

NY = PA = MD = USA

January 29, 2018

TO ALL CONCERNED:

At the December 8, 2017, Commission meeting, the draft minutes of the September 7, 2017, Commission meeting were approved as written. Please attach this notice to your copy of the September 7, 2017 minutes.

SUSQUEHANNA RIVER BASIN COMMISSION 4423 N. FRONT ST. HARRISBURG, PA 17110

MINUTES OF THE SUSQUEHANNA RIVER BASIN COMMISSION December 8, 2017

#2017-04

The meeting was held at the Loews Annapolis Hotel in Annapolis, Maryland. Chairman Chamberlayne called the meeting to order at 9:00 a.m.

ROLL CALL

Commissioners Present

Alternate Commissioners Present

Ms. Jennifer Orr, Director, Compact and Commissions Office, Pennsylvania Dept. of Environmental Protection (PADEP)
Ms. Virginia Kearney, Deputy Director, Water Management Administration (MDE)
Col. Edward Chamberlayne, District Engineer, U.S. Army Corps of Engineers (USACE), Baltimore District
Mr. Paul J. D'Amato, Region 8 Director, New York State Dept. of Environmental Conservation

(NYSDEC)

Ms. Amy Guise, Chief, Planning Division, USACE, Baltimore District

Staff Present

Mr. Andrew D. Dehoff, Executive Director Ms. Paula B. Ballaron, Manager, Policy Mr. Andrew J. Gavin, Deputy Executive Director Implementation & Outreach Ms. Marcia Hutchinson, Director, Administration Mr. Todd D. Eaby, Manager, Project Review & Finance Mr. Chuck Frank, Web Application Developer Mr. Brydon Lidle, Manager, Information Ms. Stephanie L. Richardson, Secretary to the Technology Commission Mr. Jason Oyler, General Counsel Mr. Pierre MaCoy, Hydrogeologist Ms. Gwyn Rowland, Manager, Governmental & Mr. Eric Roof, Manager, Compliance & **Public Affairs** Enforcement Mr. John W. Balay, Manager, Planning & Mr. Jamie Shallenberger, Manager, Monitoring & Operations Protection

1. **Opening Remarks from the Chair**

Chairman Chamberlayne opened the meeting by outlining the rules of conduct for the meeting. He noted that a public hearing was previously held on November 3, 2017. The Commissioners introduced themselves.

2. **Presentation: Commission Use of Technology**

SRBC Web Application Developer Chuck Frank gave a presentation on the use of technology at the Commission, highlighting the Mine Drainage Portal that provides public access to data compiled as part of the Commission's efforts to assess and track impacts to water quality from mine drainage in the basin.

3. Minutes of September 7, 2017, Commission Meeting

On a motion by Commissioner Kearney, seconded by Commissioner Orr, the minutes of the regular business meeting of September 7, 2017, were unanimously approved as written.

4. FY2019 Funding of the Groundwater and Streamflow Information Program

SRBC Planning & Operations Manager John Balay presented a resolution for consideration and adoption by the Commission urging the President and U.S. Congress to provide financial support to the Groundwater and Streamflow Information Program (GSIP), thereby supporting the Susquehanna Flood Forecast & Warning System (SFFWS).

On a motion by Commissioner D'Amato and seconded by Commissioner Kearney, Resolution No. 2017-16 (Exhibit A) was adopted with Commissioner Chamberlayne abstaining.

5. Amendment to By-laws

Director of Administration & Finance Marcia Hutchinson requested that the Commission adopt a resolution approving updates to the Commission's "By-laws and Procedures" to reflect revisions to officers' duties, clarification of budget and financial procedures, and other changes in accordance with the Susquehanna River Basin Compact.

On a motion by Commissioner Orr and seconded by Commissioner D'Amato, Resolution No. 2017-10 (Exhibit B) was unanimously adopted.

6. Grant and Contribution Approval

Director of Administration & Finance Marcia Hutchinson presented the following requests:

a. Grant Amendment Approval – Chesapeake Bay Midpoint Assessment (Pennsylvania Department of Environmental Protection)

Ms. Hutchinson requested approval of this grant amendment, which provides \$185,000 for technical support for the Chesapeake Bay Program Office. Commission staff will provide assistance to PADEP in fulfilling its Chesapeake Bay Mid-Point Assessment tasks pursuant to its

Bay Agreement with the U.S. Environmental Protection Agency. Specific support activities include verification and fatal flaw review of the Phase 6 Watershed Model, recommendations for Local Area Targets, development of a draft Phase 3 Watershed Implementation Plan (WIP); modeling forecasts for 2025 conditions; participation on Bay-related work groups and expert panels, and assistance with policy/program stakeholder outreach activities. PADEP will provide \$185,000 for this project.

b. Contribution Approval – Remote Water Quality Monitoring Network (JKLM Energy, LLC)

Ms. Hutchinson requested that the Commissioners approve the acceptance of a contribution from JKLM Energy, LLC in the amount of \$141,400, pursuant to Articles 3.7 and 15.1 of the Susquehanna River Basin Compact. In early 2010, through a combination of public and private funds, the Commission began installing what has grown to be a basin-wide network of water quality monitoring stations that transmit real-time monitoring data which is made available to the public through our Remote Water Quality Monitoring Network website. The equipment for a select number of stations needs to be replaced. The contribution from JKLM Energy will be used to purchase new equipment to support upgrades at ten (10) network monitoring stations.

A representative from JKLM Energy, LLC made a short presentation regarding the contribution for this work.

On a motion by Commissioner D'Amato and seconded by Commissioner Kearney, the signing of the grant and acceptance of the contribution were unanimously approved.

7. Final Rulemaking

General Counsel Jason Oyler presented a set of proposed rules, which would amend the Commission regulations to codify and strengthen the Commission's Access to Records Policy. This rule is designed to enhance the Commission's commitment to open and transparent operations and accessibility of records to the public.

On a motion by Commissioner Kearney and seconded by Commissioner Orr, Resolution No. 2017-17 (Exhibit C) was adopted unanimously.

8. **Docket Actions**

Mr. Eaby presented a staff memorandum containing details and recommendations regarding the following list of project applications:

- 1. Beech Creek Borough Authority (Well 2) Clinton County, Pa. (Exhibit D1)
- Brymac, Inc. dba Mountain View 2. Country Club (Pond 3/4) Centre County, Pa.
- 3. Cabot Oil & Gas Corporation (East Branch Tunkhannock Creek) Susquehanna County, Pa.
- Cabot Oil & Gas Corporation 4 (Meshoppen Creek) Wyoming County, Pa. (Exhibit D2)
- 5. Chesapeake Appalachia, L.L.C. (Susquehanna River) Bradford County, Pa. (Exhibit D3)
- Houtzdale Municipal Authority (Well 6. 14R) Clearfield County, Pa. (Exhibit D4)
- 7. LHP Management, LLC (Fishing Creek) Clinton, County, Pa. (Exhibit D5)
- 8. Martinsburg Municipal Authority (Wineland Well 3) Blair County, Pa. (Exhibit D6)
- 9. Borough of Mifflinburg (Well PW-2) Union County, Pa. (Exhibit D7)

- Repsol Oil & Gas USA, LLC 10. (Choconut Creek) Susquehanna County, Pa. (Exhibit D8)
- Schuylkill Energy Resources, Inc., 11. (Maple Hill Mine Shaft Well) Schuylkill County, Pa.
- Schuylkill Energy Resources, Inc., 12 Schuylkill County, Pa
- SUEZ Water Pennsylvania, Inc. (Salla 13. Well) Luzerne County, Pa. (Exhibit D9)
- 14. SWN Production Company, LLC (Lycoming Creek) Lycoming County, Pa. (Exhibit D10)
- 15. SWN Production Company, LLC (Lycoming Creek) Lycoming County, Pa. (Exhibit D11)
- 16-18. Village of Waverly (Wells 1, 2, 3) Tioga County, N.Y. (Exhibit D12)

Highlight = Staff recommended tabling.

Commissioner D'Amato moved and Commissioner Kearney seconded a motion that the Commission adopt the recommendations of staff for the 18 project applications. The motion was unanimously approved.

ADJOURNMENT

Commissioner D'Amato moved and Commissioner Orr seconded a motion for adjournment. The meeting was adjourned at 10:03 a.m.

March 8, 2018 Date Adopted

Stephanee Z Richardson Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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

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Docket No. 20171201 Approval Date: December 8, 2017

BEECH CREEK BOROUGH AUTHORITY

Groundwater Withdrawal (30-Day Average) of 0.220 mgd from Well 2, and Total System Withdrawal Limit (30-Day Average) of 0.220 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 renewal of the project described herein in accordance with the conditions set forth below.

Beech Creek Borough Authority (Authority) supplies water to Beech Creek Borough and Liberty and Beech Creek Townships in Clinton County, Pennsylvania. The Authority maintains and operates a public water supply system that is supplied by two groundwater wells (Wells 1 and 2). According to information provided by the Authority, no other sources are utilized by the project.

On June 29, 1987, the Commission approved the 30-day average groundwater withdrawal of 0.500 million gallons per day (mgd) from Well 2 under Commission Docket No. 19870602. On December 28, 2016, the Authority submitted a groundwater renewal application requesting approval to withdraw 0.220 mgd from Well 2. This approval authorizes use of Well 2 at the requested rate and establishes a total system limit for withdrawals from Wells 1 and 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: Beech Creek Borough Authority	
Approval Type: Groundwater Withdrawal	
Past Docket No.: 19870602	
Authorized Water Use Purpose:Public Water Supply	
Municipality: Beech Creek Borough	
County: Clinton 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 2	
Subbasin:	West Branch Susquehanna	
Watershed Boundary Dataset (WBD):	(BD): 0205020402 (Beech 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 project sponsor requested that the constant-rate aquifer testing required by Commission Regulation 18 CFR § 806.12 for groundwater withdrawals be waived. In support of the aquifer testing waiver request for Well 2, the project sponsor provided the required groundwater availability analysis and historical withdrawal and water level data.

Commission staff found that withdrawals from Well 2 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 and recommended that the Executive Director waive the aquifer testing requirements. Pursuant to Commission Resolution No. 2015-06, the Executive Director approved the waiver of the aquifer testing requirements of Commission Regulation 18 CFR § 806.12.

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): 0.220		
Maximum Instantaneous Withdrawal Rate (gpm):290 (Not to Exceed)		
Total System Withdrawal Limit – Wells 1 and 2		
(30-Day Average) (mgd): 0.220		
gpm – gallons per minute		

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

Section 6. Existing Approved Withdrawals

The project does not have existing approved withdrawals.

Section 7. Grandfathered Withdrawals

The project no longer utilizes surface water withdrawals that were in existence prior to November 11, 1995.

The project did not consumptively use water prior to January 23, 1971.

On January 1, 2018, Commission Regulation 18 CFR § 806 Subpart E becomes effective. The Authority must register Well 1 prior to December 31, 2019.

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 Commission Regulation 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 metering on the withdrawal in accordance with Commission Regulation 18 CFR § 806.30.

4. 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.

5. 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 7. The project sponsor shall maintain and monitor the accuracy of the measuring devices in accordance with the manufacturer's specifications.

6. The project sponsor shall keep daily records of the project's withdrawal and groundwater elevations for the sources listed in Sections 3 and 7, 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 Commission Regulation 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.

7. 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 Commission Regulation 18 CFR § 808.12.

8. In accordance with Commission Regulation 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 Commission Regulation 18 CFR § 806.30(a)(1) within five (5) days after any such loss.

9. In accordance with Commission Regulation 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 this approval to the Commission within ninety (90) days of the change in ownership or project sponsor name change.

10. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation 18 CFR § 806.25.

11. This approval is conditioned on the project sponsor maintaining legal access to the withdrawal location for the duration of the approval.

12. The project sponsor shall register with the appropriate agency all groundwater sources described herein, as may be required by regulations of the member jurisdiction.

13. 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 Commission Regulation 18 CFR Part 808.

14. 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.

15. 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 Commission Regulation 18 CFR § 806.32.

16. 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.

17. This project is approved for inclusion in the Commission's Comprehensive Plan for the Water Resources of the Susquehanna River Basin.

18. In accordance with Commission Regulation 18 CFR § 806.31(d), if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project.

19. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawal that would exceed the amounts listed herein.

20. 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.

21. 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

22. All grandfathered sources must be registered consistent with Section 7.

23. The date of the last meter certification was February 23, 2016; therefore, the next meter certification is due no later than February 23, 2021. 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.

24. The project sponsor shall only supply water for use in hydrocarbon development to persons who have properly registered this approval pursuant to Commission Regulation 18 CFR § 806.22(f)(12).

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. This approval shall be effective January 1, 2018, and shall remain effective until December 31, 2032. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 30, 2032, 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.

27. Commission Docket No. 19870602 shall remain effective through December 31, 2017, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2017.

Dated: December 11, 2017

tephanee L Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

Exhibit D2

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Docket No. 20170302-1 Approval Date: March 9, 2017 Modification Date: December 8, 2017

CABOT OIL & GAS CORPORATION

Surface Water Withdrawal (Peak Day), Variable, of up to 1.000 mgd from Meshoppen Creek

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 modification of the project described herein in accordance with the conditions set forth below.

This approval is a modification of Commission Docket No. 20170302 that was originally approved March 9, 2017, with a peak day withdrawal rate of 0.500 million gallons per day (mgd) and special flow protection requirements. The project sponsor has requested an increase in the peak day withdrawal, variable (monthly) peak day withdrawal rates, and modification of the intake structure. Following technical review, and consistent with applicable regulatory standards, Commission staff recommended approval of the requested modifications including an increase of the approved rate of withdrawal to up to 1.000 mgd, herein referred to as the modified rates, from the modified intake. Commission staff also recommended special flow protection requirements consistent with current policy. This approval incorporates those recommendations.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), the Department of Conservation and Natural Resources (DCNR), 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: Cabot Oil & Gas Corporation		
Approval Type:	Surface Water Withdrawal	
Original Docket No.:	20170302	
Authorized Water Use Purpose: Hydrocarbon Development and Related Incidental Us		
Municipality: Lemon Township		
County: Wyoming 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		
Approved Source: Meshoppen Creek		
Subbasin:	Middle Susquehanna	
Watershed Boundary Dataset (WBD):0205010608 (Meshoppen Creek)		pen Creek)
Water Use Designation:Cold Water Fishery (CWF)		CWF)
Withdrawal Location (degrees):	Lat: 41.627325 N Long: 75.944775 W	
Site Flow Statistics (cfs):	Q7-10 = 1.5; Average Daily Flow = 47.2	
Drainage Area (square miles):	hage Area (square miles): 46.2	
Aquatic Resource Class*: 2		
Special Flow Protection Required:	Yes	
cfs – cubic feet per second		

Section 4. 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		
Peak Day Withdrawal Amount (mgd):	Not to Exceed Values Contained in the "Withdrawal and Passby Schedule," When	
	Available	
Maximum Instantaneous Withdrawal	Not to Exceed Values Contained in the	
Rate (gpm):	"Withdrawal and Passby Schedule," When	
	Available	
Flow Protection Type:Seasonal passby expressed as monthly values		
Method for Monitoring Flow Protection:	Off-site monitoring of USGS Real-Time Gage	
01534000; Tunkhannock Creek		

	Tunkhannock, Pennsylvania			
AI	Approved Withdrawal Quantities and Limitations (continued)			
Withdrawal a	nd Passby Sched	ule:		
	Peak Day	Maximum	On-Site Flow	Off-Site Monitoring
	Withdrawal	Instantaneous	Protection	Threshold for Flow
Month	(mgd)	Withdrawal (gpm)	Rate (cfs)	Protection (cfs)*
January	1.000	695	14	189
February	1.000	695	17	219
March	1.000	695	37	454
April	1.000	695	40	490
May	1.000	695	21	266
June	1.000	695	9.0	126
July	0.750	521	5.1	74
August	0.500	348	3.7	54
September	0.500	348	3.5	52
October	0.750	521	4.9	72
November	1.000	695	11	152
December	1.000	695	17	224
1 cfs = 448.8 gal	USGS- U.S. Geological Survey 1 cfs = 448.8 gallons per minute (gpm) * Flow Protection Threshold			

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

Section 5. Standard Conditions

1. The project sponsor shall adhere to the intake design reviewed and approved by Commission staff, and shall obtain necessary general or individual permits from the jurisdictional permitting agency prior to use of the intake, prior to initiation of withdrawal at the modified rates. The project sponsor shall provide the Commission with a copy of the permit prior to operating the withdrawal at the modified rates. If subsequent design review by the permitting agency requires modification to the intake design, the project sponsor shall submit to the Commission a revised intake design for review and, if appropriate, approval by Commission staff prior to permit issuance by the permitting agency. Thereafter, any modifications proposed by the project sponsor for the permitted intake structure shall be submitted for review and, if appropriate, approval by Commission staff in accordance with Commission Regulations 18 CFR § 806.21 and § 806.23 prior to undertaking such modification(s).

2. Sixty (60) days prior to commencement of the withdrawal from the modified intake for operational purposes, the project sponsor shall post an updated sign that meets Commission specifications and displays required project description information. Signage specifications can be found at the Commission's website (www.srbc.net), along with example sign templates for reference. The sign shall be maintained for the duration of the approval. Such sign shall be posted at the point of entry or access to the project facility from a public right-of-way. If there is

any restriction to access at such point that would prevent an interested person from legibly viewing such sign, then the project sponsor shall post the sign at the nearest location to such point, along the route of ingress and egress to same, where an interested person would have unrestricted access to legibly view such sign. The project sponsor shall submit photographs as proof of installation of the updated sign.

3. In accordance with Commission Regulation 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 Commission Regulation 18 CFR § 806.30(a)(1) within five (5) days after any such loss.

4. In accordance with Commission Regulation 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 this approval to the Commission within ninety (90) days of the change in ownership or project sponsor name change.

5. This project is approved for inclusion in the Commission's Comprehensive Plan for the Water Resources of the Susquehanna River Basin.

6. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawal that would exceed the amounts listed herein.

Section 6. Special Conditions

7. The project sponsor shall adhere to the metering plan submitted for this modification, which has been 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 Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan.

8. Concurrent with commencement of the withdrawal from the modified intake for operational purposes, the project sponsor shall cease all withdrawals from the approved source when streamflow, as measured at the U.S. Geological Survey stream gage specified in Section 4, is less than the applicable flow protection threshold specified in Section 4, and shall not reinstate withdrawals until the streamflow has remained above such flow protection threshold for 48 hours.

9. Section 4 and Conditions 5, 7, 18, and 19 of Commission Docket No. 20170302 are hereby rescinded.

10. All other limitations and conditions in Commission Docket No. 20170302 not inconsistent herewith shall remain effective.

11. The project sponsor shall provide the Commission with fifteen (15) days advance notice of intent to commence withdrawal from the modified intake approved under Standard Condition 2.

Section 7. Term

12. Commission Docket No. 20170302-1 shall be effective upon commencement of the withdrawal from the modified intake for operational purposes.

13. The term of Commission Docket Nos. 20170302 and 20170302-1 shall remain effective until March 31, 2022. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before September 30, 2021, 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, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2017.

Dated: December 11, 2017

tephanee L Richardson

Stephanie L. Richardson



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. 20171202 Approval Date: December 8, 2017

CHESAPEAKE APPALACHIA, L.L.C.

Surface Water Withdrawal (Peak Day) of up to 0.750 mgd from the Susquehanna River

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.

This approval is a renewal of Commission Docket No. 20131202 that was originally approved December 12, 2013, with a peak day withdrawal rate of 0.750 million gallons per day (mgd) and no special flow protection requirements. The project sponsor has not requested any changes to the project. Commission staff recommended special flow protection requirements consistent with current policy. This approval incorporates those recommendations.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), the Department of Conservation and Natural Resources (DCNR), 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: Chesapeake Appalachia, L.L.C.		
Approval Type:Surface Water Withdrawal		
Past Docket No.: 20131202		
Authorized Water Use Purpose: Hydrocarbon Development and Related Incidental Uses		
Municipality: Athens Township		
County: Bradford 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		
Approved Source:	Susquehanna River	
Subbasin:	Upper Susquehanna	
Watershed Boundary Dataset (WBD):	0205010307 (Wappasening Creek – Susquehanna	
	River)	
Water Use Designation:	Warm Water Fishery (WWF)	
Withdrawal Location (degrees):	Lat: 41.957300 N Long: 76.514700 W	
Site Flow Statistics (cfs):	Q7-10 = 410; Average Daily Flow = 8,240	
Impairment:	Polychlorinated Biphenyl (PCB); Mercury	
Drainage Area (square miles):	4,941	
Aquatic Resource Class*:	5	
Special Flow Protection Required:	Yes	
cfs – cubic feet per second		
* Refer to Commission Policy No. 2012-01 (Low Fl	low Protection Policy Related to Withdrawal Approvals)	

Section 4. 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			
Peak Day Withdrawal Amount (mgd):		0.750 (Not to Ex	cceed, When Available)
Maximum Instantaneous	Withdrawal		
Rate (gpm):		1,000 (Not to Ex	(ceed)
Flow Protection Type:		Seasonal passby	expressed as monthly values
Method for Monitoring Flow Protection:		Off-site monitoring of USGS Real-Time Gage 01515000; Susquehanna River near Waverly, New York	
Passby Schedule:	Passby Schedule:		
	On-Site Fl	low Protection	Off-Site Monitoring Threshold
Month	Ra	te (cfs)	for Flow Protection (cfs)*
January			
February			
March			
April			
May			

Approved Withdrawal Quantities and Limitations (continued)					
Passby Schedule:	Passby Schedule:				
Month	On-Site Flow Protection Rate (cfs)	Off-Site Monitoring Threshold for Flow Protection (cfs)*			
June					
July					
August	583	566			
September	533	518			
October	644	625			
November					
December					
1 cfs = 448.8 gallons per minute (gpm)USGS – U.S. Geological Survey* Flow Protection ThresholdNo special flow protection required					

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

Section 5. 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 Commission Regulation 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 metering on the withdrawal in accordance with Commission Regulation 18 CFR § 806.30.

4. 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.

5. The project sponsor shall adhere to the intake design reviewed and approved by Commission staff. Any modifications proposed by the project sponsor for the permitted intake structure shall be submitted for review and, if appropriate, approval by Commission staff in accordance with Commission Regulations 18 CFR § 806.21 and § 806.23 prior to undertaking such modification(s).

6. The project sponsor shall keep daily records of the project's withdrawal 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 requested by the project sponsor shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 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.

7. Within sixty (60) days from notice of this approval, the project sponsor shall post an updated sign that meets Commission specifications and displays required project description information. Signage specifications can be found at the Commission's website (www.srbc.net), along with example sign templates for reference. The sign shall be maintained for the duration of the approval. Such sign shall be posted at the point of entry or access to the project facility from a public right-of-way. If there is any restriction to access at such point that would prevent an interested person from legibly viewing such sign, then the project sponsor shall post the sign at the nearest location to such point, along the route of ingress and egress to same, where an interested person would have unrestricted access to legibly view such sign. The project sponsor shall submit photographs as proof of installation of the updated sign.

8. 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 Commission Regulation 18 CFR § 808.12.

9. In accordance with Commission Regulation 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 Commission Regulation 18 CFR § 806.30(a)(1) within five (5) days after any such loss.

10. In accordance with Commission Regulation 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 this approval to the Commission within ninety (90) days of the change in ownership or project sponsor name change.

11. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation 18 CFR § 806.25.

12. This approval is conditioned on the project sponsor maintaining legal access to the withdrawal location for the duration of the approval.

13. The project sponsor shall register with the appropriate agency all surface water sources described herein, as may be required by regulations of the member jurisdiction.

14. 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 Commission Regulation 18 CFR Part 808.

15. 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.

16. 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 Commission Regulation 18 CFR § 806.32.

17. 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.

18. This project is approved for inclusion in the Commission's Comprehensive Plan for the Water Resources of the Susquehanna River Basin.

19. In accordance with Commission Regulation 18 CFR § 806.31(d), if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project.

20. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawal that would exceed the amounts listed herein.

Section 6. Special Conditions

21. Effective January 1, 2018, the project sponsor shall cease all withdrawals from the approved source when streamflow, as measured at the U.S. Geological Survey stream gage specified in Section 4, is less than the applicable flow protection threshold specified in Section 4, and shall not reinstate withdrawals until the streamflow is equal to or exceeds such flow protection threshold.

22. The project sponsor shall, on a daily basis, collect and record streamflow as measured at the U.S. Geological Survey stream gage specified in Section 4, 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. The project sponsor may propose alternative flow monitoring to the Commission for staff review and, if appropriate, approval.

23. The date of the last meter certification was March 21, 2016; therefore, the next meter certification is due no later than March 21, 2021. 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.

24. The project is fully constructed and no changes are proposed. However, if the changes are proposed or maintenance requires instream work, the project sponsor should adhere to recommendations provided by PFBC in the February 15, 2017, Pennsylvania Natural Diversity Inventory (PNDI) response for avoiding adverse impact to documented occurrences of rare species at or in proximity to the project location. The documented species are the elktoe mussel (*Alasmidonta marginata*), triangle floater mussel (*Alasmidonta undulata*), and the green floater mussel (*Lasmigona subviridis*).

25. Except as authorized pursuant to Special Condition 27, the project sponsor shall only supply water for use in hydrocarbon development to persons who have properly registered this approval pursuant to Commission Regulation 18 CFR § 806.22(f)(12).

26. 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 daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for uses other than hydrocarbon development authorized pursuant to Special Condition 27, including daily quantities supplied.

27. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for minor modification under Commission Regulation 18 CFR § 806.18(c)(4) for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

28. The project sponsor shall demonstrate to the satisfaction of the Commission that appropriate controls and treatment to prevent the spread of aquatic nuisance species are employed at the water withdrawal site.

Section 7. Term

29. This approval shall be effective January 1, 2018, and shall remain effective until December 31, 2022. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 30, 2022, 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.

30. Commission Docket No. 20131202 shall remain effective through December 31, 2017, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2017.

Dated: December 11, 2017

Stephanee L Richardson Stephanie L. Richardson



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. 20171203 Approval Date: December 8, 2017

HOUTZDALE MUNICIPAL AUTHORITY

Groundwater Withdrawal (30-Day Average) of 1.008 mgd from Well 14R, and Total System Withdrawal Limit (30-Day Average) of 1.336 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.

Houtzdale Municipal Authority (Authority) supplies water to Brisbin, Houtzdale, and Ramey Boroughs and Beccaria, Bigler, Decatur, Gulich, and Woodward Townships in Clearfield County, Pennsylvania. The Authority maintains and operates a public water supply system that is supplied by three wells (Wells TH-4, TH-5, and TH-10) and surface water withdrawals from the Mountain Branch (upper and lower intakes) and Moshannon Creek. According to information provided by the Authority, no other sources are utilized by the project.

This approval authorizes the use of Well 14R at the requested withdrawal rate and establishes a total system withdrawal limit based on the current 15-year projected demand. Should demand exceed the total system limit established herein, the Authority may request a minor modification in accordance with Commission Regulation 18 CFR § 806.18(c)(7) to increase the total system limit, as the total system limit established herein is based on the 15-year projected demand.

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: Houtzdale Municipal Authority		
Approval Type:	Groundwater Withdrawal	
Authorized Water Use Purpose:Public Water Supply		
Municipality: Gulich Township		
County:	Clearfield 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 14R	
Subbasin:	West Branch Susquehanna	
Watershed Boundary Dataset (WBD):	0205020105 (Moshannon 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 Commission Regulation 18 CFR § 806.12 for groundwater withdrawals was completed with prior Commission approval. A 73.5-hour, constant-rate aquifer test of Well 14R was conducted from November 15 through 18, 2016, pumping at an average rate of 700 gallons per minute (gpm). The aquifer testing data demonstrated that withdrawals from Well 14R will result in impacts to the shallow groundwater system, including an exceptional value wetland adjacent to Moshannon Creek if unmitigated.

In order to prevent significant adverse impacts to an exceptional value wetlands, monitoring and mitigation will be needed. Commission staff has coordinated with PADEP, the jurisdictional agency regarding the wetlands impacts, and has deferred to PADEP for final review and approval of wetlands monitoring and mitigation. In accordance with Special Condition 22, Commission review and approval of the wetlands monitoring and mitigation will not be needed provided that operation of Well 14R is conditioned by PADEP to require monitoring and mitigation.

The Authority has operated the Moshannon Creek withdrawal since at least 1967 without a passby condition and without Commission approval. However, the Authority is seeking renewal of the PADEP water allocation permit for its surface water sources, and Commission staff expects that the renewed water allocation permit will include a passby condition for Moshannon Creek. Provided that the Moshannon Creek withdrawal is conditioned with a passby requirement suitable to the Commission, wetlands mitigation is completed, and in accordance with Special Condition 23, Commission staff does not recommend that withdrawals from Well 14R be reduced or conditioned with special flow protection requirements to further avoid or mitigate surface water impacts.

Commission staff determined that the withdrawal from Well 14R at the requested withdrawal rate should not cause permanent loss of aquifer storage, render competing supplies unreliable, or cause adverse unmitigated 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):	1.008	
Maximum Instantaneous Withdrawal Rate (gpm):	700 (Not to Exceed)	
Peak Day Withdrawal (mgd):	1.008	
Total System Withdrawal Limit – Well TH-4, Well TH-5,		
Well TH-10, Well 14R, Mountain Branch (upper and lower		
intakes), and Moshannon Creek (30-Day Average) (mgd):	1.336	
mgd – million gallons per day		

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			
	30-Day AverageCommissionDocket		Docket
Source	Withdrawal (mgd)	Docket No.	Expiration Date
Well TH-4	0.580	19950101	January 12, 2025
Well TH-5	0.430	19950101	January 12, 2025
Well TH-10	1.150	19950101	January 12, 2025

Surface water withdrawals currently approved by PADEP are summarized in the table below.

PADEP-Approved Surface Water Withdrawals			
Source	Peak Day Withdrawal (mgd)*	30-Day Average Withdrawal (mgd)*	
Upper Mountain Branch	0.700	0.700	
Lower Mountain Branch	0.700	0.700	
Moshannon Creek	0.300	0.300	
* Value(s) represent maximum quantity approved through PADEP Permit No. WA-106-A.			

Section 7. Rescission of Existing Approval

Commission Docket No. 20050602, which approved a withdrawal from Well 14, was suspended on July 11, 2014, pursuant to Decision Item 16 of Commission Docket No. 20050602 and Commission Regulation 18 CFR § 806.21(c)(2). Well 14R is intended to be a replacement for Well 14 and because the Authority cannot use Well 14, Commission Docket No. 20050602 is hereby rescinded effective immediately.

Section 8. Grandfathering Determination – Withdrawals and Consumptive Use

The project did not utilize groundwater withdrawals prior to July 13, 1978. The project did not consumptively use water prior to January 23, 1971.

The project operates surface water withdrawals from Mountain Branch (upper and lower intakes) and Moshannon Creek that were initiated prior to November 11, 1995. In accordance with Commission Regulation 18 CFR § 806.4, the addition of a new source (Well 14R) subjects the pre-regulation withdrawals to Commission review and approval. The Authority will submit an application to PADEP to renew the water allocation permit that authorized the surface water withdrawals. In accordance with the Memorandum of Understanding between the Commission and PADEP, separate application to the Commission recommendations during coordinated review of the renewal application and subsequent permit approval. Provided that the proper consideration is given to the recommendations under the Memorandum of Understanding, the Commission will not require separate application and review of the surface water withdrawals, and PADEP's review will be considered adequate to meet the Commission's regulations under 18 CFR Part 806.

Section 9. 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 Commission Regulation 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 metering on the withdrawal in accordance with Commission Regulation 18 CFR § 806.30.

4. 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.

5. 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.

6. The project sponsor shall keep daily records of the project's withdrawals from the sources listed in Sections 3 and 6, 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 Commission Regulation 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.

7. 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 Commission Regulation 18 CFR § 808.12.

8. In accordance with Commission Regulation 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 Commission Regulation 18 CFR § 806.30(a)(1) within five (5) days after any such loss.

9. In accordance with Commission Regulation 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 this approval to the Commission within ninety (90) days of the change in ownership or project sponsor name change.

10. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation 18 CFR § 806.25.

11. This approval is conditioned on the project sponsor maintaining legal access to the withdrawal location for the duration of the approval.

12. The project sponsor shall register with the appropriate agency all surface water and groundwater sources described herein, as may be required by regulations of the member jurisdiction.

13. 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 Commission Regulation 18 CFR Part 808.

14. 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.

15. 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 Commission Regulation 18 CFR § 806.32.

16. 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.

17. This project is approved for inclusion in the Commission's Comprehensive Plan for the Water Resources of the Susquehanna River Basin.

18. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawal that would exceed the amounts listed herein.

19. 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.

20. 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 10. Special Conditions

21. Commission Docket No. 20050602 is hereby rescinded effective immediately.

22. Prior to operating the withdrawal from Well 14R, the project sponsor is required to implement a PADEP-approved wetlands monitoring and mitigation plan. Provided PADEP approves the plan and conditions the Well 14R operations permit to require implementation of the approved plan, Commission review and approval of the plan is not needed. The project sponsor shall copy the Commission on all correspondence with PADEP regarding wetlands monitoring and mitigation, and provide a copy of the approval of the plan when issued by PADEP. However, should PADEP not approve a plan, or not include implementation of wetlands monitoring and mitigation as a condition of the Well 14R operations permit, the project sponsor shall not withdraw from Well 14R until a Commission-approved plan is implemented. Any modifications proposed shall be submitted for review and, if appropriate, approval by PADEP or Commission staff as appropriate. Modifications shall not be made until the project sponsor receives written approval of the amended plan.

23. Should withdrawals from Moshannon Creek not be conditioned with a protective passby, the Commission may reopen this approval to modify by adding a passby condition on Well 14R, or otherwise limit or restrict Well 14R, to be protective of flows in Moshannon Creek.

24. Under Commission Docket No. 20050602, the project sponsor was required to reduce system losses to less than twenty (20) percent to comply with Commission Regulation 18 CFR § 806.25(a)(1). The project sponsor has not met this requirement. The project sponsor shall comply with the water conservation requirements and reduce system water losses to less than twenty (20) percent to comply with Commission Regulation 18 CFR § 806.25(a)(1). Within ninety (90) days from the date of this approval, the project sponsor shall submit a plan for review and approval by Commission staff detailing the actions that will be taken within five (5) years of the effective date of this approval to reduce system losses and achieve compliance of the water conservation requirements within five (5) years of the effective date of this docket approval (December 8, 2022) 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 year. If the project sponsor can demonstrate that system water losses are below 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.

25. The next meter certifications for Well TH-4, Well TH-5, Well TH-10, the Moshannon Creek intake, the Moshannon Creek booster pump, Well 14R, and the raw water intake are due no later than October 3, 2018. 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.

26. The project sponsor shall only supply water for use in hydrocarbon development to persons who have properly registered this approval pursuant to Commission Regulation 18 CFR 806.22(f)(13).

27. 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 11. Term

28. 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 Commission Regulation 18 CFR § 806.31(b). In accordance with Commission Regulation 18 CFR § 806.31(d), if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project.

29. This approval is effective until December 7, 2032. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 7, 2032, 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, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2017.

Dated: December 11, 2017

Stephanee L. Richardson Stephanie L. Richardson



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. 20171204 Approval Date: December 8, 2017

LHP MANAGEMENT COMPANY, LLC

Surface Water Withdrawal (Peak Day) of up to 0.999 mgd from Fishing Creek

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.

This approval is a renewal of Commission Docket No. 20131205 that was originally approved December 12, 2013. The project sponsor did not request any changes to the conditions of the original docket. Commission staff recommended special flow protection requirements consistent with current policy. This approval incorporates those recommendations.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), the Department of Conservation and Natural Resources (DCNR), 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:	LHP Management Company, LLC	
Approval Type:	Surface Water Withdrawal	
Past Docket No.:	20131205	
Authorized Water Use Purpose:	Bulk Supply for Hydrocarbon Development and Related	
	Incidental Uses	
Municipality:	Bald Eagle Township	
County:	Clinton 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		
Approved Source:	Fishing Creek	
Subbasin:	West Branch Susquehanna	
Watershed Boundary Dataset (WBD):	0205020403 (Fishing Creek)	
Water Use Designation:	Cold Water Fishery (CWF)	
Withdrawal Location (degrees):	Lat: 41.115694 N Long: 77.487139 W	
Site Flow Statistics (cfs):	Q7-10 = 22.3; Average Daily Flow = 268	
Wild Trout Classification:	Class A	
Impairment:	Siltation	
Drainage Area (square miles):	181	
Aquatic Resource Class*:	3	
Special Flow Protection Required:	Yes	
cfs – cubic feet per second		
* Refer to Commission Policy No. 2012-01 (Low Flo	ow Protection Policy Related to Withdrawal Approvals)	

Section 4. 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				
Peak Day Withdrawal Amount (mgd):		0.999 (Not to Exceed, When Available)		
Maximum Instantaneous	Withdrawal			
Rate (gpm):		1,000 (Not to Ex	aceed)	
Flow Protection Type: Seasonal passby expressed as monthly val		expressed as monthly values		
Method for Monitoring Flow	Aethod for Monitoring Flow Protection:Off-site monitoring of USGS Real-Time O01555000;PennsCreek at Penns Creek at PennsPennsylvaniaCreek at PennsCreek at Penns		0	
Passby Schedule:				
Month	On-Site Flow Protection Rate (cfs)		Off-Site Monitoring Threshold for Flow Protection (cfs)*	
January	94		162	
February	118		204	
March				
April				
May				
Approved Withdrawal Quantities and Limitations (continued)				
Passby Schedule:				
	On-Site Fl	low Protection	Off-Site Monitoring Threshold	

Wineland Replacement Well 1, Wineland Replacement Well 2, and Wineland Well 3

Month	Rate (cfs)	for Flow Protection (cfs)*	
June	97	168	
July	56	99	
August	41	73	
September	34	61	
October	35	63	
November	47	83	
December	83	144	
mgd – million gallons per day 1 cfs = 448.8 gallons per minute (gpm) * Flow Protection Threshold		USGS – U.S. Geological Survey – No special flow protection required	

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

Section 5. 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 Commission Regulation 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 intake design reviewed and approved by Commission staff. Any modifications proposed by the project sponsor for the permitted intake structure shall be submitted for review and, if appropriate, approval by Commission staff in accordance with Commission Regulations 18 CFR § 806.21 and § 806.23 prior to undertaking such modification(s).

5. The project sponsor shall keep daily records of the project's withdrawal 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 requested by the project sponsor shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 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. Within sixty (60) days from notice of this approval, the project sponsor shall post an updated sign that meets Commission specifications and displays required project description information. Signage specifications can be found at the Commission's website (www.srbc.net), along with example sign templates for reference. The sign

shall be maintained for the duration of the approval. Such sign shall be posted at the point of entry or access to the project facility from a public right-of-way. If there is any restriction to access at such point that would prevent an interested person from legibly viewing such sign, then the project sponsor shall post the sign at the nearest location to such point, along the route of ingress and egress to same, where an interested person would have unrestricted access to legibly view such sign. The project sponsor shall submit photographs as proof of installation of the updated sign.

7. 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 Commission Regulation 18 CFR § 808.12.

8. In accordance with Commission Regulation 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 Commission Regulation 18 CFR § 806.30(a)(1) within five (5) days after any such loss.

9. In accordance with Commission Regulation 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 this approval to the Commission within ninety (90) days of the change in ownership or project sponsor name change.

10. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation 18 CFR § 806.25.

11. This approval is conditioned on the project sponsor maintaining legal access to the withdrawal location for the duration of the approval.

12. The project sponsor shall register with the appropriate agency all surface water sources described herein, as may be required by regulations of the member jurisdiction.

13. 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 Commission Regulation 18 CFR Part 808.

14. 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.

15. 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 Commission Regulation 18 CFR § 806.32.

16. 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.

17. This project is approved for inclusion in the Commission's Comprehensive Plan for the Water Resources of the Susquehanna River Basin.

18. In accordance with Commission Regulation 18 CFR § 806.31(d), if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project.

19. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawal that would exceed the amounts listed herein.

Section 6. Special Conditions

20. Effective January 1, 2018, the project sponsor shall cease all withdrawals from the approved source when streamflow, as measured at the U.S. Geological Survey stream gage specified in Section 4, is less than the applicable flow protection threshold specified in Section 4, and shall not reinstate withdrawals until the streamflow has remained above such flow protection threshold for 48 hours.

21. The project sponsor shall, on a daily basis, collect and record streamflow as measured at the U.S. Geological Survey stream gage specified in Section 4, 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. The project sponsor may propose alternative flow monitoring to the Commission for staff review and, if appropriate, approval.

22. Prior to any withdrawal from the source listed in Section 3, the project sponsor shall install and maintain metering in accordance with Commission Regulation 18 CFR § 806.30. The project sponsor shall notify the Commission, in writing, and submit photographs of the meter when it has been installed, provide the serial number of the meter, and certify the accuracy of the measuring device to within five (5) percent of actual flow. Withdrawals shall not commence until Commission staff has approved the implementation of the approved metering plan and notified the project sponsor of such approval.

23. The project is fully constructed and no changes are proposed. However, if changes are proposed or maintenance requires instream work, the project sponsor shall adhere to recommendations provided by PFBC for avoiding adverse impact to documented occurrences of a naturally reproducing wild trout population at or in proximity to the project location. The project sponsor shall avoid modification of the intake or any other instream construction from October 1 through April 1, unless otherwise approved by PFBC in writing and submitted to the Commission.

24. The project sponsor should adhere to recommendations provided by DCNR in the October 9, 2017, Pennsylvania Natural Diversity Inventory (PNDI) response for avoiding adverse impact to documented occurrences of rare species at or in proximity to the project location. The documented species is water-willow (*Decodon verticillatus*).

25. Except as authorized pursuant to Special Condition 27, the project sponsor shall only supply water for use in hydrocarbon development to persons who have properly registered this approval pursuant to Commission Regulation 18 CFR § 806.22(f)(12).

26. 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 daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for uses other than hydrocarbon development authorized pursuant to Special Condition 27, including daily quantities supplied.

27. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for minor modification under Commission Regulation 18 CFR § 806.18(c)(4) for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

28. The project sponsor shall demonstrate to the satisfaction of the Commission that appropriate controls and treatment to prevent the spread of aquatic nuisance species are employed at the water withdrawal site.

Section 7. Term

29. This approval shall be effective January 1, 2018, and shall remain effective until December 31, 2022. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 30, 2022, 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.

30. Commission Docket No. 20131205 shall remain effective through December 31, 2017, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2017.

Dated: December 11, 2017

Stephanee Kichardson

Richardson



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. 20171205 Approval Date: December 8, 2017

MARTINSBURG MUNICIPAL AUTHORITY

Groundwater Withdrawals (30-Day Averages) of 0.288 mgd from Wineland Replacement Well 1, 0.288 mgd from Wineland Replacement Well 2, 0.346 mgd from Wineland Well 3, 0.431 mgd from the Wineland Wellfield (Wineland Replacement Well 1, Wineland Replacement Well 2, and Wineland Well 3), and Total System Withdrawal Limit (30-Day Average) of 0.431 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 renewal of the project described herein in accordance with the conditions set forth below.

The Martinsburg Municipal Authority (Authority) supplies water to Huston Township, Martinsburg Borough, North Woodbury Township, and Taylor Township in Blair County, Pennsylvania. The Authority maintains and operates a public water supply system that is supplied by four groundwater wells (Wineland Replacement Well 1 [RW-1], Wineland Replacement Well 2 [RW-2], Wineland Well 3, and the Hershberger Well) and has existing surface water withdrawal sources referred to as the Herron and Yingling Springs, which are approved as emergency sources. According to information provided by the Authority, no other sources are utilized by the project.

On March 12, 1987, the Commission approved the groundwater withdrawal of 0.432 million gallons per day (mgd) from Wineland Well 3 under Commission Docket No. 19870304. On September 12, 2016, the Authority submitted a groundwater withdrawal renewal application requesting approval to continue to withdraw from Wineland Well 3. After discussions with Commission staff, the Authority submitted a request for a wellfield determination comprised of RW-1, RW-2, and Wineland Well 3. Staff has determined that it is appropriate to consider the three wells as a wellfield. This approval renews the withdrawal from Wineland Well 3 at a reduced quantity; authorizes the use of RW-1, RW-2, and Wineland Well 3 as a wellfield; and establishes a revised total system withdrawal limit for withdrawals from RW-1, RW-2, Wineland Well 3, the Hershberger Well, and Herron and Yingling Springs.

This approval establishes a total system limit based on the 15-year projected need through 2032. Should demand exceed the total system limit established herein, the project sponsor may request a minor modification in accordance with Commission Regulation 18 CFR § 806.18(c)(7) to increase the total system limit, as the total system limit established herein is based on the 15-year projected demand.

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

Project Information	
Project Sponsor:	Martinsburg Municipal Authority
Approval Type:	Groundwater Withdrawal
Past Docket Nos.:	19870304 (Wineland Well 3), 20130610 (RW-1), and 20140306 (RW-2)
Authorized Water Use Purpose:	Public Water Supply
Municipality:	North Woodbury Township
County:	Blair County
State:	Pennsylvania

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

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 Sources:	RW-1, RW-2, and Wineland Well 3	
Subbasin:	Juniata	
Watershed Boundary Dataset (WBD):	0205030203 (Lower Frankstown Branch Juniata River)	
Withdrawal Location (degrees)*:	Lat: Long:	
Special Flow Protection Required:	No	
* Specific location information concerning discrete reasons.	te water-related project features has been withheld for security	

Section 4. Aquifer Testing

The project sponsor requested that the constant-rate aquifer testing required by Commission Regulation 18 CFR § 806.12 for groundwater withdrawals be waived. In support of the aquifer testing waiver request for Wineland Well 3, the project sponsor provided the required groundwater availability analysis, historical withdrawal and water level data, and results from historical aquifer tests.

Commission staff found that withdrawals from Wineland Well 3 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 and recommended that the Executive Director waive the aquifer testing requirements for Wineland Well 3. Pursuant to Commission Resolution No. 2015-06, the Executive Director approved the waiver of the aquifer testing requirements of Commission Regulation 18 CFR § 806.12.

A 72-hour, combined constant-rate aquifer test of RW-1 and RW-2 was conducted on November 7 through 10, 2011, pumping at an average rate of 200 gallons per minute (gpm) per well. To evaluate potential impacts to existing water users, an extensive aquifer test monitoring network was required that included water level monitoring at eight wells surrounding the test wells. During the technical reviews associated with Commission Docket Nos. 20130610 and 20140306, Commission staff determined that the withdrawals from RW-1 and RW-2 at the combined withdrawal rate of 0.576 mgd would not cause permanent loss of aquifer storage, render competing supplies unreliable, or cause adverse impacts to the water resources of the basin.

The results of testing RW-1 and RW-2, combined with the information provided in support of the Wineland Well 3 waiver, were sufficient for Commission staff to evaluate the combined effects of the withdrawals as a wellfield. Staff's evaluation indicates that the Wineland Wellfield is capable of operating at 0.922 mgd, the combined limit of RW-1, RW-2, and Wineland Well 3. However, Commission staff recommends limiting withdrawals from the Wineland Wellfield to the 15-year projected demand and not the capacity of the sources. Commission staff finds that the Wineland Wellfield is capable of operating at should not cause permanent loss of aquifer storage, render competing supplies unreliable, or cause adverse impacts to the water resources of the basin.

Section 5. Approved Withdrawal Quantities and Limitations

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

Wineland Replacement Well 1, Wineland Replacement Well 2, and Wineland Well 3

Approved Withdrawal Quantities and Limitations			
	RW-1	RW-2	Wineland Well 3
30-Day Average Withdrawal (mgd):	0.288	0.288	0.346
Maximum Instantaneous Withdrawal Rate (gpm) (Not to Exceed):	200	200	250
Peak Day Withdrawal (mgd):	0.288	0.288	0.346
Wineland Wellfield Withdrawal Limit – RW-1, RW-2, and Wineland Well 3 (30-Day Average) (mgd):	0.431		
Total System Withdrawal Limit – RW-1, RW-2, Wineland Well 3, Hershberger Well, and Herron and Yingling Springs (30-Day Average) (mgd):	0.431		

The withdrawals are 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 Surface Water Withdrawals			
Peak Day Commission Docket Source With drawel (med) Docket No. Evaluation Date			
Source	Withdrawal (mgd)	Docket No.	Expiration Date
Herron and Yingling Springs*0.15019930305May 3, 2018			
* Withdrawal approved for emergency	use only.		

Section 7. Rescission of Existing Approval

Commission Docket Nos. 20130610 and 20140306, approved withdrawals from RW-1 and RW-2, with expiration dates of June 19, 2028, and March 5, 2029, respectively. The Authority requested that Commission Docket Nos. 20130610 and 20140306 be rescinded upon approval of RW-1, RW-2, and Wineland Well 3 as a wellfield herein. Therefore, Commission Docket Nos. 20130610 and 20140306 are hereby rescinded effective January 1, 2018.

Section 8. Grandfathering Determination – Withdrawals and Consumptive Use

All surface water withdrawals utilized by the Authority have been approved by the Commission. The project did not consumptively use water prior to January 23, 1971.

Quantities applicable to the project's grandfathering determination for existing groundwater withdrawals are listed in the table below.

Wineland Replacement Well 1, Wineland Replacement Well 2, and Wineland Well 3

Grandfathered Groundwater Withdrawals	
Source30-Day Average Withdrawal (mgd)*	
Hershberger Well 0.255	
* Value represents maximum documented 30-day average amount that occurred prior to applicable regulatory effective date(s).	

On January 1, 2018, Subpart E to Commission Regulation 18 CFR § 806 becomes effective. The Authority must register the Hershberger Well prior to December 31, 2019. The Authority will have the option to request that the previous grandfathering determination for the Hershberger Well be accepted or provide other data to support a different quantity than identified herein.

Section 9. 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 Commission Regulation 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 metering on the withdrawals in accordance with Commission Regulation 18 CFR § 806.30.

4. 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.

5. The project sponsor shall adhere to the groundwater elevation monitoring plan reviewed and approved by Commission staff for the sources listed in Sections 3, 6, and 8. The project sponsor shall maintain and monitor the accuracy of the measuring devices in accordance with the manufacturer's specifications.

6. The project sponsor shall keep daily records of the project's withdrawals and groundwater elevations for the sources listed in Sections 3, 6, and 8, 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 Commission Regulation 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.

7. 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 Commission Regulation 18 CFR § 808.12.

8. In accordance with Commission Regulation 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 Commission Regulation 18 CFR § 806.30(a)(1) within five (5) days after any such loss.

9. In accordance with Commission Regulation 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 this approval to the Commission within ninety (90) days of the change in ownership or project sponsor name change.

10. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation 18 CFR § 806.25.

11. This approval is conditioned on the project sponsor maintaining legal access to the withdrawal locations for the duration of the approval.

12. The project sponsor shall register with the appropriate agency all surface water and groundwater sources described herein, as may be required by regulations of the member jurisdiction.

13. 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 Commission Regulation 18 CFR Part 808.

14. 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.

15. 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 Commission Regulation 18 CFR § 806.32.

16. 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.

17. This project is approved for inclusion in the Commission's Comprehensive Plan for the Water Resources of the Susquehanna River Basin.

18. In accordance with Commission Regulation 18 CFR § 806.31(d), if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project.

19. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawals that would exceed the amounts listed herein.

20. 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.

21. If the Commission determines that the operation of the project's groundwater withdrawals 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 10. Special Conditions

22. Commission Docket Nos. 20130610 and 20140306 are hereby rescinded effective January 1, 2018.

23. All grandfathered sources must be registered consistent with Section 8.

24. Commission Docket Nos. 20130610 and 20140306 required the project sponsor to reduce system losses to less than twenty (20) percent to comply with Commission Regulation 18 CFR § 806.25(a)(1). Although the project sponsor has not met this requirement, efforts have been made to reduce system losses and an extension to the deadline is appropriate. Therefore, system losses shall be reduced to less than twenty (20) percent by June 20, 2023. The project sponsor shall reduce system losses and achieve compliance with the water conservation requirements by June 20, 2023, 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 year. If the project sponsor can show that system water losses are below 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.

25. The next meter certifications for RW-1, RW-2, Wineland Well 3, and the Hershberger Well are due no later than February 4, 2019. 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.

26. The project sponsor shall only supply water for use in hydrocarbon development to persons who have properly registered this approval pursuant to Commission Regulation 18 CFR § 806.22(f)(13).

27. 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 11. Term

28. This approval shall be effective January 1, 2018, and shall remain effective until December 31, 2032. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 30, 2032, 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.

29. Commission Docket No. 19870304 shall remain effective through December 31, 2017, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2017.

Dated: December 11, 2017

Stephanee L. Richardson Stephanie L. Richardson



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. 20041203-2 **Approval Date: December 15, 2004 Modification Date: June 8, 2005** Modification Date: December 8, 2017

BOROUGH OF MIFFLINBURG

Groundwater Withdrawal (30-Day Average) of 0.396 mgd from Well PW-2, and Total System Withdrawal Limit (30-Day Average) of 0.554 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 modification of the project described herein in accordance with the conditions set forth below.

This approval is a modification of Commission Docket No. 20041203 that was originally approved on December 15, 2004, and authorized the Borough of Mifflinburg (Borough) to withdraw up to 0.554 million gallons per day (mgd) from Well PW-2. The approval prohibited operation of Well PW-2 during March and April (Decision Item "d") and required monitoring of an adjacent wetland for adverse impacts for a period of five (5) consecutive years while pumping Well PW-2 at the approved withdrawal quantity (Decision Item "e"). On June 8, 2005, the approval was modified to change the seasonal prohibition to April and May of each year (Commission Docket No. 20041203-1) to be consistent with a condition of the Borough's operations permit issued by the Pennsylvania Department of Environmental Protection (PADEP) and provides better protection for the wetland's hydrology. The wetlands monitoring requirement remained unchanged with the 2005 modification.

The Borough requested to reduce the 30-day average withdrawal quantity from Well PW-2 of 0.554 mgd to 0.396 mgd and eliminate the wetlands monitoring requirement, as the Borough is not capable of utilizing the previously requested and approved quantity. The Borough did not request to eliminate the seasonal pumping prohibition period.

Commission staff recommends approval of the requested reduced 30-day average withdrawal quantity of 0.396 mgd, elimination of the wetlands monitoring requirement, and that the seasonal pumping prohibition be maintained. No changes to the maximum instantaneous withdrawal rate or total system limit were requested or are authorized under this approval.

The Borough's public water supply system includes four sources (Well PW-1, Well PW-2, North Branch Buffalo Creek, and Chambers Spring), all of which are incorporated into the total system limit. Based on information provided by the Borough, no other sources are used by the project.

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:	Borough of Mifflinburg
Approval Type:	Groundwater Withdrawal
Original Docket Nos.:	20041203 and 20041203-1 (rescinded herein)
Authorized Water Use Purpose:	Public Water Supply
Municipality:	West Buffalo Township
County:	Union 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 PW-2	
Subbasin:	West Branch Susquehanna	
Watershed Boundary Dataset (WBD):	0205020612 (Buffalo Creek)	
Withdrawal Location (degrees)*:	Lat: Long:	
Special Flow Protection Required:	No	
* Specific location information concerning discrete reasons.	water-related project features has been withheld for security	

Section 4. Aquifer Testing

Previous aquifer testing indicated the potential for impacts to an adjacent wetland (vernal pond) from pumping Well PW-2 at a continuous rate of 400 gallons per minute (gpm). The magnitude of the potential impacts was unclear, and the Commission, in coordination with the PADEP, required that operation of the well be prohibited during April and May each year to

protect the wetland hydrology. The Commission also required the project sponsor to monitor the wetlands for adverse impacts for five (5) consecutive years while pumping Well PW-2 at the maximum approved withdrawal quantity. However, the project sponsor indicated that the well cannot be operated at the maximum approved rate due to system demand and limitations, and the wetlands monitoring condition cannot be fully satisfied.

To evaluate potential impacts to the wetlands at a decreased withdrawal rate, a 69-hour operational test of Well PW-2 was conducted from July 19 through 22, 2017, pumping at an average rate of 275 gpm, and included monitoring four existing wetland piezometers. The operational testing demonstrated that significant adverse impacts to the wetlands are not expected to occur while pumping Well PW-2 at the requested reduced rate, provided that the April and May pumping restriction is maintained. Accordingly, Commission staff recommends that the wetlands monitoring condition be rescinded.

Commission staff determined that the withdrawal from Well PW-2 at the reduced withdrawal quantity, combined with the April and May pumping restriction, 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):	0.396*
Maximum Instantaneous Withdrawal Rate (gpm):	385 (Not to Exceed)*
Peak Day Withdrawal (mgd):0.554	
Total System Withdrawal Limit – Well PW-1, Well PW-2,	
North Branch Buffalo Creek, and Chambers Spring	
(30-Day Average) (mgd): 0.554	
* The project sponsor shall not pump Well PW-2 during April and May of each year.	

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 tables below.

Existing Approved Groundwater Withdrawals			
30-Day Average Commission Docket			
Source Withdrawal (mgd) Docket No. Expiration Date			
Well PW-1	0.870	19931104	November 23, 2023

Existing Approved Surface Water Withdrawals			
Peak DayCommissionDocketSourceWithdrawal (mgd)Docket No.Expiration Date		Docket Expiration Date	
North Branch Buffalo Creek	0.800 (individually)	DUCKET NO.	Expiration Date
and Chambers Spring*	0.800 (individually) 0.800 (combined)	19930506	May 18, 2018
* Established minimum flow requirements of 2.080 mgd at the intake at North Branch Buffalo Creek and			
0.022 mgd at the intake at Chambers Spring.			

Section 7. Grandfathering Determination – Withdrawals

All sources used by the project sponsor have been reviewed and approved by the Commission.

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 maintain metering on the withdrawal in accordance with Commission Regulation 18 CFR § 806.30.

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 withdrawal for the sources listed in Sections 3, 6, and 7 and groundwater elevations for Well PW-2, 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 shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval from the Commission. 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 Commission Regulation 18 CFR § 808.12.

6. In accordance with Commission Regulation 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 Commission Regulation 18 CFR § 806.30(a)(1) within five (5) days after any such loss.

7. In accordance with Commission Regulation 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 this approval 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 Commission Regulation 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 surface water and 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 Commission Regulation 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 Commission Regulation 18 CFR § 806.32.

14. This project is approved for inclusion in the Commission's Comprehensive Plan for the Water Resources of the Susquehanna River Basin.

15. In accordance with Commission Regulation 18 CFR § 806.31(d), if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project.

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.

Section 9. Special Conditions

18. The withdrawal from Well PW-2 shall not be operated during April and May.

19. Decision Items a, b, e, f, g, h, i, j, k, m, and n of Commission Docket No. 20041203 are hereby rescinded. All other limitations and conditions in Commission Docket No. 20041203 not inconsistent herewith shall remain effective.

20. Commission Docket No. 20041203-1 is hereby rescinded. Decision Item d of Docket No. 20041203 remains rescinded.

21. The project sponsor shall comply with the water conservation requirements and reduce system water losses to less than twenty (20) percent to comply with Commission Regulation 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.

22. The date of the last meter certification was December 16, 2015; therefore, the next meter certification is due no later than December 16, 2020. 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.

23. The project sponsor shall only supply water for use in hydrocarbon development to persons who have received approval for use of this approval pursuant to Commission Regulation 18 CFR § 806.22(f)(13).

24. 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 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

25. This modified approval shall be effective January 1, 2018. The term of Commission Docket Nos. 20041203 and 20041203-2 shall remain effective until December 15, 2029. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 15, 2029, 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, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2017.

Dated: December 11, 2017

Stephanee L. Richardson





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. 20171206 Approval Date: December 8, 2017

REPSOL OIL & GAS USA, LLC

Surface Water Withdrawal (Peak Day), Variable, of up to 0.999 mgd from Choconut Creek

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.

This approval is a renewal of Commission Docket No. 20131211 that was originally approved December 12, 2013, issued to Talisman Energy USA Inc., which underwent a name change to Repsol Oil & Gas USA, LLC, effective December 30, 2016, with a peak day withdrawal rate of 0.999 million gallons per day (mgd) and special flow protection requirements. The project sponsor has requested variable (monthly) peak day withdrawal rates. Following technical review, and consistent with applicable regulatory standards, Commission staff recommended approval of these changes to the conditions of the original docket. Commission staff also recommended special flow protection requirements consistent with current policy. This approval incorporates those recommendations.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), the Department of Conservation and Natural Resources (DCNR), 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:	Repsol Oil & Gas USA, LLC
Approval Type:	Surface Water Withdrawal
Past Docket No.:	20131211
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses

Project Information (continued)	
Municipality:	Choconut Township
County:	Susquehanna 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			
Approved Source:	Choconut Creek		
Subbasin:	Upper Susquehanna		
Watershed Boundary Dataset (WBD):	0205010302 (Choconut Creek – Susquehanna River)		
Water Use Designation:	Warm Water Fishery (WWF)		
Withdrawal Location (degrees):	Lat: 41.982302 N Long: 76.004048 W		
Site Flow Statistics (cfs):	Q7-10 = 0.5; Average Daily Flow = 17.4		
Drainage Area (square miles):	23.7		
Aquatic Resource Class*:	2		
Special Flow Protection Required:	Yes		
cfs – cubic feet per second * Refer to Commission Policy No. 2012-01 (Low Fl	ow Protection Policy Related to Withdrawal Approvals)		

Section 4. 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			
Peak Day Withdrawal Amount (mgd):	Not to Exceed Values Contained in the		
	"Withdrawal and Passby Schedule," When		
	Available		
Maximum Instantaneous Withdrawal	Not to Exceed Values Contained in the		
Rate (gpm):	"Withdrawal and Passby Schedule," When		
	Available		
Flow Protection Type: Seasonal passby expressed as monthly values			
Method for Monitoring Flow Protection: Off-site monitoring of USGS Real-Time G			
01513550; Choconut Creek near Choco			
Pennsylvania			

Approved Withdrawal Quantities and Limitations (continued)				
Withdrawal and Passby Schedule:				
	Peak Day	Maximum On-Site Flow		Off-Site Monitoring
	Withdrawal	Instantaneous	Protection	Threshold for Flow
Month	(mgd)	Withdrawal (gpm)	Rate (cfs)	Protection (cfs)*
January	0.999	694	6.2	6.1
February	0.999	694	6.2	6.1
March	0.999	694	14	12
April	0.999	694	15	13
May	0.999	694	7.7	7.3
June	0.943	655	5.8	5.7
July	0.540	375	3.3	3.3
August	0.388	270	2.4	2.4
September	0.367	255	2.3	2.3
October	0.655	455	4.1	4.0
November	0.999	694	6.2	6.1
December	0.999	694	6.4	6.2
USGS– U.S. Geological Survey				
1 cfs = 448.8 gallons per minute (gpm)				
* Flow Protection Threshold				

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

Section 5. 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 Commission Regulation 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 metering on the withdrawal in accordance with Commission Regulation 18 CFR § 806.30.

4. 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.

5. The project sponsor shall adhere to the intake design reviewed and approved by Commission staff. Any modifications proposed by the project sponsor for the permitted intake structure shall be submitted for review and, if appropriate, approval by Commission staff in accordance with Commission Regulations 18 CFR § 806.21 and § 806.23 prior to undertaking such modification(s).

6. The project sponsor shall keep daily records of the project's withdrawal 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 requested by the project sponsor shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 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.

7. Within sixty (60) days from notice of this approval, the project sponsor shall post an updated sign that meets Commission specifications and displays required project description information. Signage specifications can be found at the Commission's website (www.srbc.net), along with example sign templates for reference. The sign shall be maintained for the duration of the approval. Such sign shall be posted at the point of entry or access to the project facility from a public right-of-way. If there is any restriction to access at such point that would prevent an interested person from legibly viewing such sign, then the project sponsor shall post the sign at the nearest location to such point, along the route of ingress and egress to same, where an interested person would have unrestricted access to legibly view such sign. The project sponsor shall submit photographs as proof of installation of the updated sign.

8. 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 Commission Regulation 18 CFR § 808.12.

9. In accordance with Commission Regulation 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 Commission Regulation 18 CFR § 806.30(a)(1) within five (5) days after any such loss.

10. In accordance with Commission Regulation 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 this approval to the Commission within ninety (90) days of the change in ownership or project sponsor name change.

11. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation 18 CFR § 806.25.

12. This approval is conditioned on the project sponsor maintaining legal access to the withdrawal location for the duration of the approval.

13. The project sponsor shall register with the appropriate agency all surface water sources described herein, as may be required by regulations of the member jurisdiction.

14. 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 Commission Regulation 18 CFR Part 808.

15. 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.

16. 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 Commission Regulation 18 CFR § 806.32.

17. 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.

18. This project is approved for inclusion in the Commission's Comprehensive Plan for the Water Resources of the Susquehanna River Basin.

19. In accordance with Commission Regulation 18 CFR § 806.31(d), if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project.

20. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawal that would exceed the amounts listed herein.

Section 6. Special Conditions

21. Effective January 1, 2018, the project sponsor shall cease all withdrawals from the approved source when streamflow, as measured at the U.S. Geological Survey stream gage specified in Section 4, is less than the applicable flow protection threshold specified in Section 4,

and shall not reinstate withdrawals until the streamflow is equal to or exceeds such flow protection threshold.

22. The project sponsor shall, on a daily basis, collect and record streamflow as measured at the U.S. Geological Survey stream gage specified in Section 4, 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. The project sponsor may propose alternative flow monitoring to the Commission for staff review and, if appropriate, approval.

23. The date of the last meter certification was August 18, 2016; therefore, the next meter certification is due no later than August 18, 2021. 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.

24. Except as authorized pursuant to Special Condition 26, the project sponsor shall only supply water for use in hydrocarbon development to persons who have properly registered this approval pursuant to Commission Regulation 18 CFR § 806.22(f)(12).

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 daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for uses other than hydrocarbon development authorized pursuant to Special Condition 26, including daily quantities supplied.

26. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for minor modification under Commission Regulation 18 CFR § 806.18(c)(4) for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

27. The project sponsor shall demonstrate to the satisfaction of the Commission that appropriate controls and treatment to prevent the spread of aquatic nuisance species are employed at the water withdrawal site.

Section 7. Term

28. This approval shall be effective January 1, 2018, and shall remain effective until December 31, 2022. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 30, 2022, 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.

29. Commission Docket No. 20131211 shall remain effective through December 31, 2017, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2017.

Dated: December 11, 2017

Stephanee L Richardson

Stephanie L. Richardson





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. 20171207 Approval Date: December 8, 2017

SUEZ WATER PENNSYLVANIA INC. – SHAVERTOWN OPERATION

Groundwater Withdrawal (30-Day Average) of 0.288 mgd from the Salla Well and Total System Withdrawal Limit (30-Day Average) of 0.331 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.

SUEZ Water Pennsylvania Inc.'s (SUEZ's) Shavertown system supplies water to Dallas and Kingston Townships, Luzerne County, Pennsylvania. SUEZ maintains and operates a public water supply system that includes two sources (Salla Well and Hassold Well) and an interconnection for emergency use, with its adjacent Dallas system that is not included in the total system limit for the Shavertown system. Based on information provided by SUEZ, no other sources are operated by the project.

On October 10, 1985, the Commission approved the withdrawal from the Salla Well for up to 0.288 million gallons per day (mgd). On August 28, 2015, SUEZ submitted a groundwater withdrawal application to the Commission requesting approval for withdrawal from the Salla Well. This approval authorizes withdrawal from the Salla Well at the requested, previously approved rate, and establishes a total system withdrawal limit for withdrawals from the Salla Well and the Hassold Well.

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

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:SUEZ Water Pennsylvania Inc.			
Approval Type:Groundwater Withdrawal			
Past Docket No.: 19851001			
Authorized Water Use Purpose:Public Water Supply			
Municipality:	Dallas Township		
County:	Luzerne 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:	Salla Well		
Subbasin:	Middle Susquehanna		
Watershed Boundary Dataset (WBD):	0205010702 (Upper Susquehanna River)		
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 Commission Regulation 18 CFR § 806.12 for groundwater withdrawals was completed with prior Commission approval. A 72-hour, constant-rate aquifer test of the Salla Well was conducted from November 15 through 18, 2016, pumping at an average rate of 199 gallons per minute (gpm).

Commission staff determined that the withdrawal from the Salla Well 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): 0.288		
Maximum Instantaneous Withdrawal Rate (gpm):200 (Not to Exceed)		
Peak Day Withdrawal (mgd):	0.288	
Total System Withdrawal Limit – Salla Well and		
Hassold Well (30-Day Average) (mgd): 0.331		

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

Section 6. Existing Approved Withdrawals

The project does not have existing approved withdrawals.

Section 7. Grandfathered Sources

Existing sources from which withdrawals have occurred prior to July 13, 1978, are listed in the table below.

Grandfathered Groundwater Withdrawals		
Source Date of Initiation		
Hassold Well	1949	

On January 1, 2018, Subpart E to Commission Regulation 18 CFR § 806 becomes effective. SUEZ must register the Hassold Well prior to December 31, 2019.

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 Commission Regulation 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 metering on the withdrawals and in accordance with Commission Regulation 18 CFR § 806.30.

4. 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.

5. 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 7. The project sponsor shall maintain and monitor the accuracy of the measuring devices in accordance with the manufacturer's specifications.

6. The project sponsor shall keep daily records of the project's withdrawals and groundwater elevations for the sources listed in Sections 3 and 7, 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 Commission Regulation 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.

7. 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 Commission Regulation 18 CFR § 808.12.

8. In accordance with Commission Regulation 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 Commission Regulation 18 CFR § 806.30(a)(1) within five (5) days after any such loss.

9. In accordance with Commission Regulation 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 this approval to the Commission within ninety (90) days of the change in ownership or project sponsor name change.

10. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation 18 CFR § 806.25.

11. This approval is conditioned on the project sponsor maintaining legal access to the withdrawal location for the duration of the approval.

12. The project sponsor shall register with the appropriate agency all groundwater sources described herein, as may be required by regulations of the member jurisdiction.

13. 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 Commission Regulation 18 CFR Part 808.

14. 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.

15. 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 Commission Regulation 18 CFR § 806.32.

16. 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.

17. This project is approved for inclusion in the Commission's Comprehensive Plan for the Water Resources of the Susquehanna River Basin.

18. In accordance with Commission Regulation 18 CFR § 806.31(d), if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project.

19. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawal that would exceed the amounts listed herein.

20. 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.

21. 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

22. All grandfathered sources must be registered consistent with Section 7.

23. The date of the last meter certification for the Salla Well and Hassold Well was October 26, 2017; therefore, the next meter certification is due no later than October 26, 2022. 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.

24. The project sponsor shall only supply water for use in hydrocarbon development to persons who have properly registered this approval pursuant to Commission Regulation 18 CFR § 806.22(f)(12).

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. This approval shall be effective January 1, 2018, and shall remain effective until December 31, 2032. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 30, 2032, 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, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2017.

Dated: December 11, 2017

Stephanee L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20171208 Approval Date: December 8, 2017

SWN PRODUCTION COMPANY, LLC

Surface Water Withdrawal (Peak Day) of up to 0.500 mgd from Lycoming Creek (Bodines)

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.

This approval is a renewal of Commission Docket No. 20131209 that was originally approved December 12, 2013, with a maximum instantaneous withdrawal rate of 1,100 gallons per minute (gpm). The project sponsor has requested a reduction in the maximum instantaneous withdrawal rate to 350 gpm, which staff recommended approval. Commission staff also recommended special flow protection requirements consistent with current policy. This approval incorporates those recommendations.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), the Department of Conservation and Natural Resources (DCNR), 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: SWN Production Company, LLC			
Approval Type:	Approval Type: Surface Water Withdrawal		
Past Docket No.: 20131209			
Authorized Water Use Purpose: Hydrocarbon Development and Related Incidental Use			
Municipality:	Lewis Township		
County:	Lycoming 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			
Approved Source:	Lycoming Creek		
Subbasin:	West Branch Susquehanna		
Watershed Boundary Dataset (WBD):	0205020602 (Lycoming Creek)		
Water Use Designation:	Exceptional Value (EV)		
Withdrawal Location (degrees):	Lat: 41.447986 N Long: 76.980880 W		
Site Flow Statistics (cfs):	Q7-10 = 6.4; Average Daily Flow = 245		
Wild Trout Classification:	Naturally Reproducing Wild Trout		
Drainage Area (square miles):	146		
Aquatic Resource Class*:	3		
Special Flow Protection Required:	Yes		
cfs – cubic feet per second			

Section 4. 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				
Peak Day Withdrawal Amount (mgd):		0.500 (Not to Exceed, When Available)		
Maximum Instantaneous	Withdrawal			
Rate (gpm):		350 (Not to Exceed)		
Flow Protection Type: Seasonal passby expressed as monthly valu		v expressed as monthly values		
Method for Monitoring Flow Protection:		Off-site monitoring of USGS Real-Time Gage 01550000; Lycoming Creek near Trout Run,		
Pennsylvania		onning creek neur rrout Run,		
Passby Schedule:	Passby Schedule:			
	On-Site Fl	ow Protection	Off-Site Monitoring Threshold	
Month	Rate (cfs)		for Flow Protection (cfs)*	
January	19		23	
February	21		26	
March	44		53	
April	88		105	
May	44		53	
June		17	21	

Approved Withdrawal Quantities and Limitations (continued)			
Passby Schedule:			
	On-Site Flow Protection	Off-Site Monitoring Threshold	
Month	Rate (cfs)	for Flow Protection (cfs)*	
July	24	30	
August	15	19	
September	15	19	
October	20	25	
November	12	15	
December	19	23	
mgd – million gallons per day 1 cfs = 448.8 gpm	USGS – U.S. Geological Survey * Flow Protection Threshold		

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

Section 5. 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 Commission Regulation 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 metering on the withdrawal in accordance with Commission Regulation 18 CFR § 806.30.

4. 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.

5. The project sponsor shall adhere to the intake design reviewed and approved by Commission staff. Any modifications proposed by the project sponsor for the permitted intake structure shall be submitted for review and, if appropriate, approval by Commission staff in accordance with Commission Regulations 18 CFR § 806.21 and § 806.23 prior to undertaking such modification(s).

6. The project sponsor shall keep daily records of the project's withdrawal 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 requested by the project sponsor shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 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.

7. Within sixty (60) days from notice of this approval, the project sponsor shall post an updated sign that meets Commission specifications and displays required project description information. Signage specifications can be found at the Commission's website (www.srbc.net), along with example sign templates for reference. The sign shall be maintained for the duration of the approval. Such sign shall be posted at the point of entry or access to the project facility from a public right-of-way. If there is any restriction to access at such point that would prevent an interested person from legibly viewing such sign, then the project sponsor shall post the sign at the nearest location to such point, along the route of ingress and egress to same, where an interested person would have unrestricted access to legibly view such sign. The project sponsor shall submit photographs as proof of installation of the updated sign.

8. 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 Commission Regulation 18 CFR § 808.12.

9. In accordance with Commission Regulation 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 Commission Regulation 18 CFR § 806.30(a)(1) within five (5) days after any such loss.

10. In accordance with Commission Regulation 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 this approval to the Commission within ninety (90) days of the change in ownership or project sponsor name change.

11. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation 18 CFR § 806.25.

12. This approval is conditioned on the project sponsor maintaining legal access to the withdrawal location for the duration of the approval.

13. The project sponsor shall register with the appropriate agency all surface water sources described herein, as may be required by regulations of the member jurisdiction.

14. 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 Commission Regulation 18 CFR Part 808.

15. 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.

16. 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 Commission Regulation 18 CFR § 806.32.

17. 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.

18. This project is approved for inclusion in the Commission's Comprehensive Plan for the Water Resources of the Susquehanna River Basin.

19. In accordance with Commission Regulation 18 CFR § 806.31(d), if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project.

20. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawal that would exceed the amounts listed herein.

Section 6. Special Conditions

21. Effective January 1, 2018, the project sponsor shall cease all withdrawals from the approved source when streamflow, as measured at the U.S. Geological Survey stream gage specified in Section 4, is less than the applicable flow protection threshold specified in Section 4, and shall not reinstate withdrawals until the streamflow is equal to or exceeds such flow protection threshold.

22. The project sponsor shall, on a daily basis, collect and record streamflow as measured at the U.S. Geological Survey stream gage specified in Section 4, 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. The project sponsor may propose alternative flow monitoring to the Commission for staff review and, if appropriate, approval.

23. The date of the last meter certification was July 26, 2017; therefore, the next meter certification is due no later than July 26, 2022. 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.

24. The project is fully constructed and no changes are proposed. However, if changes are proposed or maintenance requires instream work, the project sponsor shall adhere to recommendations provided by PFBC for avoiding adverse impact to documented occurrences of a naturally reproducing wild trout population at or in proximity to the project location. The project sponsor shall avoid modification of the intake or any other instream construction from October 1 through December 31, unless otherwise approved by PFBC in writing and submitted to the Commission.

25. Except as authorized pursuant to Special Condition 27, the project sponsor shall only supply water for use in hydrocarbon development to persons who have properly registered this approval pursuant to Commission Regulation 18 CFR § 806.22(f)(12).

26. 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 daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for uses other than hydrocarbon development authorized pursuant to Special Condition 27, including daily quantities supplied.

27. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for minor modification under Commission Regulation 18 CFR § 806.18(c)(4) for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

28. The project sponsor shall demonstrate to the satisfaction of the Commission that appropriate controls and treatment to prevent the spread of aquatic nuisance species are employed at the water withdrawal site.

Section 7. Term

29. This approval shall be effective January 1, 2018, and shall remain effective until December 31, 2022. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 30, 2022, 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.

30. Commission Docket No. 20131209 shall remain effective through December 31, 2017, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2017.

Dated: December 11, 2017

Stephanee L. Richardson Stephanie L. Richardson



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. 20171209 Approval Date: December 8, 2017

SWN PRODUCTION COMPANY, LLC

Surface Water Withdrawal (Peak Day) of up to 0.500 mgd from Lycoming Creek (Ralston)

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.

This approval is a renewal of Commission Docket No. 20131210 that was originally approved December 12, 2013, with a maximum instantaneous withdrawal rate of 1,100 gallons per minute (gpm). The project sponsor has requested a reduction in the maximum instantaneous withdrawal rate to 350 gpm, which staff recommended approval. Commission staff also recommended special flow protection requirements consistent with current policy. This approval incorporates those recommendations.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), the Department of Conservation and Natural Resources (DCNR), 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: SWN Production Company, LLC			
Approval Type:Surface Water Withdrawal			
Past Docket No.: 20131210			
Authorized Water Use Purpose: Hydrocarbon Development and Related Incidental Use			
Municipality:	McIntyre Township		
County:	Lycoming 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			
ved Source: Lycoming Creek			
West Branch Susquehanna			
0205020602 (Lycoming Creek)			
Exceptional Value (EV)			
Lat: 41.498878 N Long: 76.956948 W			
Q7-10 = 4.4; Average Daily Flow = 169			
Naturally Reproducing Wild Trout			
Drainage Area (square miles): 100			
3			
Yes			

Section 4. 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				
Peak Day Withdrawal Amount (mgd):		0.500 (Not to Exceed, When Available)		
Maximum Instantaneous Withdrawal				
Rate (gpm):		350 (Not to Exceed)		
Flow Protection Type: Se		Seasonal passby expressed as monthly values		
Method for Monitoring Flow Protection:		Off-site monitoring of USGS Real-Time Gage 01550000; Lycoming Creek near Trout Run,		
Pennsylvania				
Passby Schedule:				
	On-Site Fl	ow Protection	Off-Site Monitoring Threshold	
Month	Ra	te (cfs)	for Flow Protection (cfs)*	
January		13	23	
February	14		26	
March	30		53	
April	60		105	
May		30	53	
June		12	21	

Approved Withdrawal Quantities and Limitations (continued)				
Passby Schedule:				
	On-Site Flow Protection	Off-Site Monitoring Threshold		
Month	Rate (cfs)	for Flow Protection (cfs)*		
July	17	30		
August	15	27		
September	15	27		
October	15	27		
November	35	61		
December	13	23		
mgd – million gallons per day 1 cfs = 448.8 gpm	USGS – U.S. Geological Survey * Flow Protection Threshold			

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

Section 5. 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 Commission Regulation 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 metering on the withdrawal in accordance with Commission Regulation 18 CFR § 806.30.

4. 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.

5. The project sponsor shall adhere to the intake design reviewed and approved by Commission staff. Any modifications proposed by the project sponsor for the permitted intake structure shall be submitted for review and, if appropriate, approval by Commission staff in accordance with Commission Regulations 18 CFR § 806.21 and § 806.23 prior to undertaking such modification(s).

6. The project sponsor shall keep daily records of the project's withdrawal 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 requested by the project sponsor shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 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.

7. Within sixty (60) days from notice of this approval, the project sponsor shall post an updated sign that meets Commission specifications and displays required project description information. Signage specifications can be found at the Commission's website (www.srbc.net), along with example sign templates for reference. The sign shall be maintained for the duration of the approval. Such sign shall be posted at the point of entry or access to the project facility from a public right-of-way. If there is any restriction to access at such point that would prevent an interested person from legibly viewing such sign, then the project sponsor shall post the sign at the nearest location to such point, along the route of ingress and egress to same, where an interested person would have unrestricted access to legibly view such sign. The project sponsor shall submit photographs as proof of installation of the updated sign.

8. 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 Commission Regulation 18 CFR § 808.12.

9. In accordance with Commission Regulation 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 Commission Regulation 18 CFR § 806.30(a)(1) within five (5) days after any such loss.

10. In accordance with Commission Regulation 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 this approval to the Commission within ninety (90) days of the change in ownership or project sponsor name change.

11. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation 18 CFR § 806.25.

12. This approval is conditioned on the project sponsor maintaining legal access to the withdrawal location for the duration of the approval.

13. The project sponsor shall register with the appropriate agency all surface water sources described herein, as may be required by regulations of the member jurisdiction.

14. 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 Commission Regulation 18 CFR Part 808.

15. 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.

16. 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 Commission Regulation 18 CFR § 806.32.

17. 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.

18. This project is approved for inclusion in the Commission's Comprehensive Plan for the Water Resources of the Susquehanna River Basin.

19. In accordance with Commission Regulation 18 CFR § 806.31(d), if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project.

20. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawal that would exceed the amounts listed herein.

Section 6. Special Conditions

21. Effective January 1, 2018, the project sponsor shall cease all withdrawals from the approved source when streamflow, as measured at the U.S. Geological Survey stream gage specified in Section 4, is less than the applicable flow protection threshold specified in Section 4, and shall not reinstate withdrawals until the streamflow is equal to or exceeds such flow protection threshold.

22. The project sponsor shall, on a daily basis, collect and record streamflow as measured at the U.S. Geological Survey stream gage specified in Section 4, 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. The project sponsor may propose alternative flow monitoring to the Commission for staff review and, if appropriate, approval.

23. The date of the last meter certification was October 18, 2017; therefore, the next meter certification is due no later than October 18, 2022. 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.

24. The project is fully constructed and no changes are proposed. However, if changes are proposed or maintenance requires instream work, the project sponsor shall adhere to recommendations provided by PFBC for avoiding adverse impact to documented occurrences of a naturally reproducing wild trout population at or in proximity to the project location. The project sponsor shall avoid modification of the intake or any other instream construction from October 1 through December 31, unless otherwise approved by PFBC in writing and submitted to the Commission.

25. Except as authorized pursuant to Special Condition 27, the project sponsor shall only supply water for use in hydrocarbon development to persons who have properly registered this approval pursuant to Commission Regulation 18 CFR § 806.22(f)(12).

26. 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 daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for uses other than hydrocarbon development authorized pursuant to Special Condition 27, including daily quantities supplied.

27. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for minor modification under Commission Regulation 18 CFR § 806.18(c)(4) for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

28. The project sponsor shall demonstrate to the satisfaction of the Commission that appropriate controls and treatment to prevent the spread of aquatic nuisance species are employed at the water withdrawal site.

Section 7. Term

29. This approval shall be effective January 1, 2018, and shall remain effective until December 31, 2022. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 30, 2022, 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.

30. Commission Docket No. 20131210 shall remain effective through December 31, 2017, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2017.

Dated: December 11, 2017

Stephanee L. Richardson Stephanie L. Richardson

Exhibit D12



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. 20171210 Approval Date: December 8, 2017

VILLAGE OF WAVERLY

Groundwater Withdrawals (30-Day Averages) of 0.317 mgd from Well 1, 0.432 mgd from Well 2, and 0.397 from Well 3; and Total System Withdrawal Limit (30-Day Average) of 1.800 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 Village of Waverly (Village) supplies water to the Village of Waverly and the Town of Barton, Tioga County, New York. The Village maintains and operates a public water supply system that is supplied by four groundwater wells (Wells 1, 2, 3, and 4) and an interconnection with the Town of Barton. Because the Village operates Barton Well 1 for the Town of Barton, the total system limit includes Barton Well 1 and Village Wells 1, 2, 3, and 4. Based on information provided by the Village, no other sources are operated by the project.

On February 11, 1982, the Commission approved the groundwater withdrawal of 0.500 million gallons per day (mgd) from Well 3 under Commission Docket No. 19820202. On December 5, 2007, the Commission approved a request from the Village to increase its withdrawal from Well 4 from 0.500 mgd to 0.576 mgd. In accordance with Commission Regulation 18 CFR § 806.4(a)(2)(ii), the Village was required to submit groundwater withdrawal applications for the previously unapproved sources (Wells 1 and 2). On January 12, 2009, the Village submitted groundwater withdrawal applications requesting approval to continue to withdraw from Wells 1, 2, and 3. This approval authorizes the use of Wells 1, 2, and 3 at the reduced requested rates and establishes a total system limit for the Village that supersedes the combined total system limit previously approved for the Village and the Town of Barton.

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

Commission staff has coordinated with the New York State Department of Health (NYSDOH) and the New York State Department of Environmental Conservation (NYSDEC) 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:	Village of Waverly		
Approval Type:Groundwater Withdrawal			
Past Docket No.: 19820202 (Well 3)			
Authorized Water Use Purpose:Public Water Supply			
Municipality: Village of Waverly (Wells 1 and 2);			
Town of Barton (Well 3)			
County:	Tioga County		
State:	New York		

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 Sources:	Wells 1, 2, and 3		
Subbasin:	Upper Susquehan	na	
Watershed Boundary Dataset (WBD):	0205010306 (Cayuta 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 Commission Regulation 18 CFR § 806.12 for groundwater withdrawals was completed with prior Commission approval for Wells 1, 2, and 3. Constant-rate aquifer tests were conducted on the project's wells between November 4, 2014, and November 17, 2015. Additionally, supplemental testing of the wells was conducted from August 7 through 10, 2017.

Commission staff determined that the withdrawals from Wells 1, 2, and 3 at the requested withdrawal rates 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.

Individual aquifer testing and results for Wells 1, 2, and 3 are discussed in the following subsections.

Section 4.1 Well 1

The monitoring network for the Well 1 aquifer test in 2014 included three wells and two piezometers. Due to data validation concerns, the Village completed supplemental aquifer testing of Well 1 in 2017. The results of the 2014 and 2017 aquifer tests demonstrated that the well is capable of producing the requested quantity without significant adverse impacts to other users or the environment. The testing also demonstrated that the supervisory control and data acquisition (SCADA) system was not reliably collecting water level data. Therefore, staff recommends that the Village confirm or repair the SCADA system, as appropriate, in accordance with Special Condition 21.

Section 4.2 Well 2

The monitoring network for the Well 2 aquifer test in 2015 included five wells and two piezometers. Due to data validation concerns, the Village completed supplemental aquifer testing of Well 2 in 2017. The results of the 2014 and 2017 aquifer tests indicated that water levels in Well 2 may be lower than the top of screen during pumping conditions but significant adverse impacts to other users or the environment are not expected. The testing also demonstrated that the SCADA system was not reliably collecting water level data. The Village recognizes that operation of the withdrawal should not result in lowering the water level in the well below the top of the screen, acknowledges the limitations of its SCADA system, and is committed to maintaining water levels above the top of the screen. Therefore, staff recommends that the Village confirm or repair the SCADA system, as appropriate, in accordance with Special Condition 21, and install a low level, automatic cutoff switch to maintain water levels above the top of the screen in accordance with Special Condition 22.

Section 4.3 Well 3

The monitoring network for the Well 3 aquifer test in 2015 included four wells and two piezometers. Due to data validation concerns, the Village completed supplemental aquifer testing of Well 3 in 2017. The results of the 2014 and 2017 aquifer tests indicated that water levels in Well 3 may be lower than the top of screen during pumping conditions but significant adverse impacts to other users or the environment are not expected. The testing also demonstrated that the SCADA system was not reliably collecting water level data. The Village recognizes that operation of the withdrawal should not result in lowering the water level in the well below the top of the screen, acknowledges the limitations of its SCADA system, and is committed to maintaining water levels above the top of the screen. Therefore, staff recommends

that the Village confirm or repair the SCADA system, as appropriate, in accordance with Special Condition 21, and install a low level, automatic cutoff switch to maintain water levels above the top of the screen in accordance with Special Condition 22.

Section 5. Approved Withdrawal Quantities and Limitations

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

Approved Withdrawal Quantities and Limitations			
	Well 1	Well 2	Well 3
30-Day Average Withdrawal (mgd):	0.317	0.432	0.397
Maximum Instantaneous Withdrawal Rate (gpm) (Not to Exceed):	230	333	330
Total System Withdrawal Limit – Well 1, Well 2, Well 3, Well 4, and Barton Well 1 (30-Day Average) (mgd):	1.800		
gpm – gallons per minute			

The withdrawals are 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				
30-Day AverageCommissionDocketSourceWithdrawal (mgd)Docket No.Expiration Date				
Well 4	0.576	20030207 and 20030207-1	February 6, 2028	

Section 7. Grandfathering Determination – Withdrawals

The project no longer utilizes surface water withdrawals that existed prior to November 11, 1995.

With this approval all groundwater sources used by the Village 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. Within sixty (60) days from the date of this approval, the project sponsor shall submit a comprehensive metering plan to the Commission for review and approval by Commission staff that accounts for all withdrawals listed in Sections 3 and 6 of this approval.

3. The project sponsor shall maintain metering on the withdrawals in accordance with Commission Regulation 18 CFR § 806.30.

4. 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.

5. Within sixty (60) days from the date of this approval, the project sponsor shall submit a plan to Commission staff for review and approval for the implementation of a groundwater elevation monitoring program in accordance with Commission Regulation 18 CFR § 806.30(a)(4). The plan shall include proposed methods for the daily measurement and recording of groundwater elevations in the sources listed in Sections 3 and 6. Following approval, the project sponsor shall execute the plan and complete installation of water level monitoring equipment in accordance with the approved schedule. The project sponsor shall notify the Commission, in writing, and submit photographs of the water level monitoring equipment when it has been installed and certify the accuracy of the measuring devices. The project sponsor shall notify the Commission when the monitoring plan has been fully implemented.

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 Commission Regulation 18 CFR § 808.12.

7. In accordance with Commission Regulation 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 Commission Regulation 18 CFR § 806.30(a)(1) within five (5) days after any such loss.

8. In accordance with Commission Regulation 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 this approval 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 Commission Regulation 18 CFR § 806.25.

10. This approval is conditioned on the project sponsor maintaining legal access to the withdrawal locations for the duration of the approval.

11. The project sponsor shall register with the appropriate agency all groundwater sources described herein, as may be required by regulations of the member jurisdiction. The project sponsor shall also satisfy annual usage, capacity, and conservation reporting requirements in the form and manner prescribed by NYSDEC's Division of Water.

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 Commission Regulation 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. The foregoing shall include, but not be limited to, any applicable permitting requirements of NYSDEC. 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. Furthermore, no water withdrawn by this project may be used in natural gas well development using High Volume Hydraulic Fracturing in New York State.

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 Commission Regulation 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. In accordance with Commission Regulation 18 CFR § 806.31(d), if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project.

18. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawals that would exceed the amounts listed herein.

19. 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.

20. If the Commission determines that the operation of the project's groundwater withdrawals 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

21. Within ninety (90) days of this approval, the project sponsor shall submit for review and approval by Commission staff a water level verification plan for Wells 1, 2, 3, and 4 to verify water levels collected by the SCADA. The plan shall include an implementation schedule; duration of the testing period, which is expected to include at least three (3) months of water level verification monitoring; and describe procedures that will be used to verify, through various pumping and non-pumping conditions, that the water level data collected by the SCADA system is accurate and reliable. Once approved, the plan shall be implemented within thirty (30) days. Modifications to the approved plan shall not be made until the project sponsor receives written approval of the amended plan.

The project sponsor shall report the results of the water level verification to the Commission as follows:

- a. The report must summarize the data collected, document the results of the water level monitoring, and evaluate the need for corrective action to the SCADA system. Any repairs or modifications to the SCADA system should be reported to the Commission in the interpretive report. If warranted as a result of repairs, an updated groundwater elevation monitoring plan shall be included with the report.
- b. The report shall be submitted within thirty (30) days of completion of the implemented plan, unless otherwise directed by Commission staff.
- c. The project sponsor must complete corrective action, as needed, to ensure the accurate and reliable collection of water level data.
- d. Commission staff may extend the water level verification should monitoring be inconclusive or additional corrective action is needed.

22. The project sponsor shall install low level, automatic cutoff switches to prevent drawdown of the water level from exceeding 26.5 feet below ground surface in Well 2 (774.3 feet above mean sea level) and 30.3 feet below ground surface in Well 3 (791.1 feet above mean sea level).

23. The project sponsor shall comply with the water conservation requirements and reduce system water losses to less than twenty (20) percent to comply with Commission Regulation 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.

24. Within sixty (60) days of this approval, the project sponsor shall provide meter certifications for Wells 1, 2 and 3. 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.

25. The project sponsor shall only supply water for use in hydrocarbon development to persons who have properly registered this approval pursuant to Commission Regulation 18 CFR § 806.22(f)(13).

26. 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

27. This approval shall be effective January 1, 2018, and shall remain effective until December 31, 2032. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 30, 2032, 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.

28. Commission Docket No. 19820202 shall remain effective through December 31, 2017, whereupon it shall expire.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2017.

Dated: December 11, 2017

Stephanee Z Richardson

Stephanie L. Richardson