a water management agency serving the Susquehanna River Watershed



December 15, 2015

TO ALL CONCERNED:

At the December 4, 2015, Commission meeting, the draft minutes of the September 10, 2015, Commission meeting were approved as written. Please attach this notice to your copy of the September 10, 2015 minutes.

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

MINUTES OF THE SUSQUEHANNA RIVER BASIN COMMISSION December 4, 2015

#2015-04

The meeting was held at the North Office Building, Pennsylvania State Capitol Complex, Harrisburg, Pennsylvania. Chairwoman Heffner called the meeting to order at 9:00 a.m.

ROLL CALL

Commissioners Present

Alternate Commissioners and Advisors Present

Mr. Kenneth P. Lynch, Director, Region 7, New York State Dept. of Environmental Conservation (NYSDEC)
Ms. Kelly Heffner, Deputy Secretary for Water Management, Pennsylvania Dept. of Environmental Protection (PADEP)
Ms. Virginia Kearney, Deputy Director, Water Management Administration, Maryland Dept. of the Environment (MDE)
Col. Edward Chamberlayne, District Engineer, U.S. Army Corps of Engineers (USACE), Baltimore District

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

Staff Present

Mr. Andrew D. Dehoff, Executive Director
Mr. Andrew J. Gavin, Deputy Executive Director
Ms. Marcia Hutchinson, Director, Administration & Finance
Ms. Stephanie L. Richardson, Secretary to the Commission
Mr. Jason Oyler, General Counsel
Mr. John W. Balay, Manager, Planning & Operations
Ms. Paula B. Ballaron, Manager, Policy
Implementation & Outreach

Mr. Todd D. Eaby, Manager, Project Review
Mr. Brydon Lidle, Manager, Information
Technology
Mr. Eric Roof, Manager, Compliance &
Enforcement
Ms. Gwyn Rowland, Manager, Governmental &
Public Affairs
Mr. Jamie Shallenberger, Manager, Monitoring &
Protection
Mr. William Miller, Hydrologist
Mr. Mike Sweitzer, System Administrator

Also Present

Mr. Hank Gruber, USACE, NAD

1. **Opening Remarks from the Chair**

Chairwoman Heffner opened the meeting and provided an opening statement outlining the rules of conduct for the meeting. She noted that a public hearing was previously held on October 29, 2015. The Commissioners introduced themselves and gave information regarding their respective duties in the agencies they represent.

2. Presentation on Paxton Creek Total Maximum Daily Load (TMDL) Strategy

Ms. Claire Maulhardt, from Capital Region Water, made a presentation on an intergovernmental cooperation agreement for working together on the Paxton Creek Total Maximum Daily Load (TMDL) Strategy to reduce sediment from stormwater discharges and stream bank erosion for improving the health of Paxton Creek Watershed in Harrisburg and the surrounding communities.

3. Minutes of September 10, 2015, Commission Meeting

On a motion by Commissioner Lynch, seconded by Commissioner Chamberlayne, the minutes of the regular business meeting of September 10, 2015, were unanimously approved as written.

4. FY2017 Funding of the Groundwater and Streamflow Information Program

Planning & Operations Manager John Balay presented a resolution for consideration and adoption by the Commission urging the 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 Lynch, seconded by Commissioner Kearney, the Commission adopted the resolution with Commissioner Chamberlayne abstaining. (Exhibit A)

5. Final Rulemaking

General Counsel Jason Oyler presented a set of proposed rules, which would amend the Commission regulations to simplify and revise the rules for transfer of approvals, create a category for minor modifications, and establish a procedure for the Commission to issue general permits; and enact other minor enhancements. These rules were the subject of a proposed rulemaking notice in the Federal Register, the state notice publications, and of one public hearing. Comments on the proposed rules were received through November 9, 2015, to which the Commission staff prepared responses and, in some cases, made modifications to the proposed rules for consideration.

Chairwoman Heffner called for a vote and the Commission unanimously voted to accept the resolution and changes to the final rulemaking. (Exhibit B)

6. Update of Investment Policy Statement

Director of Administration and Finance Marcia Hutchinson requested that the Commission adopt a resolution amending the investment policy statement adopted by Resolution 2012-02, updating the addendum to the SRBC's investment policy based upon updated expected 10- and 15-year returns.

On a motion by Commissioner Kearney, seconded by Commissioner Chamberlayne, the resolution was unanimously adopted. (Exhibit C)

7. Agreements

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

a. Contract Ratification – Overstreet & Nestor LLC

Staff requested that the Commission ratify an agreement with Overstreet & Nestor for legal services. The Commission has received an administrative appeal from Shrewsbury Borough, and General Counsel has determined that outside legal assistance is needed to respond to the appeal in a timely manner. It is estimated that services will cost approximately \$50,000.

b. Subcontract Approval – Watershed Restoration and Protection Program (Commonwealth Financing Authority)

Staff requested that the Commission approve a subcontract agreement with a construction contractor or contractors. The Commission was awarded a grant from the Commonwealth of Pennsylvania, Commonwealth Financing Authority, to improve water quality in the Cedar Run Watershed, Hampden Township, Cumberland County, Pa. A contractor or contractors is needed to construct stormwater management facilities. The stormwater management measures will enhance the water quality of stormwater runoff from approximately 50 acres in the Cedar Run Watershed. The contractor(s) will be selected based on proposals received in response to a public bid. The subcontract(s) will not exceed \$175,000 with Commonwealth Financing Authority to providing \$150,000 and SRBC providing \$25,000.

On a motion by Commissioner Chamberlayne, seconded by Commissioner Lynch, the contract and subcontract were unanimously approved.

8. Regulatory Program Actions

a. Compliance Actions

Regulatory Counsel Jason Oyler presented the following compliance action recommendations for the Commission's consideration:

Staff recommended that the Commission accept the following settlement offers:

- Seneca Resources Corporation; \$75,000
- Schreiber Foods, Inc.; \$44,500

There was no environmental harm attributed to either violation. Seneca Resources has provided the post-hydrofracing reports as required.

b. Report on Delegated Settlements

Mr. Oyler reported on delegated settlements staff completed over the previous quarter. The following compliance matters have been settled:

A settlement with Bon Air Country Club ("Bon Air"):

- Bon Air has a Docket for the withdrawal and consumptive use of water (No. 20030413) for the operation of a golf course in Shrewsbury Township, York County, Pennsylvania.
- During a routine compliance inspection, Commission staff discovered that Bon Air had never implemented a groundwater monitoring plan required by the Docket that was necessary to ensure that Bon Air's withdraw was not affecting surface waters or other groundwater sources.
- The settlement is **\$5,000**.

A settlement with Byler Golf Management, Inc. dba Iron Valley Golf Club ("Iron Valley"):

- Iron Valley has a Docket for the withdrawal and consumptive use of water (No. 19981206 and 19981206-1) for the operation of a golf course in Cornwall Borough, Lebanon County, Pennsylvania.
- During a routine compliance inspection, Commission staff requested the daily metered water use records for its two groundwater withdrawals and the consumptive use of the project. The project was unable to produce the requested records.
- The settlement is for **\$4,000**.

A settlement with PH Glatfelter Company (Glatfelter):

- Glatfelter has a Docket for the consumptive use of water (No. 20100608) at its Spring Grove Facility, York County, Pennsylvania.
- During the course of Glatfelter's quarterly reporting of consumptive use numbers in 2014, it became apparent that Glatfelter had changed the methods used to calculate its consumptive use numbers. The change was due to the fact that the influent flow meter Glatfelter was using completely failed in the first quarter of 2014. Glatfelter did replace the influent meter.
- The settlement is for **\$7,000**.

A settlement with The Lion Brewery, Inc. ("Lion"):

- Lion has an ABR for the consumptive use of water associated with their brewing operation in Wilkes-Barre, Luzerne County, Pennsylvania.
- SRBC compliance staff arrived on site for a meeting and inspection of Lion's facilities, however, Lion failed to keep its scheduled meeting on site with the SRBC compliance inspector and he was not given access to Lion's staff and premises.
- Lion has a prior compliance action for failure to get Commission approval of its Consumptive Use of water.
- The settlement is for **\$1,000**.

A settlement with Irem Temple Golf Club ("Irem"):

- Irem has a Docket (No. 20020401) for consumptive use of water in support of golf course irrigation needs at its facility in Dallas Township, Luzerne County, Pennsylvania.
- During a compliance inspection, it was observed that Irem was using an unapproved groundwater well to fill its irrigation pond. Irem also was failing to record the water withdrawn from its groundwater sources.
- The settlement is for **\$7,500**.

c. Docket Actions

Todd Eaby, Manager of Project Review, presented a staff memorandum containing details and recommendations regarding the following list of project applications:

- 1-4. Aqua Pennsylvania, Luzerne County, Pa.
- Byler Golf Management, Inc., Iron Valley Gold Course, Lebanon County, Pa. (Exhibit D1)
- Cabot Oil & Gas Corporation (Tunkhannock Creek), Susquehanna County, Pa. (Exhibit D2)
- 7-10. East Berlin Area Joint Authority, Adams County, Pa.
- 11-15. East Cocalico Township Authority, Lancaster County, Pa.
- 16-18. Furman Foods, Inc., Northumberland County, Pa.
- 19. Montgomery Water and Sewer Authority, Lycoming County, Pa. (Exhibit D3)
- 20. Mount Joy Borough Authority, Lancaster County, Pa.
- 21-24. Pennsylvania Department of Environmental Protection, Bureau of Conservation and Restoration, Cambria County, Pa.

- 25. Sugar Hollow Water Services, LLC (Susquehanna River), Wyoming County, Pa. (Exhibit D4)
- SWN Production Company, LLC (Susquehanna River), Susquehanna County, Pa. (Exhibit D5)
- SWN Production Company, LLC (Susquehanna River), Susquehanna County, Pa. (Exhibit D6)
- 28. SWN Production Company, LLC (Tioga River), Tioga County, Pa. (Exhibit D7)
- 29. Village of Sidney (Well 2-88), Delaware County, N.Y. (Exhibit D8)
- Seneca Resources Corporation (Impoundment 1), into the Basin diversion, McKean County, Pa. (Exhibit D9)

Highlight = Staff recommending tabling.

All projects on the above list were recommended for approval with the exception of Nos. 1-4, 7-18, and 20-24, which were recommended for tabling.

Commissioner Chamberlayne commented that he appreciates the time and effort that staff takes to study these requests. Commissioner Kearney moved that the Commission accept the settlements as outlined by Mr. Oyler and adopt the recommendations of staff for the 30 project applications. The motion was seconded by Commissioner Chamberlayne and unanimously adopted by the Commission.

9. Adjournment

Commissioner Kearney made a motion to adjourn that was seconded by Commissioner Lynch. Chairwoman Heffner adjourned the meeting at 10:15 a.m.

Date Adopted

Stephanie L. Richardson

RESOLUTION NO. 2015-10

A RESOLUTION of the Susquehanna River Basin Commission (the "Commission") urging the President and the Congress of the United States to provide financial support to the Groundwater and Streamflow Information Program in FY 2017, thereby supporting the Susquehanna Flood Forecast and Warning System.

WHEREAS, the Susquehanna River Basin is one of the most flood-prone watersheds in the United States, with average annual flood damages of nearly \$150 million; and

WHEREAS, severe flooding in the Susquehanna River Basin in September 2011, from which basin residents are still continuing to recover, caused millions of dollars in flood damages, injury, and loss of life, and further underscored the flood prone nature of the basin; and

WHEREAS, through an integrated rain and stream gage network, timely and accurate flood forecasts and warnings, and flood stage mapping for at-risk communities in the Susquehanna River Basin, the Susquehanna Flood Forecasting and Warning System (SFFWS) has helped prevent injury and loss of life; reduced flood damages by tens of millions of dollars; and delivered a benefit to cost ratio of 20:1; and

WHEREAS, these streamgages are crucial to early warning and flood damage reduction efforts in the Susquehanna River Basin, one of the most flood prone river basins in the United States; and

WHEREAS, the SFFWS is inextricably linked to the public health, safety, and welfare of the citizens of the Susquehanna River Basin; and

WHEREAS, in the interest of avoiding duplication of effort, maximizing available resources and promoting good government, the Commission, in accordance with its authority under Section 3.7 of the Susquehanna River Basin Compact, Pub. L. 91-575, plays an important coordinative role with federal and state agencies through the SFFWS, and also provides important technical assistance and public information services to the SFFWS; and

WHEREAS, federal funding for the SFFWS was eliminated in FY 2011; and

WHEREAS, concern by Congress for the long-term continuity and reliability of our national streamgaging data led to the creation of the National Streamflow Information Program (NSIP) by the U.S. Geological Survey (USGS) in 1999; and

WHEREAS, NSIP was designed and authorized to operate as a federally funded "backbone" network supporting approximately 4,750 streamgages and tidal gages necessary to fulfill 5 specific national purposes including streamflow forecasts that provide real-time stage and discharge data that are required to support flood and other streamflow forecasting by the National Weather Service and other federal agencies across the country; and

WHEREAS, Public Law 111-11 known as the "Omnibus Public Land Management Act of 2009" authorizes full implementation of NSIP by March 2019; and

WHEREAS, NSIP was integrated into a larger Groundwater and Streamflow Information Program (GSIP) by the USGS in October 2015, which fully supports full implementation of the "federally funded backbone" network as authorized by Public Law 111-11; and

WHEREAS, full implementation of the federally funded network will offset costs incurred by other federal streamgage programs, offset associated costs to cooperators within these same programs, and create a sustainable network to protect the lives and property of our nation's citizenry; and

WHEREAS, 45 streamgages in the SFFWS have been designated within the USGS federally funded network and therefore, have been designated as eligible for USGS support.

NOW THEREFORE BE IT RESOLVED THAT:

1. The Commission recommends the President include the amount of \$122 million in the FY 2017 budget to fully fund all GSIP eligible gages in the nation, thereby providing sustainable funding for the SFFWS.

2. The Congress of the United States is likewise encouraged to support the above stated appropriation request for FY 2017.

3. This resolution shall be effective immediately.

Dated: December 4, 2015

Kelly J. Heffner, Chair

Pennsylvania

RESOLUTION NO. 2015-11

A RESOLUTION of the Susquehanna River Basin Commission (the "Commission") adopting and promulgating a final rulemaking action amending its project review regulations to simplify and clarify the process for transferring approvals and to add section dealing with general permits and modifications to approvals.

WHEREAS, the Commission is authorized under Sections 3.9 and 15.2 of the Susquehanna River Basin Compact, P.L. 91-575 (the "Compact"), to "adopt, amend, and repeal rules and regulations to implement the compact;" and

WHEREAS, a proposed rulemaking action was published in the Federal Register on September 21, 2015; the New York Register on October 7, 2015; the Pennsylvania Bulletin on October 17, 2015; and the Maryland Register on October 16, 2015; and

WHEREAS, in accordance with 18 CFR § 808.1, this proposed rulemaking action was the subject of a public hearing held in Grantville, Pennsylvania on October 29, 2015; and

WHEREAS, the Commission also accepted written comments on this proposed rulemaking action through November 9, 2015; and

WHEREAS, in response to comments received on this proposed rulemaking action, the Commission has made modifications to clarify and strengthen the final rulemaking, all as explained in the "Supplementary Information" section of the attached final rulemaking notice; and

WHEREAS, it is the determination of the Commission that the activities to be regulated under its project review regulations, as hereby amended, have, both singularly and cumulatively, a major effect on the water resources of the basin and on water resources management; and

WHEREAS, the Commission maintains a Comprehensive Plan for the Water Resources of the Susquehanna River Basin (the "comprehensive plan"); and

WHEREAS, it is the further determination of the Commission that its project review regulations, as hereby amended, are required for the effectuation of the comprehensive plan and the implementation of the Compact.

NOW THEREFORE BE IT RESOLVED THAT:

1. A final rulemaking action amending Title 18, Part 806 of the Code of Federal Regulations, as set forth in the document attached hereto and made a part hereof, is hereby adopted by the Commission.

2. The Executive Director is hereby directed to publish a final rulemaking notice in the Federal Register and comparable member state notice publications in accordance with this final

rulemaking action, including appropriate comment and response as well as the transition issues related to the final rulemaking in the preamble thereto as presented by staff.

3. The Commission sets a reduced fee for an application for a minor modification, which is now created by the final rulemaking, at \$750. Any future adjustments to this fee will be made by the Commission during any future changes to the Commission's fee schedule.

4. This final rulemaking action shall be effective upon publication in the Federal Register and appropriate state administrative bulletins and registers.

Dated: December 4, 2015

Kelly Jean Niffner Kelly J. Hermer, Chair

Pennsylvania

RESOLUTION NO. 2015-12

A RESOLUTION of the Susquehanna River Basin Commission (the "Commission") amending the investment policy statement adopted by Resolution 2012-02.

WHEREAS, in 2012, the Commission amended the By-laws and adopted the current investment policy of the Commission; and

WHEREAS, the investment policy statement contains as an addendum, a Statement of Investment Policy, Objectives and Guidelines for SRBC short-term and long-term investments; and

WHEREAS, the Commission's investment advisor has provided updated expected 10and 15-year returns; and

WHEREAS, the Director of Administration & Finance has developed an updated addendum to the SRBC's investment policy based upon these updated returns.

NOW THEREFORE BE IT RESOLVED THAT:

1. The Commission hereby adopts the investment policy statement addendum for SRBC Short-Term and Long-Term Investments, dated "Annual Addendum—2016", as presented by the Director of Administration & Finance.

2. This addendum will replace the current addendum, dated "Annual Addendum-2012". No other changes are made to the SRBC's Investment Policy.

3. This resolution shall be effective immediately.

Dated: December 4, 2015

Killy Jean Niffner

Pennsvlvan



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. 19981206-2 Approval Date: December 3, 1998 Modification Date: August 10, 2000 Modification Date: December 4, 2015

BYLER GOLF MANAGEMENT, INC. dba IRON VALLEY GOLF CLUB

Groundwater Withdrawals (30-Day Averages) of 0.300 mgd from Well Lb-814 and 0.140 from Well B, Total System Withdrawal Limit (30-Day Average) of 0.300 mgd, and Consumptive Water Use (Peak Day) of up to 0.300 mgd from Well Lb-814 and Well B

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 adverse impacts are anticipated by the operation of this project, and that 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.

The purpose of the modification application is to request approval of the water use purpose for snowmaking at a newly constructed snowtubing recreation area, in addition to the previously authorized water use purpose of golf course irrigation. This modification does not include any increase to the previously approved daily quantities of withdrawal or consumptive water use. The project's water system includes two approved groundwater withdrawals of up to 0.440 million gallons per day (mgd) from Well Lb-814 and Well B, herein referred to as the "Total System." Commission staff recommends that a Total System limit on all sources be established at 0.300 mgd. This approval incorporates those recommendations.

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:	Byler Golf Management, Inc., dba Iron Valley Golf Club	
Approval Types:	Groundwater Withdrawal and Consumptive Water Use	
Original Docket Nos.:	19981206 and 19981206-1	
Authorized Water Use Purpose:	Golf Course Irrigation and Snowmaking	
Municipality:	Cornwall Borough	
County:	Lebanon 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 Sources:Well Lb-814 and Well B			ell B
Subbasin: Lower Susquehanna		1	
Watershed Boundary Dataset (WBD):		0205030508 (Quitta	apahilla Creek)
Withdrawal Location (degrees):	Withdrawal Location (degrees): Well Lb-814		Long: 76.393381 W
	Well B	Lat: 40.266258 N	Long: 76.394159 W

Section 4. Aquifer Testing

During technical analyses for the original docket and first modification, Commission staff determined that, due to the hydrologic setting, aquifer testing of Well Lb-814 was unnecessary and limited aquifer testing of Well B was adequate; therefore, the Commission waived aquifer testing for those sources. Based on previous analysis and considering that the project sponsor is not proposing an increase in the previously approved daily withdrawals, Commission staff has determined that no additional aquifer testing is required for this modification.

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		
Total System Withdrawal Limit – Well Lb-814 and Well B (30-Day		
Average) (mgd):	0.300	

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

Section 6. Approved Consumptive Water Use Quantities and Limitations

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

Approved Consumptive Water Use Quantities and Limitations			
Sources for Project Consumptive	1. Well Lb-814		
Water Use:	2. Well B		
Project Consumptive Water Uses:	1. Golf Course Irrigation		
	2. Snowmaking		
Consumptive Water Use Mitigation			
Туре:	Payment of consumptive use mitigation fee		

The consumptive use of water is also subject to all other conditions set forth in this docket approval.

Section 7. Existing Approved Withdrawals and Consumptive Water Use

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

Existing Approved Groundwater Withdrawals			
30-Day Average Commission Docket			
Source	Source Withdrawal (mgd)		Expiration Date
Well Lb-814	0.300	19981206	December 3, 2023
Well B	0.140	19981206-1	December 3, 2023

Existing Approved Consumptive Water Use			
Peak Day ConsumptiveCommissionDocket			
Water Use (mgd)Docket No.Expiration Date			
0.300	19981206	December 3, 2023	

Section 8. Grandfathering Determination – Withdrawals and Consumptive Water Use

The project did not utilize surface water withdrawals or groundwater withdrawals prior to November 11, 1995 or July 13, 1978, respectively.

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

Therefore, there are no grandfathered withdrawal and/or consumptive water use quantities associated with this project.

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, consumptive water use, 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 ninety (90) 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 Section 3. 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. Thereafter, the groundwater elevation data shall be reported to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter.

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, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. 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 shall keep daily records of the project's consumptive water use 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, if appropriate, approval by Commission staff. 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.

8. The project's consumptive water use is subject to mitigation requirements, as per Commission Regulation 18 CFR § 806.22(b). To satisfy the Commission's current mitigation requirements for consumptive water use, the project sponsor shall make quarterly payments to the Commission at the rate specified in the effective Regulatory Program Fee Schedule, as modified from time to time by the Commission. Payments shall be made quarterly and shall be calculated by applying this rate to the total amount of water consumptively used by the project during the preceding calendar quarter. Quarterly payments are due and payable within thirty (30) days after the close of the preceding quarter. The rate of payment, after appropriate notice to consumptive users of water using this method of compliance, is subject to change at the Commission's discretion.

9. 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.

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 or consumptive water use that would exceed the amounts listed herein or to add a source used for consumptive water use that is not listed in Section 3.

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 10. Special Conditions

22. Consistent with Standard Condition 3, the project sponsor shall maintain metering on the irrigation pond and consumptive water use in accordance with Commission Regulation 18 CFR § 806.30.

23. Consumptive water use for pond evaporation and irrigation of the golf course shall continue to be calculated in the already approved manner. The daily quantity of water consumptively used for snowmaking shall be calculated as twenty-two (22) percent of the water pumped to the snowmaking system.

24. All other conditions in Commission Docket Nos. 19981206 and 19981206-1 not inconsistent herewith shall remain effective.

25. The date of the last meter certification was February 27, 2014; therefore, the next meter certification is due no later than February 27, 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.

Section 11. Term

26. This modified approval shall be effective immediately, and shall remain effective until December 3, 2023, the term of the prior docket approval. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 3, 2023, 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 4, 2015.

Dated: December 7, 2015

Stephanee L. Richardson Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

Exhibit D2

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

Docket No. 20151201 Approval Date: December 4, 2015

CABOT OIL & GAS CORPORATION

Surface Water Withdrawal (Peak Day), Variable, of up to 1.500 mgd from Tunkhannock 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 adverse impacts are anticipated by the operation of this project, and that 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.

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

Project Information		
Project Sponsor:	Cabot Oil & Gas Corporation	
Approval Type:	Surface Water Withdrawal	
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses	
Municipality:	Lenox Township	
County:	Susquehanna 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				
Approved Source:	Tunkhannock Creek			
Subbasin:	Middle Susquehanna			
Watershed Boundary Dataset (WBD):0205010612 (Tunkhannock Creek)				
Water Use Designation:Cold Water Fishery (CWF)				
Withdrawal Location (degrees):	Lat: 41.666050 N	Long: 75.714447 W		
Site Flow Statistics (cfs):	Q7-10 = 4.6; Average	Daily Flow = 147.4		
Drainage Area (square miles): 101				
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):		Not to Exceed Values Contained in the "Withdrawal and Passby Schedule," When			
			Availab	le	
Maximum Ins	stantaneous With	drawal	Not to E	Exceed Values Con	ntained in the
Rate (gpm):				rawal and Passby S	Schedule," When
			Availab		
Flow Protecti	· -			1 1 1	d as monthly values
Method for M	Ionitoring Flow F	Protection:		-	GS Real-Time Gage
				00; Tunkhannock	
			Tunkha	nnock, Pennsylvar	nia
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	1.500	2,000		40	163
February	1.500	2,000		47	190
March	1.500	2,000		101	397
April	0.750	1,000			
May	0.750	1,000		58	226
June	0.500	700		25	98
July	0.500	70	0	14	58
August	0.500	70	0	10	43
September	0.500	700		9.8	42

A	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)*	
October	0.500	700	14	57	
November	1.500	2,000	27	117	
December 1.500 2,000 47 193					
mgd – million gallons per day USGS – U.S. Geological Survey					
1 cfs = 448.8 gallons per minute (gpm) No special flow protection required					
* 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. Prior to any withdrawal from the source listed in Section 3, the project sponsor shall install and maintain metering on the withdrawal 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.

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, and shall obtain necessary general or individual permits from the jurisdictional permitting agency prior to use of the intake. The project sponsor shall provide the Commission with a copy of the permit prior to operating the withdrawal. 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).

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, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. 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. Prior to initiation of the withdrawal, the project sponsor shall post a 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-ofway. 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 sign installation prior to initiation of the withdrawal.

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. 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 location for the duration of the approval.

11. 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.

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. All such permits and/or approvals shall be obtained prior to the withdrawal of water. The Commission may modify, suspend, or revoke this approval if the project sponsor fails to obtain or maintain such permits and/or approvals.

14. The Commission may at any time reopen any project approval or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment, pursuant to 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. 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

18. 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.

19. 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.

20. Except as authorized pursuant to Special Condition 22, 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).

21. 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 22, including daily quantities supplied.

22. 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 authorization 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.

23. 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

24. 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.

25. This approval is effective until December 3, 2019. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 3, 2019, 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.

26. The project sponsor has requested that Commission Docket No. 20121203 be rescinded upon commencement of the withdrawal approved herein. The project sponsor shall provide the Commission with fifteen (15) days advance notice of its commencement of the withdrawal authorized under this approval. The commencement of the withdrawal authorized hereunder shall result in the concurrent and automatic rescission of Commission Docket No. 20121203 and its successors.

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 4, 2015.

Dated: December 7, 2015

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. 20151202 Approval Date: December 4, 2015

MONTGOMERY WATER AND SEWER AUTHORITY

Groundwater Withdrawal (30-Day Average) of 0.360 mgd from Well 4, and Total System Withdrawal Limit (30-Day Average) of 0.398 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 adverse impacts are anticipated by the operation of this project, and that 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 Montgomery Water and Sewer Authority's (Authority's) public water supply system has two existing groundwater sources (Wells 1 and 3). With this approval, the Authority's water system will include three sources (Wells 1, 3, and 4), herein referred to as the "Total System." Based on the information provided by the Authority, no other sources are used by the project. The approval authorizing withdrawal from one of the Authority's previously approved sources, Well 2R, expired due to a lack of initiation [Commission Regulation 18 CFR § 806.31(b)].

In consideration of the 15-year projected demand and the reasonably foreseeable need of the project, Commission staff recommends an increase of the previously established Total System limit on all sources to 0.398 million gallons per day (mgd) (30-day average).

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: Montgomery Water and Sewer Authority		
Approval Type:Groundwater Withdrawal		
Authorized Water Use Purpose:	Public Water Supply	

293200.1

Project Information (continued)		
Municipality:	Clinton 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			
Withdrawal Type:	Groundwater		
Approved Source:	Well 4		
Subbasin:	West Branch Susquehanna River		
Watershed Boundary Dataset (WBD):	0205020612 (Black Hole 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-hour, constant-rate aquifer test of Well 4 was conducted between December 15 through 18, 2014, pumping at an average rate of 253 gallons per minute (gpm).

The results of the Well 4 aquifer test indicate the potential for significant adverse pumping-induced impacts to occur to the Montgomery Area School District Athletic Complex well as a result of operating Well 4 at the requested rate. Commission staff recommends that the impact to the Montgomery Area School District Athletic Complex well be mitigated in accordance with Special Condition 21.

Several other monitored private wells exhibited drawdown during the constant-rate aquifer test; however, Commission staff's review of the aquifer testing data indicates that the potential long-term drawdown is not expected to be significant to existing private wells as a result of operating Well 4. However, because water-bearing zone and well construction information for some of the private wells with observed or projected drawdown are limited, staff recommends that to confirm the findings of no significant impact during long-term operation that a monitoring plan for Commission review and approval be required along with periodic reporting, as provided in Special Condition 22.

Commission staff determined that the withdrawal from Well 4 at the requested withdrawal rate should not cause permanent loss of aquifer storage, render unmitigated

Montgomery Water and Sewer Authority Well 4

competing supplies unreliable, or cause adverse impacts to the water resources of the basin, subject to the conditions set forth herein.

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): 0.360		
Maximum Instantaneous Withdrawal Rate (gpm):	250 (Not to Exceed)	
Total System Withdrawal Limit – Wells 1, 3, and 4		
(30-Day Average) (mgd):	0.398	

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 Average	Commission	Docket
Source	Withdrawal (mgd)	Docket No.	Expiration Date
Well 1	0.330	19881102	November 10, 2018
Well 3	0.220	19910705	July 11, 2021
Note: Well 2 (approved in Commission Docket No. 19881102) was abandoned in 2003 due to water quality			
issues.			

Section 7. Grandfathering Determination – Withdrawals

The project utilized groundwater withdrawals prior to July 13, 1978. As documented in Commission Docket No. 19881102, increased groundwater withdrawals forfeited grandfathering in 1988.

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. 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.

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 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 groundwater elevation data shall be reported to the Commission quarterly, and as otherwise required. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. 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(a)(4). Modifications shall not be made until the project sponsor receives written approval of the amended plan.

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, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. 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. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation 18 CFR § 806.25.

Montgomery Water and Sewer Authority Well 4

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

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

11. If the project sponsor fails to comply with the provisions of the Susquehanna River Basin Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the project sponsor is subject to enforcement actions pursuant to 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. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

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

16. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawal that would exceed the amounts listed herein or to add a source used for consumptive use that is not listed in Section 3.

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.

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

Section 9. Special Conditions

19. The project sponsor shall 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).

20. 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.

21. Due to the potential for significant adverse impact to the Montgomery Area School District Athletic Complex well, the project sponsor shall mitigate impacts by connecting the facility to the public water supply system, in accordance with the lease agreement provided to the Commission with the Well 4 application. The project sponsor shall submit to the Commission documentation confirming that all activities were completed in accordance with the lease agreement. Withdrawal from Well 4 shall not commence until Commission staff responds, in writing, with a determination that mitigation to the Montgomery Area School District Athletic Complex has been completed to the satisfaction of the Commission.

22. Within ninety (90) days from the date of this approval, the project sponsor shall submit a monitoring plan to the Commission for staff review and, if appropriate, approval to confirm that no unmitigated significant adverse impacts will occur as a result of long-term operation of Well 4 at the approved rate. The monitoring plan shall include the following components:

- a. An updated well inventory within the designated area(s);
- b. Using the data collected with the well inventory and projected drawdown from the aquifer test, determine and present proposed monitoring locations that will be used to collect water level data to confirm test results and evaluate drawdown in the designated area(s) as a result of long-term operation of Well 4;
- c. Proposed monitoring methods and the frequency of water level data collection and evaluation; and
- d. Procedures that the Authority will take to investigate and address claim of impact by a well owner or should post-approval monitoring indicate occurrence of significant adverse impacts not predicted using the aquifer testing results.

Interpretive annual reports including the raw monitoring data documenting the results of the residential well monitoring during the previous calendar year must be provided to the Commission within sixty (60) days of the close of the preceding calendar year. Should the groundwater elevation data indicate that unacceptable impacts will occur as a result of operating Well 4 at the approved rate, the Commission may revise existing or impose new conditions on the use of Well 4, or require that additional mitigation be completed. Collection of groundwater elevation data under this monitoring plan will be required for the entire term of the approval unless Commission staff finds that sufficient data has been collected that confirms long-term operation of Well 4 at or near its approved consecutive 30-day average rate will not cause an adverse impact to the nearby residential wells not previously mitigated. Commission staff will notify the project sponsor, in writing, if the residential well monitoring required herein has confirmed that no significant adverse impacts will occur and that the required monitoring may cease. Additionally, with written consent from the Commission, monitoring may cease if all properties within the designated area of concern are demonstrated to have been connected to the public water supply system.

23. Effective immediately, Commission Docket No. 20091206 is hereby rescinded.

Section 10. Term

24. 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.

25. This approval is effective until December 3, 2030. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 3, 2030, 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 4, 2015.

Dated: December 7, 2015

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. 20151204 Approval Date: December 4, 2015

SUGAR HOLLOW WATER SERVICES, LLC

Surface Water Withdrawal (Peak Day) of up to 1.500 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 adverse impacts are anticipated by the operation of this project, and that 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. 20111214 that was originally approved December 15, 2011, with a peak day withdrawal rate of 1.500 million gallons per day (mgd) and special flow protection requirements. The project sponsor has not requested any changes to the project. Commission staff recommended that the special flow protection requirements be modified to reflect 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:	Sugar Hollow Water Services, LLC	
Approval Type: Surface Water Withdrawal		
Original Docket No.: 20111214		
Authorized Water Use Purpose:	: Bulk Supply for Hydrocarbon Development and Related	
	Incidental Uses	
Municipality:	Eaton Township	
County:	Wyoming County	
State:	Pennsylvania	

293200.1

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:	Middle Susquehanna		
Watershed Boundary Dataset (WBD):	0205010614 (Lower Susquehanna River)		
Water Use Designation:	Warm Water Fishery (WWF)		
Withdrawal Location (degrees):	Lat: 41.511527 N Long: 75.943708 V		
Site Flow Statistics (cfs):	Q7-10 = 701; Average Daily Flow = 13,927		
Impairment:	Mercury; Polychlorinated Biphenyl (PCB)		
Drainage Area (square miles):	9,430		
Aquatic Resource Class*:	6		
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):		1.500 (Not to Ex	ceed, When Available)
Maximum Instantaneous Withdrawal			
Rate (gpm):		1,500 (Not to Exceed)	
Flow Protection Type: Seasonal passby e		expressed as monthly values	
Method for Monitoring Flow Protection:		Off-site monitoring of USGS Real-Time Gage 01533400; Susquehanna River at Meshoppen, Pennsylvania	
Passby Schedule:			
	On-Site Flow Protection		Off-Site Monitoring Threshold
Month	Rate (cfs)		for Flow Protection (cfs)*
January			
February			
March			
April			
May			
June			
July	1,210		1,130

Approved Withdrawal Quantities and Limitations (continued)		
Passby Schedule:		
	On-Site Flow Protection	Off-Site Monitoring Threshold
Month	Rate (cfs)	for Flow Protection (cfs)*
August	890	827
September	851	791
October	1,110	1,040
November		
December		
USGS– U.S. Geological Survey 1 cfs = 448.8 gallons per minute (gp		

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, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. 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. 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 location for the duration of the approval.

11. 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.

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. All such permits and/or approvals shall be obtained prior to the withdrawal of water. The Commission may modify, suspend, or revoke this approval if the project sponsor fails to obtain or maintain such permits and/or approvals.

14. The Commission may at any time reopen any project approval or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to

protect public health, safety, welfare, or the environment, pursuant to 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 withdrawal that would exceed the amounts listed herein.

Section 6. Special Conditions

19. Effective January 1, 2016, 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.

20. 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.

21. The date of the last meter certification was April 4, 2014; therefore, the next meter certification is due no later than April 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.

22. Except as authorized pursuant to Special Condition 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).

23. 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 24, including daily quantities supplied.

24. 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 authorization 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.

25. 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

26. This approval shall be effective January 1, 2016, and shall remain effective until December 31, 2019. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 30, 2019, 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. 20111214 shall remain effective through December 31, 2015, 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 4, 2015.

Stephanee & Richardson Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20151205 Approval Date: December 4, 2015

SWN PRODUCTION COMPANY, LLC

Surface Water Withdrawal (Peak Day) of up to 2.000 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 adverse impacts are anticipated by the operation of this project, and that 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. 20111217 that was originally approved December 15, 2011, with a peak day withdrawal rate of 2.000 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 the addition of special flow protection requirements with this approval to reflect 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	
Original Docket No.:	20111217	
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses	
Municipality:	Great Bend Township	
County:	Susquehanna County	
State:	Pennsylvania	

293200.1

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):	0205010113 (Lower S	Susquehanna River)		
Water Use Designation:	Warm Water Fishery	(WWF)		
Withdrawal Location (degrees):	Lat: 41.987925 N	Long: 75.756836 W		
Site Flow Statistics (cfs):	Q7-10 = 178.6; Avera	ge Daily Flow = 3,478		
Impairment:	Mercury			
Drainage Area (square miles):	2,120			
Aquatic Resource Class*:	5			
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):		2.000 (Not to Exceed, When Available)		
Maximum Instantaneous Wi	thdrawal			
Rate (gpm):		1,389 (Not to Ex	(ceed)	
Flow Protection Type:		Seasonal passby	expressed as monthly values	
Method for Monitoring Flow	Protection:	Off-site monitor	ing of USGS Real-Time Gage	
		01503000; Susquehanna River at Conklin, New		
		York		
Passby Schedule:				
	On-Site Flow Protection		Off-Site Monitoring Threshold	
Month	Rate (cfs)		for Flow Protection (cfs)*	
January				
February				
March				
April				
May				
June				

Approved Withdrawal Quantities and Limitations (continued)					
Passby Schedule:					
Month	On-Site Flow Protection Rate (cfs)	Off-Site Monitoring Threshold for Flow Protection (cfs)*			
July					
August	247	261			
September	242	256			
October					
November					
December					
USGS- U.S. Geological Survey No special flow protection required1 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, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. 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. 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 location for the duration of the approval.

11. 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.

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. All such permits and/or approvals shall be obtained prior to the withdrawal of water. The Commission may modify, suspend, or revoke this approval if the project sponsor fails to obtain or maintain such permits and/or approvals.

14. The Commission may at any time reopen any project approval or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment, pursuant to 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 withdrawal that would exceed the amounts listed herein.

Section 6. Special Conditions

19. Effective January 1, 2016, 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.

20. 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.

21. The date of the last meter certification was June 25, 2012; therefore, the next meter certification is due no later than June 25, 2017. 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.

22. Except as authorized pursuant to Special Condition 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).

23. 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 24, including daily quantities supplied.

24. 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 authorization 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.

25. 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

26. This approval shall be effective January 1, 2016, and shall remain effective until December 31, 2019. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 30, 2019, 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. 20111217 shall remain effective through December 31, 2015, 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 4, 2015.

ephanee Z Richardson

Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20140302-1 Approval Date: March 6, 2014 Modification Date: December 4, 2015

SWN PRODUCTION COMPANY, LLC

Surface Water Withdrawal (Peak Day) of up to 2.500 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 adverse impacts are anticipated by the operation of this project, and that 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. 20140302 that was originally approved March 6, 2014, with a peak day withdrawal rate of 0.750 million gallons per day (mgd) and no special flow protection requirements. The project sponsor has requested an increase in the peak day withdrawal and an associated increase in the instantaneous withdrawal rate. Following technical review, and consistent with applicable regulatory standards, Commission staff recommended that the approved rate of withdrawal be increased to 2.500 mgd, herein referred to as the modified rate. 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	
Original Docket No.:	20140302	
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses	
Municipality:	Great Bend Township	
County:	Susquehanna County	
State:	Pennsylvania	

293200.1

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):	0205010113 (Lower Susquehanna River)		
Water Use Designation:	Warm Water Fishery (WWF)		
Withdrawal Location (degrees):	Lat: 41.967362 N Long: 75.732244 W		
Site Flow Statistics (cfs):	Q7-10 = 172; Average Daily Flow = 3,347		
Impairment:	Mercury; Polychlorinated Biphenyl (PCB)		
Drainage Area (square miles):	2,040		
Aquatic Resource Class*:	5		
Special Flow Protection Required:	No		
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):	2.500 (Not to Exceed)		
Maximum Instantaneous Withdrawal Rate (gpm):1,737 (Not to Exceed)			
gpm – gallons per minute			

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, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. 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. 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 location for the duration of the approval.

11. 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.

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 Commission may modify, suspend, or revoke this approval if the project sponsor fails to obtain or maintain such permits and/or approvals.

14. The Commission may at any time reopen any project approval or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment, pursuant to 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 withdrawal that would exceed the amounts listed herein.

Section 6. Special Conditions

19. The date of the last meter certification was March 26, 2014; therefore, the next meter certification is due no later than March 26, 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.

20. All other conditions in Commission Docket No. 20140302 not inconsistent herewith shall remain effective.

21. Except as authorized pursuant to Special Condition 23, 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).

22. 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 23, including daily quantities supplied.

23. 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 authorization 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.

24. 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

25. This modified approval shall be effective January 1, 2016, and shall remain effective until March 31, 2018, the term of the prior docket approval. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before September 30, 2017, 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 4, 2015.

Stephanee & Richardson Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20151206 Approval Date: December 4, 2015

SWN PRODUCTION COMPANY, LLC

Surface Water Withdrawal (Peak Day), Variable, of up to 1.500 mgd from the Tioga 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 adverse impacts are anticipated by the operation of this project, and that the project is physically feasible and does not conflict with or adversely affect the Commission's Comprehensive Plan. Accordingly, the Commission hereby approves the project described herein in accordance with the conditions set forth below.

The project sponsor requested a peak day withdrawal of 2.000 million gallons per day (mgd) at a maximum instantaneous rate of 1,389 gallons per minute (gpm). In consideration of the drainage area, flows in the Tioga River, and the magnitude of the proposed withdrawal, staff informed the project sponsor of staff's intention to recommend a reduction in the withdrawal rates and adjustments to the passby flows to be protective during low flow conditions. The project sponsor subsequently requested reduced monthly withdrawal rates of up to 1.500 mgd at a maximum instantaneous rate of 1,042 gpm. This approval incorporates those modified rates and passby flows.

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	
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses	
Municipality:	Hamilton Township	
County:	Tioga 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:	Tioga River		
Subbasin:	Chemung		
Watershed Boundary Dataset (WBD):	0205010409 (Tioga River)		
Water Use Designation:	Cold Water Fishery (CWF)		
Withdrawal Location (degrees):	Lat: 41.659060 N Long: 77.048234 W		
Site Flow Statistics (cfs):	Q7-10 = 3.5; Average Daily Flow = 82		
Impairment:	Acid Mine Drainage		
Drainage Area (square miles):	57.4		
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):		Not to E	Not to Exceed Values Contained in the		
			"Withdr	awal and Passby S	Schedule," When
			Availab	le	
Maximum Ins	stantaneous With	drawal	Not to E	Exceed Values Con	ntained in the
Rate (gpm):			"Withdr	awal and Passby S	Schedule," When
			Availab	le	
Flow Protection	on Type:		Seasona	l passby expressed	d as monthly values
Method for Monitoring Flow Protection:		Off-site monitoring of USGS Real-Time Gage			
		01516350; Tioga River near Mansfield,			
		Pennsyl	vania		
Withdrawal and Passby Schedule:					
	Peak Day	Maxin	ит	On-Site Flow	Off-Site Monitoring
	Withdrawal	Instantaneous		Protection	Threshold for Flow
Month	(mgd)	Withdrawal (gpm)		Rate (cfs)	Protection (cfs)*
January	1.500	1,042		23	66
February	1.500	1,042		25	70
March	1.500	1,042		50	138
April	1.500	1,042		60	164

Approved Withdrawal Quantities and Limitations (continued)				
Withdrawal a	nd Passby Sched	lule:		
	Peak Day	Maximum	On-Site Flow	Off-Site Monitoring
	Withdrawal	Instantaneous	Protection	Threshold for Flow
Month	(mgd)	Withdrawal (gpm)	Rate (cfs)	Protection (cfs)*
May	1.500	1,042	31	87
June	1.100	764	16	46
July	0.800	556	12	34
August	0.800	556	12	34
September	0.800	556	12	34
October	0.800	556	12	34
November	1.100	764	17	47
December	1.500	1,042	32	88
USGS- U.S. Geo 1 cfs = 448.8 gpt * Flow Protection	m		·	

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. Prior to any withdrawal from the source listed in Section 3, the project sponsor shall install and maintain metering on the withdrawal 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.

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, and shall obtain necessary general or individual permits from the jurisdictional permitting agency prior to use of the intake. The project sponsor shall provide the Commission with a copy of the permit prior to operating the withdrawal. 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).

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, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. 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. Prior to initiation of the withdrawal, the project sponsor shall post a 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-ofway. 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 sign installation prior to initiation of the withdrawal.

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. 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 location for the duration of the approval.

11. 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.

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. All such permits and/or approvals shall be obtained prior to the withdrawal of water. The Commission may modify, suspend, or revoke this approval if the project sponsor fails to obtain or maintain such permits and/or approvals.

14. The Commission may at any time reopen any project approval or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment, pursuant to 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. 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

18. 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.

19. 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.

20. Per Commission coordination with jurisdictional agency(ies), the project sponsor shall adhere to recommendations for avoiding adverse impact to documented occurrences of naturally reproducing wild trout populations. The project sponsor shall avoid instream construction from October 1 through December 31.

21. Except as authorized pursuant to Special Condition 23, 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).

22. 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 23, including daily quantities supplied.

23. 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 authorization 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.

24. 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

25. 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.

26. This approval is effective until December 3, 2019. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 3, 2019, 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 4, 2015.

Stephanee L Richardson Stephanie L. Richardson

Exhibit D8



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. 19860201-1 Approval Date: February 13, 1986 Modification Date: December 4, 2015

VILLAGE OF SIDNEY

Groundwater Withdrawal (30-day Average) of 2.000 mgd from Well 2-88

Section 1. Approval

On February 13, 1986, the Susquehanna River Basin Commission (Commission) approved the Village of Sidney (Village) for the withdrawal of 2.000 million gallons per day (mgd) from Well 2-88 under Commission Docket No. 19860201. The Village has requested to extend the term of the approval through December 2019, to allow time for development of a new groundwater source that will replace Well 2-88, which is located within a floodplain, exhibits trace concentrations of volatile organic compounds, and has concentrations of manganese that exceed the New York State Department of Health (NYSDOH) maximum contaminant level. The Village is not requesting an increase in the approved withdrawal limit or modification of any other conditions of the original approval. Commission staff recommended that the approval be extended by five (5) years to provide additional time for the coordinated review with the New York State Department of Environmental Conservation (NYSDEC) and NYSDOH. This approval incorporates those recommendations.

The Commission hereby approves the extension of the term of Commission Docket No. 19860201 for a period not to exceed five (5) years in accordance with the conditions set forth below.

Commission staff has coordinated with NYSDEC and NYSDOH during review of this project modification.

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 Sidney	
Approval Type:	Groundwater Withdrawal	
Original Docket No.:	19860201	
Authorized Water Use Purpose:	Public Water Supply	

Project Information (continued)		
Municipality:	Village of Sidney	
County:	Delaware County	
State:	New York	

Section 3. 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 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, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. 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. The project sponsor shall comply with the water conservation requirements specified in Commission Regulation 18 CFR § 806.25.

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

8. 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. 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.

9. 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.

10. 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.

11. 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.

12. 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.

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

14. 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.

15. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawal that would exceed the amount listed herein or to add a source that is not listed herein.

16. 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 4. Special Conditions

17. All other conditions in Commission Docket No. 19860201 not inconsistent herewith shall remain effective.

18. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawal from grandfathered sources.

19. If operation of Well 2-88 is intended to continue beyond the term of this modification, certification of the meter will be required prior to February 13, 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.

Section 5. Term

20. This approval is effective immediately and shall remain effective until February 13, 2021. Should the Village determine that the need for use of Well 2-88 as a source will continue beyond February 13, 2021, as specified in Commission Regulation 18 CFR § 806.31(e), the project sponsor shall submit an application for Well 2-88 on or before August 13, 2020. The project sponsor may continue operation of Well 2-88 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 4, 2015.

Stephanee Kichardson

Exhibit D9



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. 20141216-1 Approval Date: December 5, 2014 Modification Date: December 4, 2015

SENECA RESOURCES CORPORATION

Into-Basin Diversion (Peak Day) of up to 1.977 mgd from SRC Wells 5H and 6H and Clermont Wells 1, 2, North 2, 3, and 4 in the Ohio River Basin

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 adverse impacts are anticipated by the operation of this project, and that 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.

This approval is a modification of Commission Docket No. 20141216 that was originally approved December 5, 2014, with a peak day into-basin diversion of 1.473 million gallons per day (mgd) from five wells located within the Ohio River Basin. The project sponsor has requested to add two source wells (Clermont Well 2 and Clermont North Well 2), also within the Ohio River Basin, and increase the peak day diversion limit. Following technical review, and consistent with applicable regulatory standards, Commission staff recommended that the addition of the two well sources and the approved increased peak day diversion be increased to 1.977 mgd.

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:	Seneca Resources Corporation		
Approval Type:	Into-Basin Diversion from the Ohio River Basin		
Original Docket No.:	20141216		
Authorized Water Use Purpose:	Hydrocarbon Development (Downhole Use Only)		
Municipality:	Sergeant and Norwich Townships		
County:	McKean County		
State:	Pennsylvania		

Section 3. Source Information

Information concerning the source of water from which the into-basin diversion will be made is set forth in the table below.

Source Information				
Approved Sources:	SRC Wells 5H and 6H;			
	Clermont Wells 1, 2, North 2, 3, and 4			
Basin:	Ohio River Basin			
Watershed Boundary Dataset (WBD):				
SRC Well 5H	0501000501 (East Branch Clarion River)			
SRC Well 6H	0501000501 (East Branch Clarion River)			
Clermont Well 1	0501000101 (Potato Creek)			
Clermont Well 2	0501000101 (Potato Creek)			
Clermont North Well 2	0501000101 (Potato Creek)			
Clermont Well 3	0501000101 (Potato Creek)			
Clermont Well 4	0501000501 (East Branch Clarion River)			
Withdrawal Location (degrees):				
SRC Well 5H	Lat: 41.679167 N Long: 78.502861 W			
SRC Well 6H	Lat: 41.678444 N Long: 78.498389 W			
Clermont Well 1	Lat: 41.616739 N Long: 78.442368 W			
Clermont Well 2	Lat: 41.611389 N Long: 78.447444 W			
Clermont North Well 2	Lat: 41.704422 N Long: 78.498422 W			
Clermont Well 3	Lat: 41.619723 N Long: 78.438882 W			
Clermont Well 4	Lat: 41.681392 N Long: 78.497136 W			
Source Water Quality:	All sources exhibit iron concentrations exceeding			
	Title 25 Pa. Code Chapter 93 Water Quality			
	Standards			

Section 4. Approved Into-Basin Diversion Quantities and Limitations

The into-basin diversion approved hereunder is subject to the quantitative limits and restrictions set forth in the table below.

Approved Into-Basin Diversion Quantities and Limitations		
Peak Day Diversion Amount (mgd):	1.977 (Not to Exceed)	
mgd – million gallons per day		

The into-basin diversion 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 diversion 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 diversions, 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 keep daily records of the project's diversion 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, if appropriate, approval by Commission staff prior to implementing or modifying existing equipment or procedures. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

6. The project sponsor or any other person representing the project sponsor shall allow authorized employees or agents of the Commission, without advance notice, at any reasonable time and upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas where the project is being constructed, operated, or maintained, or otherwise exercise all investigative powers authorized under Commission Regulation 18 CFR § 808.12.

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

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

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

10. 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.

11. 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 diversion 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.

12. 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.

13. 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.

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 the diversion that would exceed the amounts listed herein.

Section 6. Special Conditions

17. Consistent with Standard Condition 11, 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 activating the two new sources approved herein. The Commission may modify, suspend, or revoke this approval if the project sponsor fails to obtain or maintain such permits and/or approvals.

18. In consideration of the source water quality, all water diverted into the Susquehanna River Basin under this authorization shall be stored in tanks or lined impoundments, and used downhole only for the sole purpose of hydrocarbon development. The water shall not be utilized for any purposes incidental to this use.

19. The date of the last meter certification was November 21, 2014; therefore, the next meter certification is due no later than November 21, 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.

20. All other conditions in Commission Docket No. 20141216 not inconsistent herewith shall remain effective.

21. 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 22, including daily quantities supplied.

22. 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 authorization 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.

23. 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.

Section 7. Term

24. This modified approval shall be effective January 1, 2016, and shall remain effective until December 4, 2018, the term of the prior docket approval. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 4, 2018, 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 4, 2015.

Stephanee L Richardson Stephanie L. Richardson