

# Susquehanna River Basin Commission

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Docket No. 20240613 Approval Date: June 13, 2024

#### MOUNT JOY BOROUGH AUTHORITY

Groundwater Withdrawal (30-Day Average) of 1.020 mgd from Well 3, and Total System Withdrawal Limit (30-Day Average) of 1.540 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 renewal of the project described herein in accordance with the conditions set forth below.

The project sponsor maintains and operates a public water supply system that includes three groundwater sources (Wells 1, 2, and 3), all of which are incorporated into the total system withdrawal limit. Based on information provided by the project sponsor, no other sources are operated by the project and the project does not operate any interconnections with other public water supply systems.

The Commission previously approved the withdrawal of 1.020 million gallons per day (mgd) and 778 gallons per minute (gpm) from Well 3 under Commission Docket Nos. 20070607 and 20070607-1, which also include passby flow conditions. The project sponsor submitted a groundwater withdrawal renewal application requesting approval to withdraw up to 1.020 mgd from Well 3, elimination of the passby condition, and to establish Well 3 as the primary well, with Wells 1 and 2 being established as supplemental or secondary to Well 3. This approval authorizes continued withdrawals at the requested rate and reduces the total system withdrawal limit from 2.600 mgd established under Commission Docket No. 20110617-2 to 1.540 mgd based on updated projected demand. Concurrent with this renewal, the Commission initiated and approved a modification of Commission Docket No. 20110617 that supersedes Commission Docket No. 20110617-2.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (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:	Mount Joy Borough Authority		
Approval Type:	Groundwater Withdrawal		
Previous Docket Nos.:	20070607 and 20070607-1		
<b>Authorized Water Use Purpose:</b>	Public Water Supply		
Municipality:	Mount Joy Borough		
County:	Lancaster 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 3			
Subbasin:	Lower Susquehanna			
Watershed Boundary Dataset (WBD):	0205030608 (Chiques 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**

Commission staff determined that the requirements of 18 CFR § 806.12 were met in 2005 with prior approval of an aquifer testing plan and an aquifer test for Well 3. A 72-hour, constant-rate aquifer test of Well 3 was conducted on January 21 through 24, 2005, pumping at an average rate of 1,404 gpm. Commission staff found that the project sponsor provided the necessary information and reports that are required under 18 CFR § 806.14 for comparison to results of prior hydrogeologic evaluations and to evaluate potential impacts to other users, impacts to the environment, and the sustainability of the withdrawal at the requested withdrawal rate.

Aquifer testing in 2005 demonstrated that operation of Well 3 reduced flow in a nearby tributary to Little Chiques Creek and staff concluded that flow in Little Chiques Creek would be impacted at the requested withdrawal rate. Therefore, the original approval for Well 3 included a passby condition requiring the project sponsor to cease withdrawals when flow thresholds are met.

The original approval was modified on June 16, 2017, approving a reduced instantaneous pumping rate and modifying the passby condition.

For this renewal, the project sponsor requested the following:

- 1. Renewal at previously approved rates of 1.020 mgd (30-day average), a maximum instantaneous withdrawal rate of 778 gpm, and elimination of the passby condition for Well 3;
- 2. A condition requiring Well 3 to be operated as the primary well for the system; and
- 3. A condition requiring Wells 1 and 2 to be operated as supplemental or secondary sources for when Well 3 cannot meet system demand or the well or related treatment system is inoperable due to maintenance or repair.

Because the requested renewal included establishing order or priority of use of all the system sources and an elimination of the prior passby condition on Well 3, Commission staff evaluated and considered the potential impacts to the water resources by operation of withdrawals from Wells 1, 2, and 3 in their respective watersheds. Withdrawals from Wells 1 and 2 cause documented significant flow reductions to Charles Spring, which contributes flow to the Donegal Creek Watershed. The Donegal Creek Watershed is significantly smaller than the Little Chiques Creek Watershed at the point of impact for Well 3. Donegal Creek is also identified as a Class B-D wild trout stream, where Little Chiques is only designated as trout stocked. Shifting impacts of the withdrawals from a small, spring-dependent higher quality and more sensitive watershed to a larger watershed should prove to be more beneficial to the smaller watershed than deleterious to the larger watershed. In addition, the Mount Joy Wastewater Treatment Plant outfall is located approximately 1.5 stream miles downstream of Well 3, limiting the extent of the impacted reach. Additionally, the project sponsor built a water treatment system for Well 3 that has been only minimally used due to the passby and logistics of operating the treatment plant, as the membrane filtration plant requires extensive and time-consuming start-up and shutdown procedures. Therefore, Commission staff recommends approval of the requested withdrawal from Well 3 without a passby condition, in combination with establishing priority of Well 3 use as the primary source in accordance with Special Conditions 21 and 22. Staff also recommends concurrent approval of a separate modification to the Well 1 and Well 2 docket by including Special Conditions 21 and 22 of this approval for Well 3 to establish priority of use of the system sources.

Following completion of the water resource development plan required under Commission Docket No. 20110617-1, staff recommends that the Commission evaluate system demands and the ability of sources to meet demands to determine if withdrawals from Well 3 should be conditioned with special flow protection to avoid potential long-term significant adverse impacts to surface water features.

Commission staff determined that the withdrawal from Well 3 at the requested withdrawal rate should not cause permanent loss of aquifer storage or render competing supplies unreliable. Beneficial changes are being implemented by shifting potential adverse impacts to a less sensitive watershed and are acceptable in the interest of public health and welfare during the interim

operating period until the full implementation of the water resource development plan, 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):	1.020			
Maximum Instantaneous Withdrawal Rate (gpm):	778 (Not to Exceed)			
Peak Day Withdrawal (mgd):	1.120			
Total System Withdrawal Limit – Wells 1, 2, and 3				
(30-Day Average) (mgd):	1.540			

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 1	1.300	20110617 20110617-1 20110617-3	June 22, 2026		
Well 2	1.270	20110617 20110617-1 20110617-3	June 22, 2026		

# 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 adhere to the groundwater elevation monitoring plan reviewed and approved by Commission staff for the sources listed in Sections 3 and 6. The project sponsor shall maintain and monitor the accuracy of the measuring devices in accordance with the manufacturer's specifications.
- 5. The project sponsor shall keep daily records of the project's withdrawal and groundwater elevations for the source listed in Section 3, 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.
- 6. 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.
- 7. 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.
- 8. 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.
- 9. The project sponsor shall comply with the water conservation requirements specified in 18 CFR § 806.25.
- 10. This approval is conditioned on the project sponsor maintaining legal access to the withdrawal location for the duration of the approval.

- 11. The project sponsor shall register with the appropriate agency all water sources described herein, and adhere to reporting requirements as may be required by regulations of the member jurisdiction.
- 12. 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.
- 13. 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.
- 14. 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.
- 15. 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.
- 16. This project is approved for inclusion in the Commission's Comprehensive Plan for the Water Resources of the Susquehanna River Basin.
- 17. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawal that would exceed the amounts listed herein.
- 18. 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.
- 19. 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**

20. The next meter certification is due within sixty (60) days of this approval or prior to operation, whichever is sooner. 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 utilize Well 3 as the primary system source, and Wells 1 and 2 shall be supplemental sources used only to meet daily system demand when Well 3 is not available or not capable of meeting system demand on its own.
- 22. The project sponsor shall provide written notification to Commission staff if Well 3 will not be operable or available for use in the distribution system for a period of five (5) consecutive days or longer.
- 23. The project sponsor 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, including daily quantities supplied.

#### Section 10. Term

- 24. This approval shall be effective immediately and shall remain effective until June 12, 2039. As specified in 18 CFR § 806.31(e), if the project sponsor submits an application on or before December 12, 2038, 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.
- 25. Commission Docket Nos. 20070607 and 20070607-1 shall remain effective through June 12, 2024, whereupon they shall expire.

**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 June 13, 2024.

Dated: June 14, 2024