (mgd), which is higher than projected demand indicated by the project sponsor, but consistent with the 15-year projected demand through 2037.

Well 8 is replacing Well 7, which is being abandoned due to the construction of a new highway, and Well 4, which is not in use but may be kept in reserve until highway construction is completed. Therefore, the project sponsor has requested Well 8 be limited to 335 gallons per minute (gpm), the total of the previously Pennsylvania Department of Environmental Protection (PADEP)-permitted maximum instantaneous pumping rates for Well 4 of 125 gpm and for Well 7 of 210 gpm.

Should demand exceed the total system limit established herein, the project sponsor may submit a minor modification application in accordance with 18 CFR § 806.18(c)(7) to request an increase to the total system limit, as the total system limit established herein is based on the 15-year projected demand.

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Commission staff has coordinated with PADEP and the Pennsylvania Fish and Boat Commission (PFBC) during review of this project.

Section 2. Project Information

Information concerning the project sponsor, water use type, and location are set forth in the table below.

Project Information				
Project Sponsor:	Aqua Pennsylvania, Inc.			
Facility:	Monroe Manor System			
Approval Type:	Groundwater Withdrawal			
Authorized Water Use Purpose:	Public Water Supply			
Municipality:	Monroe Township			
County:	Snyder County			
State:	Pennsylvania			

Section 3. Source Information

Information concerning the source of water from which the withdrawal will be made is set forth in the table below.

Source Information				
Withdrawal Type:	Groundwater			
Approved Source:	Well 8			
Subbasin:	Middle Susquehanna			
Watershed Boundary Dataset (WBD):	0205030104 (Penns Creek)			
Withdrawal Location (degrees)*:	Lat:	Long:		
Special Flow Protection Required:	No			
* Specific location information concerning discrete water-related project features has been withheld for security reasons.				

Section 4. Aquifer Testing

The constant-rate aquifer testing required by 18 CFR § 806.12 for groundwater withdrawals was completed with prior Commission approval. A 72-hour, constant-rate aquifer test of Well 8 was conducted from October 18 through 21, 2021, pumping at an average rate of 340 gpm.

Aquifer testing of Well 8, with concurrent pumping from Well 6 at a reduced rate of 236 gpm, demonstrated that significant adverse impacts may occur at a nearby residential well at the combined rate of 576 gpm. Because concurrent operation of Wells 6 and 8 will be required

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to meet the current and projected system demand, staff evaluated the potential drawdown from operating Wells 6 and 8 at their respective maximum withdrawal rates and found that the combined use of Wells 6 and 8 may cause approximately 35 feet of drawdown at the residential well, which would reduce the available water column by approximately 46 percent. Furthermore, sedimentation within the nearby residential well, which required redevelopment to restore the well function, may be attributed to the operation of Well 6, the drilling and development of Well 8, or both, and was documented at a depth of 105 feet below ground surface (bgs), 17 feet above the pump intake. To avoid adverse impacts to the nearby residential well, the project sponsor committed to developing a monitoring and mitigation plan for review and approval by Commission staff in accordance with Special Condition 22.

Commission staff determined that the withdrawal from Well 8 at the requested withdrawal rate should not cause permanent loss of aquifer storage, render competing supplies unreliable, or cause adverse impacts to the water resources of the basin, subject to the conditions set forth below.

Section 5. Approved Withdrawal Quantities and Limitations

The withdrawal approved hereunder is subject to the quantitative limits and restrictions set forth in the table below.

Approved Withdrawal Quantities and Limitations				
30-Day Average Withdrawal (mgd):	0.482			
Maximum Instantaneous Withdrawal Rate (gpm):	335 (Not to Exceed)			
Peak Day Withdrawal (mgd):	0.483			
Total System Withdrawal Limit – Wells 4, 6, 7, and 8				
(30-Day Average) (mgd):	0.600			

The withdrawal is also subject to all other conditions set forth in this docket approval.

Section 6. Existing Approved Withdrawals

Quantities applicable to the existing approved withdrawals are listed in the table below.

Existing Approved Groundwater Withdrawals					
Source	30-Day Average Withdrawal (mgd)	Commission Docket No.	Docket Expiration Date		
Well 4	0.180	20100904	September 15, 2025		
Well 6	0.391	20101202	December 15, 2025		
Well 7	0.302	20110602	June 22, 2026		

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Section 7. Grandfathering Determination – Withdrawals

All withdrawals used by the project have Commission approval.

Section 8. Standard Conditions

- 1. The project sponsor shall comply with all Commission regulations, 18 CFR Parts 801, 806, and 808. This project is subject to the Annual Compliance and Monitoring fee as specified in the Commission's Regulatory Program Fee Schedule, which may be modified over the term of the approval.
- 2. The project sponsor shall adhere to the metering plan reviewed and approved by Commission staff. Any modifications proposed for the metering plan shall be submitted for review and, if appropriate, approval by Commission staff in accordance with 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan.
- 3. The project sponsor shall maintain the totalizing meter and other flow and volume measuring devices, accurate to within five (5) percent, so as to provide an accurate record of withdrawals, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.
- 4. The project sponsor shall keep daily records of the project's withdrawals and groundwater elevations for the sources listed in Sections 3 and 6, and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure, and any modifications proposed for the groundwater elevation monitoring plan, shall be submitted for review and approval by Commission staff in accordance with 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.
- 5. The project sponsor or any other person representing the project sponsor shall allow authorized employees or agents of the Commission, without advance notice, at any reasonable time and upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas where the project is being constructed, operated, or maintained, or otherwise exercise all investigative powers authorized under 18 CFR § 808.12.
- 6. In accordance with 18 CFR § 806.30(b)(2), the project sponsor shall report violations of any withdrawal limits and any conditions of this approval within five (5) days of such violation or report loss of measuring or recording capabilities required under 18 CFR § 806.30(a)(1) within five (5) days after any such loss.

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- 7. In accordance with 18 CFR § 806.6, if ownership of the project changes or if the project sponsor undergoes a name change, the project sponsor shall submit application for transfer or reissuance of all approvals to the Commission within ninety (90) days of the change in ownership or project sponsor name change.
- 8. The project sponsor shall comply with the water conservation requirements specified in 18 CFR § 806.25.
- 9. This approval is conditioned on the project sponsor maintaining legal access to the withdrawal location for the duration of the approval.
- 10. The project sponsor shall register with the appropriate agency all groundwater sources described herein, as may be required by regulations of the member jurisdiction.
- 11. If the project sponsor fails to comply with the provisions of the Susquehanna River Basin Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the project sponsor is subject to enforcement actions pursuant to 18 CFR Part 808.
- 12. Commission approval shall not be construed to exempt the project sponsor from obtaining and maintaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. All such permits and/or approvals shall be obtained prior to the withdrawal of water. The Commission may modify, suspend, or revoke this approval if the project sponsor fails to obtain or maintain such permits and/or approvals.
- 13. The Commission may at any time reopen any project approval or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment, pursuant to 18 CFR § 806.32.
- 14. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.
- 15. This project is approved for inclusion in the Commission's Comprehensive Plan for the Water Resources of the Susquehanna River Basin.
- 16. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawal that would exceed the amounts listed herein.
- 17. The project sponsor is required to apply for and obtain approval prior to any increase in the total system withdrawal that would exceed the approved total system withdrawal limits listed herein.

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18. If the Commission determines that the operation of the project's groundwater withdrawal adversely affects any existing groundwater or surface water withdrawal, the project sponsor shall be required to provide, at its expense, an alternate water supply or other mitigating measure.

Section 9. Special Conditions

- 19. The project sponsor shall comply with the water conservation requirements and reduce system water losses to less than twenty (20) percent to comply with 18 CFR § 806.25(a)(1). The project sponsor shall reduce system losses and achieve compliance with the water conservation requirements within five (5) years of the effective date of this docket approval unless the Commission grants an extension of time due to extenuating circumstances described, in writing, by the project sponsor. The project sponsor shall report to the Commission annually on the progress made pursuant to this requirement. Annual reports are due within sixty (60) days after the close of the preceding calendar year. If the project sponsor can show that system water losses are below twenty (20) percent for two (2) consecutive calendar years, annual reports for the remainder of the five (5)-year period may no longer be required following written notification from Commission staff.
- 20. The date of the last meter certification was February 3, 2022; therefore, the next meter certification is due no later than February 3, 2027. Certification of meter accuracy shall be provided to the Commission no less frequent than once every five (5) years from the date of the last certification.
- 21. The project sponsor shall adhere to the groundwater elevation monitoring plan reviewed and approved by Commission staff for the source listed in Section 3. Prior to any withdrawal from the source listed in Section 3, the project sponsor shall install and maintain water level monitoring equipment in accordance with 18 CFR § 806.30. The project sponsor shall notify the Commission, in writing, and submit make, model, serial numbers, and photographs of the water level monitoring equipment when it has been installed and certify the accuracy of the measuring devices. Withdrawals shall not commence until Commission staff has approved the implementation of the approved groundwater elevation monitoring plan and notified the project sponsor of such approval. The project sponsor shall maintain and monitor the accuracy of the measuring devices in accordance with the manufacturer's specifications.
- 22. The project sponsor, in coordination with the property owner, has committed to developing a monitoring and mitigation plan to provide ongoing evaluation of potential significant adverse impacts regarding sedimentation, water level diminution, and turbidity to a nearby private water supply well, and establish mitigation actions and conditions to implement mitigation, as needed.
 - a. Within thirty (30) days from the date of this approval, the project sponsor shall submit a monitoring and mitigation plan for review and, if appropriate, approval by Commission staff. The monitoring and mitigation plan shall include a description of water level, turbidity, and sedimentation monitoring; identify

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conditions or triggers for implementing mitigation; and describe post-mitigation monitoring that will be performed to verify that mitigation was successful.

- b. Monitoring in accordance with the approved monitoring and mitigation plan shall begin within thirty (30) days of staff approval of the monitoring and mitigation plan and prior to initiation of withdrawal from Well 8. The project sponsor shall provide written notification to Commission staff within seven (7) days of the start of monitoring.
- c. The project sponsor shall provide written notification within seven (7) days of initiating withdrawal from Well 8.
- d. The project sponsor shall evaluate the monitoring data at least quarterly and Commission staff shall be notified within three (3) days of identifying that significant adverse impacts have occurred or will occur, or that a complaint from the property owner has been received.
- e. The project sponsor shall perform monitoring for a minimum of three (3) years. Monitoring shall continue until staff determines, and informs the project sponsor in writing, that monitoring has demonstrated that significant adverse impacts will not occur and that monitoring can cease.
- f. The project sponsor shall submit an interpretive report to the Commission for staff's review by January 31 annually.
- g. If mitigation trigger conditions are met, the project sponsor shall provide mitigation as defined in the monitoring and mitigation plan. Within fourteen (14) days of completing mitigation, the project sponsor shall provide documentation of the mitigation activities to Commission staff.
- h. Post-mitigation monitoring, if needed, shall be performed to confirm mitigation efforts have been sufficiently completed. If applicable, post-mitigation monitoring shall be completed for at least one (1) year from implementation of mitigation, and annual reports shall continue to be provided by January 31 of each year, until Commission staff informs the project sponsor, in writing, that mitigation was successful and that post-mitigation monitoring can cease.
- i. If appropriate, Commission staff may extend, delay, terminate, or modify the mitigation methods and requirements of this condition accordingly. Additionally, Commission staff may revise existing or impose new conditions regarding the mitigation of the nearby private water supply well if monitoring under this condition indicates that additional mitigation is needed.
- 23. This docket does not authorize concurrent operation of Wells 7 and 8. Within thirty (30) days of completing abandonment, the project sponsor shall provide the Commission with of

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a copy of the Water-Well Abandonment Form that will be sent to PADEP and the Pennsylvania Department of Conservation and Natural Resources, and request that the Commission rescind Docket No. 20110602 for Well 7.

- 24. The project sponsor shall only supply water for use in hydrocarbon development to persons who have properly registered or received approval pursuant to 18 CFR § 806.22(f), as applicable.
- 25. The project sponsor shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for use in hydrocarbon development, including daily quantities supplied. The project sponsor also shall keep records, and shall report the same to the Commission upon request, of all persons supplied water from the project that maintain a permanent connection to the public water supply system. The project sponsor shall also keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project that do not maintain a permanent connection to the public water supply system for uses other than hydrocarbon development, including daily quantities supplied.

Section 10. Term

- 26. The project sponsor has a period of three (3) years from the date of this approval to commence the withdrawal or this approval will automatically expire, unless an extension is requested, in writing, by the project sponsor no later than one hundred twenty (120) days prior to such expiration and approved by the Commission as provided in 18 CFR § 806.31(b).
- 27. This approval is effective until September 14, 2037. As specified in 18 CFR § 806.31(e), if the project sponsor submits an application on or before March 14, 2037, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Jason E. Oyler, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on September 15, 2022.

Dated: September 16, 2022

Jason E. Oyler, Esq.