



SUSQUEHANNA RIVER
BASIN COMMISSION

4423 N. Front Street | Harrisburg, PA 17110-1788 | 717.238.0423 | srbc.net

NY ■ PA ■ MD ■ USA

March 10, 2016

TO ALL CONCERNED:

At the March 10, 2016, Commission meeting, the draft minutes of the December 4, 2015, Commission meeting were approved as written. Please attach this notice to your copy of the December 4, 2015 minutes.

- DRAFT -

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

**MINUTES OF THE
SUSQUEHANNA RIVER BASIN COMMISSION**

March 10, 2016

#2016-01

The meeting was held at the University Center, Aberdeen, Maryland. Chairwoman Heffner called the meeting to order at 9:00 a.m.

ROLL CALL

Commissioners Present

Ms. Kelly Heffner, Special Deputy Secretary for Water Resource Planning, Pennsylvania Dept. of Environmental Protection (PADEP)

Ms. Virginia Kearney, Deputy Director, Water Management Administration, Maryland Department of the Environment (MDE)

Col. Edward Chamberlayne, District Engineer, U.S. Army Corps of Engineers (USACE), Baltimore District

Mr. Kenneth P. Lynch, Director, Region 7, New York State Dept. of Environmental Conservation (NYSDEC)

**Alternate Commissioners
and Advisors Present**

Mr. Saeid Kasraei, Program Administrator, Water Supply Program, MDE

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

Mr. Jamie Shallenberger, Manager, Monitoring & Protection

Also Present

Mr. Hank Gruber, USACE, North Atlantic Division

1. Opening Remarks from the Chair

Chairwoman Heffner opened the meeting at 9:00 a.m. by outlining the rules of conduct for the meeting. Chairwoman Heffner noted that a public hearing was previously held on February 4, 2016. The Commissioners introduced themselves.

2. Presentation on Restoring Hydrologic Function in the Urban Landscape

Dr. Stuart Schwartz, Senior Research Scientist with the Center for Urban Environmental Research and Education (CUERE) of the University of Maryland, gave a presentation describing the adaptation of soil husbandry practices adapted from agriculture, forestry, and land reclamation to restore the hydrologic function of urban pervious landscapes.

3. Minutes of December 4, 2015, Commission Meeting

On a motion by Commissioner Kearney, seconded by Commissioner Chamberlayne, the minutes of the regular business meeting of December 4, 2015, were unanimously approved as written.

4. Revised FY2017 Budget

Director of Administration and Finance Marcia Hutchinson presented a revised budget for FY2017, which covers the period July 1, 2016, to June 30, 2017, and Resolution 2016-01 (Exhibit A) to adopt the same. This revised budget contains revenues and expenses for the general fund and the water management fund, which was first presented and approved June 2015. This revision is necessary due to updated revenue and expense projections.

On a motion by Commissioner Kearney, seconded by Commissioner Lynch, Resolution 2016-01 was adopted unanimously.

5. Recommendation of New Auditors

Ms. Hutchinson requested that the Commission authorize the Executive Director and the Director of Administration and Finance to retain the services of Hamilton & Musser, P.C., for the conduct of the annual independent audit of the Commission's financial records for three consecutive fiscal years, beginning with FY2017, with an option to extend this retention for up to two additional fiscal years. Ms. Hutchinson confirmed that auditing services were competitively bid.

On a motion by Commissioner Chamberlayne, seconded by Commission Kearney, the Commission approved this request.

6. Contracts and Grants

Ms. Hutchinson presented the following requests:

a. Grant Amendment Ratification – Enhanced Nutrient and Sediment Monitoring of Chesapeake Bay (U.S. Environmental Protection Agency)

Staff requested ratification of this amendment, which provides an additional \$201,325 of funding for calendar year 2016 of this grant effort. Staff will continue to collect and analyze New York, Pennsylvania, and Maryland non-tidal tributary monitoring data in the Susquehanna River Basin to assist in the Chesapeake Bay restoration effort.

b. Feasibility Cost Sharing Agreement Approval – Foster Joseph Sayers Dam and Reservoir Study (U.S. Army Corps of Engineers)

The U.S. Army Corps of Engineers (USACE), Baltimore District (NAB), and the Commission, as a non-federal sponsor, are working together to determine if there is interest in undertaking actions at Foster Joseph Sayers Dam and Reservoir, Centre County, Pennsylvania in accordance with the authority provided to USACE by Section 1135, Project Modifications for the Improvement of the Environment, Continuing Authorities Program (CAP). As a result, staff has been discussing entering into a Feasibility Cost Sharing Agreement (FCSA) with USACE.

Under the proposed FCSA, USACE and the Commission will conduct a feasibility study that will consider a range of alternatives for managing the existing autumn drawdown at Foster Joseph Sayers Dam and Reservoir. This drawdown currently occurs without regard to flow conditions at any downstream location, unless a high water event is underway. Alternatives that will be considered include various trigger flows, trigger gages, times, and durations for making releases from Foster Joseph Sayers Dam and Reservoir during critical low flow years (i.e. drought years). Alternatives will be developed to avoid or minimize impacts to environmental resources and recreational features while also improving the in-lake and downstream environment. The product of the feasibility phase will be a feasibility report along with integrated NEPA documentation (an environmental assessment and, if warranted, finding of no significant impact).

Staff requested that the Commission approve the proposed Feasibility Cost Sharing Agreement with USACE. The Commission will provide \$354,815 of cash and in-kind contributions. USACE will also provide \$354,815. The total cost of the project is estimated at \$709,630.

On a motion by Commissioner Lynch, seconded by Commissioner Kearney, the Commission unanimously adopted the recommendations of the Director of Administration and Finance with respect to ratification of the grant amendment and the feasibility cost sharing agreement.

7. Regulatory Program Actions

a. Compliance Actions

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

Staff recommended that the Commission accept the following settlement offers:

- Aqua Pennsylvania, Inc., \$9,000
- Cabot Oil & Gas Corporation, \$11,000
- King Valley Golf Course, \$10,000

There was no environmental harm attributed to any of these violations.

b. Report on Delegated Settlements

Mr. Oyler reported on delegated settlements staff completed over the previous quarter. Pursuant to SRBC Resolution 2014-15, the Executive Director entered into the following settlements to resolve compliance and enforcement matters:

A settlement with Dauphin County General Authority—Highlands Golf Course (“Dauphin Highlands”):

- Dauphin Highlands has a docket for the withdrawal and consumptive use of water (No. 19940104, 19940104-1, and 19940104-2) for the operation of a golf course in Swatara Township, Dauphin County.
- During a routine compliance inspection, Commission staff determined that Dauphin Highlands failed to maintain continuous daily records of its groundwater withdrawals and other administrative deficiencies.
- Dauphin Highlands has corrected these deficiencies.
- Dauphin Highlands does not have any relevant prior compliance history with the Commission.
- The settlement is for **\$2,000**.

A settlement with Talisman Energy USA, Inc. (Talisman) and Mountain Energy Services, Inc. (Mountain Energy):

- Talisman has an Approval by Rule (ABR) for its Cooley P pad to consumptively use water.
- Mountain Energy is a third party water supplier servicing the natural gas industry and has a docket for withdrawal of water (Docket No. 20140606) from Tunkhannock Creek, Tunkhannock Township, Wyoming County.
- On July 24 and 25, 2015, Mountain Energy hauled water from their Tunkhannock Creek withdrawal to Talisman’s Cooley P pad for dust suppression.
- Talisman did not have approval to use water from Mountain Energy’s Tunkhannock Creek Withdrawal and was in violation of 806.22(f)(13).
- By supplying water to a pad that was not authorized to receive it, Mountain Energy violated Condition 22 of its docket.
- These violations are considered to be administrative violations.
- Mountain Energy does not have any prior relevant compliance history with the Commission.
- Talisman does have a prior violation settlement in February 2015 for \$8,000 (passby violation).
- The settlement with Talisman is **\$1,000**.
- The settlement with Mountain Energy is **\$1,000**.

c. Docket Actions

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

- 1. Anadarko E&P Onshore LLC (Lycoming Creek), Lycoming County, Pa. (Exhibit B1)
 - 2-5. Aqua Pennsylvania, Inc. (Dug Road Well) Luzerne County, Pa. (Exhibit B2)
 - 6. **Black Bear Waters LLC, Lycoming County, Pa.**
 - 7-10. East Berlin Area Joint Authority (Reading Township), Adams County, Pa. (Exhibit B3)
 - 11-15. East Cocalico Township Authority (Wells 3A-7), Lancaster County, Pa. (Exhibit B4)
 - 16. EQT Production Company (Wilson Creek), Tioga County, Pa. (Exhibit B5)
 - 17-19. Furman Foods, Inc. (Point Township), Northumberland County, Pa. (Exhibit B6)
 - 20. Mount Joy Borough Authority (Wells 1 and 2), Lancaster County, Pa. (Exhibit B7)
 - 21-24. Muncy Borough Municipal Authority (Wells 5-8), Lycoming County, Pa. (Exhibit B8)
 - 25-28. Pennsylvania Department of Environmental Protection, Bureau of Conservation and Restoration (Cresson Mine), Cambria County, Pa. (Exhibit B9)
 - 29. SWN Production Company (Susquehanna River), Mehoopany Township, Wyoming County, Pa. (Exhibit B10)
 - 30. SWN Production Company (Susquehanna River), Oakland Township, Wyoming County, Pa. (Exhibit B11)
 - 31. SWN Production Company (Tunkhannock Creek), Lenox Township, Wyoming County, Pa. (Exhibit B12)
 - 32. Gas Field Specialists, Inc. (into-basin diversion), McKean County, Pa. (Exhibit B13)
- Highlight** = Staff recommending tabling.

All projects on the above list were recommended for approval with the exception of No. 6, which was recommended for tabling.

Commissioner Kearney moved that the Commission accept the settlements as outlined by Mr. Oyler and adopt the recommendations of staff for the 32 project applications. The motion was seconded by Commissioner Chamberlayne and unanimously adopted by the Commission.

ADJOURNMENT

Commissioner Chamberlayne made a motion to adjourn that was seconded by Commissioner Kearney. Chairwoman Heffner adjourned the meeting at 10:09 a.m.

Date Adopted

Stephanie L. Richardson

RESOLUTION NO. 2016-01

A RESOLUTION of the Susquehanna River Basin Commission (the "Commission") revising the Fiscal Year (FY) 2017 budget.

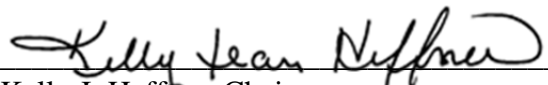
WHEREAS, in June 2015, the Commission adopted a preliminary budget covering the period July 1, 2016, to June 30, 2017 (FY-2017), and submitted that budget to the member jurisdictions for their consideration; and

WHEREAS, after due consideration by the member jurisdictions and the receipt of other fiscally related information affecting the final formulation of the FY-2017 budget, it is necessary to revise that budget before it takes effect on July 1, 2016.

NOW THEREFORE BE IT RESOLVED THAT:

1. The FY-2017 budget is hereby revised in accordance with the revisions presented this day to the Commission by the Director of Administration & Finance.
2. This resolution shall be effective immediately.

Dated: March 10, 2016



Kelly J. Heffner, Chair
Pennsylvania



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. 20160301

Approval Date: March 10, 2016

ANADARKO E&P ONSHORE LLC

**Surface Water Withdrawal (Peak Day) of up to 1.340 mgd
from Lycoming 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 renewal of the project described herein in accordance with the conditions set forth below.

This approval is a renewal of Commission Docket No. 20120301 that was originally approved March 15, 2012, with a peak day withdrawal rate of 1.340 million gallons per day (mgd) and special flow protection requirements. The project sponsor has not requested any changes to the project. The project sponsor did not request, and Commission staff did not recommend, any changes to the conditions of the original docket, other than the special flow protection requirements be modified to reflect current policy and the addition that instream infrastructure modifications, if needed, shall not be permitted from August 1 through December 31. 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:	Anadarko E&P Onshore LLC
Approval Type:	Surface Water Withdrawal
Original Docket No.:	20120301
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Lewis Township
County:	Lycoming County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Approved Source:	Lycoming Creek
Subbasin:	West Branch Susquehanna
Watershed Boundary Dataset (WBD):	0205020602 (Lycoming Creek)
Water Use Designation:	Exceptional Value (EV)
Withdrawal Location (degrees):	Lat: 41.436719 N Long: 76.993050 W
Site Flow Statistics (cfs):	Q7-10 = 6.5; Average Daily Flow = 249
Wild Trout Classification:	Naturally Reproducing Wild Trout
Drainage Area (square miles):	148
Aquatic Resource Class*:	Class 3
Special Flow Protection Required:	Yes
cfs – cubic feet per second	
*Refer to Commission Policy No. 2012-01 (Low Flow 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):	1.340 (Not to Exceed, When Available)	
Maximum Instantaneous Withdrawal Rate (gpm):	931 (Not to Exceed)	
Flow Protection Type:	Seasonal passby expressed as monthly values	
Method for Monitoring Flow Protection:	Off-site monitoring of USGS Real-Time Gage 01550000; Lycoming Creek near Trout Run, Pennsylvania	
Passby Schedule:		
<i>Month</i>	<i>On-Site Flow Protection Rate (cfs)</i>	<i>Off-Site Monitoring Threshold for Flow Protection (cfs)*</i>
January	65	77
February	69	82
March	44	53
April	89	105
May	44	53
June	47	56
July	39	47

Approved Withdrawal Quantities and Limitations (continued)		
Passby Schedule:		
<i>Month</i>	<i>On-Site Flow Protection Rate (cfs)</i>	<i>Off-Site Monitoring Threshold for Flow Protection (cfs)*</i>
August	39	47
September	39	47
October	39	47
November	51	61
December	79	93
USGS– U.S. Geological Survey 1 cfs = 448.8 gallons per minute (gpm) * Flow Protection Threshold		

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

Section 5. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, 18 CFR Parts 801, 806, and 808. This project is subject to the annual compliance and monitoring fee as specified in the Commission’s Regulatory Program Fee Schedule, which may be modified over the term of the approval.

2. The project sponsor shall adhere to the metering plan reviewed and approved by Commission staff. Any modifications proposed for the metering plan shall be submitted for review and, if appropriate, approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan.

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

4. The project sponsor shall maintain the totalizing meter and other flow and volume measuring devices, accurate to within five (5) percent, so as to provide an accurate record of withdrawals, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

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

6. The project sponsor shall keep daily records of the project’s withdrawal and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and

are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and, 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 April 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 July 22, 2015; therefore, the next meter certification is due no later than July 22, 2020. Certification of meter accuracy shall be provided to the Commission no less frequent than once every five (5) years from the date of the last certification.

22. The project sponsor shall adhere to recommendations for avoiding adverse impact to the stream's naturally reproducing wild trout population by avoiding instream construction from October 1 through December 31.

23. The project sponsor shall adhere to recommendations for avoiding adverse impact to documented occurrences of rare, threatened, or endangered species at or in proximity to the

project location. The documented species includes the Eastern hellbender (*Cryptobranchus alleganiensis*). To avoid adverse impact to the species, instream infrastructure modifications shall not be permitted from August 1 through December 31 to avoid the breeding and egg incubation periods of the Eastern hellbender.

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

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

26. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for 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.

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

Section 7. Term

28. This approval shall be effective April 1, 2016, and shall remain effective until March 31, 2020. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before September 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.

29. Commission Docket No. 20120301 shall remain effective through March 31, 2016, 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 March 10, 2016.

Dated: March 11, 2016


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. 20160302

Approval Date: March 10, 2016

AQUA PENNSYLVANIA, INC. – MIDWAY MANOR SYSTEM

**Groundwater Withdrawals (30-Day Averages) of
0.115 mgd from Dug Road Well, 0.035 mgd from Hilltop Well,
0.158 mgd from Midway Well 1, and 0.110 mgd from Midway Well 2;
Combined Groundwater Withdrawal Limit (30-Day Average) of
0.158 mgd from Midway Well 1 and Midway Well 2; and
Total System Withdrawal Limit (30-Day Average) of 0.308 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 unmitigated 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.

Aqua Pennsylvania, Inc. (Aqua) purchased and combined several small public water supply systems that were previously permitted individually by the Pennsylvania Department of Environmental Protection (PADEP). The system will include four approved well sources (Dug Road Well, Hilltop Well, Midway Well 1, and Midway Well 2), which are herein referred to as the "Total System." Prior and up to this approval, Aqua operated Meadowcrest Well 2, which will be replaced by the Hilltop Well upon approval, and all operations of Meadowcrest Well 2 will cease. Based on information provided by Aqua, no other sources are in use by the project. Commission staff recommended approval of the Dug Road Well at the requested rate, approval of the Hilltop Well at the reduced rate of 0.035 million gallons per day (mgd), approval of Midway Well 1 at the reduced rate of 0.158 mgd, approval of Midway Well 2 at the requested rate, approval of a combined withdrawal rate limit for Midway Wells 1 and 2, and establishment of a total system limit of 0.308 mgd. The total system limit is equal to the sum of the recommended withdrawals, considering the combined limit for Midway Wells 1 and 2, but less than the 15-year projected demand for the project. This approval incorporates those recommendations.

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

Section 4.1. Dug Road Well

The monitoring network for the Dug Road Well aquifer test included seven wells, two surface water monitoring locations, and two multilevel streambank piezometers. Commission staff's review of the aquifer testing results indicates that two private wells, if unmitigated, could experience significant adverse impacts during long-term operation. Therefore, to avoid potential adverse impact, a low level shutoff switch in the Dug Road Well at a depth of 200 feet below ground surface (bgs) is being recommended (Special Condition 25). Staff also recommends monitoring of the two private wells not monitored during the test to confirm that the limitation of drawdown by level switch provides adequate mitigation (Special Condition 26).

Section 4.2. Hilltop Well

The monitoring network for the Hilltop Well aquifer test included five wells. Commission staff's review of the aquifer testing data indicated that as requested: (1) potentially significant adverse impacts to one privately owned well may occur at the recommended rate; (2) the projected water level in the Hilltop Well may dewater a significant water-bearing zone; and (3) the aquifer may be of limited extent. Therefore, Commission staff recommends that that the withdrawal rate be reduced from 0.038 mgd to 0.035 mgd, and that monitoring of the private well be required to confirm that long-term operation of the Hilltop Well does not cause significant adverse impacts (Special Condition 26).

Section 4.3. Midway Well 1 and Midway Well 2

The monitoring network for the Midway Well 1 and Midway Well 2 aquifer tests included nine wells, two surface water monitoring locations, and three multilevel piezometers installed in a wetland. The aquifer test rate was 150 gallons per minute (gpm) (0.216 mgd) for Midway Well 1 and 77 gpm (0.110 mgd) for Midway Well 2. Aqua requested the tested rates in the applications.

Commission staff's review of the aquifer testing data indicated that as requested: (1) potentially significant adverse impacts to two privately owned wells may occur at the tested rates; (2) the projected water level in the Midway Well 1 may cause significant lowering of the water level in the aquifer; (3) significant well interference will occur if Midway Well 1 and Midway Well 2 are operated concurrently; and (4) the aquifer may be of limited extent. To address potential impacts to private supplies, Aqua completed mitigation at the two wells with expected significant adverse impacts. Therefore, to avoid adverse lowering of the water level in the aquifer and to confirm that long-term operation of the Midway Well 1 and Midway Well 2 do not cause significant adverse impacts to private supplies, Commission staff recommended that that the withdrawal rate for Midway Well 1 be reduced from 0.216 mgd to 0.158 mgd, concurrent operation be prohibited to avoid well interference, and that monitoring of several private wells be completed (Special Condition 26).

Section 5. Approved Withdrawal Quantities and Limitations

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

Approved Withdrawal Quantities and Limitations				
Source	30-Day Average Withdrawal (mgd)	Maximum Instantaneous Withdrawal Rate (gpm) (not to exceed)	Combined Withdrawal Limit (30-day average) (mgd)	Total System Withdrawal Limit¹ (30-day average) (mgd)
Dug Road Well	0.115	94	Not Applicable	0.308
Hilltop Well	0.035	27	Not Applicable	
Midway Well 1	0.158	150	0.158*	
Midway Well 2	0.110**	77	(Midway Wells 1 and 2)	
¹ Total system limit includes withdrawals from the Dug Road Well, Hilltop Well, Midway Well 1, and Midway Well 2. * Concurrent operation of Midway Well 1 and Midway Well 2 is prohibited. ** The 30-day average withdrawal for Midway Well 2 is equal to the peak day limit for this well.				

The withdrawals are also subject to all other conditions set forth in this docket approval.

Section 6. Existing Approved Withdrawals

The project does not have existing approved withdrawals.

Section 7. Grandfathering Determination – Withdrawals

The Dug Road Well, Midway Well 1, and Midway Well 2 were in use prior to July 13, 1978, by other owners prior to the purchase by Aqua. The purchase by Aqua of the wells and creation of one larger public water supply system in February 2007, resulted in the loss of grandfathering, as the combined withdrawals for the project exceeded the Commission’s regulatory threshold of 0.100 mgd (30-day average). Commission review and approval of the project, in accordance with Commission Regulation 18 CFR § 806.4, is required. Therefore, there are no longer any grandfathered withdrawals associated with this system.

Section 8. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, 18 CFR Parts 801, 806, and 808. This project is subject to the annual compliance and monitoring fee as specified in the Commission’s Regulatory Program Fee Schedule, which may be modified over the term of the approval.

2. The project sponsor shall adhere to the metering plan reviewed and approved by Commission staff. Any modifications proposed for the metering plan shall be submitted for review and, if appropriate, approval by Commission staff in accordance with Commission

Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan.

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

4. The project sponsor shall maintain the totalizing meters 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 Section 3. 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 withdrawals 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.

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.

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 comply with the water conservation requirements and reduce system water losses to less than twenty (20) percent to comply with Commission Regulation 18 CFR § 806.25(a)(1). The project sponsor shall reduce system losses and achieve compliance with the water conservation requirements within five (5) years of the effective date of this docket approval (March 10, 2021) unless the Commission grants an extension of time due to extenuating circumstances described, in writing, by the project sponsor. The project sponsor

shall report to the Commission annually on the progress made pursuant to this requirement. Annual reports are due within sixty (60) days after the close of the preceding year.

20. The date of the last meter certifications were February 25, 2013; therefore, the next meter certifications are due no later than February 25, 2018. Certification of meter accuracy shall be provided to the Commission no less frequent than once every five (5) years from the date of the last certification.

21. 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 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.

23. Within six (6) months of this approval and in accordance with Commission Regulation 18 CFR § 806.32, the project sponsor shall submit for review and, if appropriate, approval by Commission staff a water resource development plan designed to evaluate the project sponsor's ability to meet its anticipated reasonably foreseeable maximum projected 15-year water demands. The water resource development plan shall identify water resources available through a 1-in-10-year drought recurrence interval for development in the vicinity of the project sponsor's service area.

The water resource development plan shall describe a practical, phased approach for the development of additional sources, if needed, to meet 15-year projected water demands. Once approved, the plan shall be implemented so as to enable additional source(s) to be operational within five (5) years of the plan approval, unless Commission staff determines that an alternate implementation schedule is appropriate. The project sponsor shall obtain all necessary approvals and pay the appropriate project review fees associated with any proposed new sources.

24. The project sponsor shall execute the groundwater elevation monitoring plan and complete installation of water level monitoring equipment in the Hilltop Well and in Midway Well 2 within thirty (30) days of project approval. 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 and shall provide serial numbers for all measuring devices deployed in the sources listed in Section 3 within thirty (30) days of project approval.

25. The project sponsor shall initiate implementation of the Dug Road Well mitigation plan in accordance with the schedule that was submitted with the application and approved by staff. The mitigation plan includes the installation of automated equipment to prevent drawdown of the water level in the Dug Road Well from exceeding 200 feet below the top of well casing.

26. To confirm that completed mitigation is adequate and that significant adverse impacts will not occur as a result of long-term operation of the Dug Road Well, Hilltop Well, Midway Well 1, and Midway Well 2, the project sponsor shall implement the approved private well monitoring plans (which identifies the wells to be monitored) within thirty (30) days of this approval. Approval of the private well monitoring plans is conditioned as follows:

- a. With concurrence of the property owner, an electronic recording transducer shall be supplied, installed, and maintained by the project sponsor in the well identified in the approved plan.
- b. If access to any of the approved monitoring locations is denied, or if a review of monitoring data (or new well inventory data) suggests additional monitoring locations are needed, staff may modify the monitoring network from what has been approved.
- c. The project sponsor shall keep daily groundwater elevation data records collected from the private monitoring wells. 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. The project sponsor must notify the Commission within two (2) business days of discovery of an indication that a significant adverse impact to other groundwater users may occur or has occurred as a result of Aqua's groundwater withdrawals.
- d. Collection of groundwater elevation data 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 the wells at or near the approved consecutive 30-day average rate will not cause an adverse impact to nearby private wells, but in no case will the monitoring be less than two (2) years. Commission staff will notify the project sponsor, in writing, if the private well monitoring required herein has confirmed that no significant adverse impacts will occur and that the required monitoring may cease. Interpretive annual reports including the raw monitoring data documenting the results of the private 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. The first annual report shall be submitted no later than February 28, 2017. Should the groundwater data indicate that unacceptable impacts will occur as a result of operating the wells at the approved rate, the Commission may revise existing or impose new conditions on the use of the wells to avoid adverse impact, or require other mitigation be completed.

27. Withdrawal from Meadowcrest Well 2 is prohibited after the date of this approval. The project sponsor is required to apply for and obtain Commission approval prior to any subsequent withdrawal from Meadowcrest Well 2.

28. Concurrent operation of Midway Well 1 and Midway Well 2 is prohibited.

Section 10. Term

29. The project sponsor has a period of three (3) years from the date of this approval to commence the withdrawal from the Hilltop Well or the approval for the Hilltop Well 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 any of the sources used by the project are 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.

30. This approval is effective until March 9, 2031. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before September 9, 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 March 10, 2016.

Dated: March 11, 2016


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. 20160303

Approval Date: March 10, 2016

EAST BERLIN AREA JOINT AUTHORITY

Groundwater Withdrawals (30-Day Averages) of 0.044 mgd from Well 1, 0.065 mgd from Well 2, 0.058 mgd from Well 4, and 0.051 mgd from Well 5; and Total System Withdrawal Limit (30-Day Average) of 0.254 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 East Berlin Area Joint Authority's (Authority's) public water supply system includes six sources (Wells 1, 2, 4, 5, 6, and 7), which are herein referred to as the "Total System." According to information provided by the Authority, no other sources are used by the project.

On June 5, 1986, the Commission approved the 30-day average groundwater withdrawal of 0.024 million gallons per day (mgd) from Well 5 under Commission Docket No. 19860601, which expires on June 5, 2016, and limited operation of Well 5 to 8 hours per day and established a maximum drawdown level. In its revised renewal application, the Authority requested 0.051 mgd from Well 5 and the elimination of the pumping restrictions. The addition of new sources after 2007 (Wells 6 and 7) required Commission review and approval of Wells 1, 2, and 4, which were initiated prior to the Commission's groundwater withdrawal regulations. On June 10, 2008, the Commission received applications from the Authority, which were subsequently revised based on the results of aquifer testing, requesting approval for withdrawals from Wells 1, 2, and 4.

This approval authorizes use of Wells 1, 2, 4, and 5 at the revised requested rates, eliminates certain pumping restrictions for Well 5, rescinds Commission Docket No. 19860601, and establishes a total system limit.

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.

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

Section 5. Approved Withdrawal Quantities and Limitations

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

Approved Withdrawal Quantities and Limitations				
	Well 1	Well 2	Well 4	Well 5
30-Day Average Withdrawal (mgd):	0.044	0.065	0.058	0.051
Maximum Instantaneous Withdrawal Rate (gpm) (Not to Exceed):	50	90	60	50
Total System Withdrawal Limit – Wells 1, 2, 4, 5, 6, and 7 (30-Day Average) (mgd):	0.254			

The withdrawals are also subject to all other conditions set forth in this docket approval.

Section 6. Existing Approved Withdrawals

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

Existing Approved Groundwater Withdrawals			
Source*	30-Day Average Withdrawal (mgd)	Commission Docket No.	Docket Expiration Date
Well 6	0.130	20080950	September 11, 2023
Well 7	0.029	20080950	September 11, 2023

*Wells 6 and 7 were formerly referred to as Wells TW-1 and TW-2, respectively.

Section 7. Grandfathering Determination – Withdrawals

The project did not utilize surface water withdrawals prior to November 11, 1995.

The project used three wells (Wells 1, 2, and 4) prior to July 13, 1978. In accordance with Commission Regulation 18 CFR § 806.4, the addition of new sources in 2008 (Wells 6 and 7) subjected the pre-regulation withdrawals to Commission review and approval. With this approval, all withdrawals used by the Authority will have Commission approval.

Section 8. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, 18 CFR Parts 801, 806, and 808. This project is subject to the annual compliance and monitoring fee as specified in

the Commission's Regulatory Program Fee Schedule, which may be modified over the term of the approval.

2. Within one hundred twenty (120) days from the date of this approval, the project sponsor shall submit a comprehensive metering plan to the Commission for review and approval by Commission staff that accounts for all withdrawals listed in Sections 3, 5, and 6 of this approval. Following approval, the project sponsor shall execute the metering plan and complete installation of metering equipment in accordance with the approved schedule. The project sponsor shall notify the Commission, in writing, and submit photographs of the meters when they have 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.

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

4. The project sponsor shall maintain the totalizing meters and other flow and volume measuring devices, accurate to within five (5) percent, so as to provide an accurate record of withdrawals, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

5. Within one hundred twenty (120) days from the date of this approval, the project sponsor shall submit a plan to Commission staff for review and approval for the implementation of a groundwater elevation monitoring program in accordance with Commission Regulation 18 CFR § 806.30(a)(4). The plan shall include proposed methods for the daily measurement and recording of groundwater elevations in the sources listed in Sections 3, 5, and 6. Following approval, the project sponsor shall execute the plan and complete installation of water level monitoring equipment in accordance with the approved schedule. The project sponsor shall notify the Commission, in writing, and submit photographs of the water level monitoring equipment when it has been installed and certify the accuracy of the measuring devices. The project sponsor shall notify the Commission when the monitoring plan has been fully implemented. 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 withdrawals 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.

9. This approval is conditioned on the project sponsor maintaining legal access to the withdrawal locations 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. 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.

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

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

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

Section 9. Special Conditions

20. The 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 records, and shall report the same to the Commission upon request, of all persons supplied water from the project that maintain a permanent connection to the public water supply system. The project sponsor shall also keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project that do not maintain a permanent connection to the public water supply system for uses other than hydrocarbon development, including daily quantities supplied.

Section 10. Term

22. This approval is effective April 1, 2016, and shall remain effective until March 31, 2031. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before September 30, 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.

23. Commission Docket No. 19860601 shall remain effective through March 31, 2016, whereupon it shall be rescinded.

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 March 10, 2016.

Dated: March 11, 2016


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. 20160304

Approval Date: March 10, 2016

EAST COCALICO TOWNSHIP AUTHORITY

**Groundwater Withdrawals (30-Day Averages) of 0.059 mgd from Well 3A,
0.023 mgd from Well 4, 0.056 mgd from Well 5,
0.022 mgd from Well 6, and 0.046 mgd from Well 7;
Combined Withdrawal Limit (30-day Average) of 0.073 mgd from Wells 5 and 6;
and Total System Withdrawal Limit (30-Day Average) of 1.395 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 East Cocalico Township Authority's public water supply system includes 14 wells (Wells 2A, 3A, 4, 5, 6, 7, 8A, 9, 10, 11, 12, 14, M, and F), which are herein referred to as the "Total System." Based on information provided by East Cocalico Township Authority, no other sources or interconnects are used by the project.

On January 11, 1979, the Commission approved the groundwater withdrawal (consecutive 30-day average) of 0.100 million gallons per day (mgd) from Well 7 under Commission Docket No. 19790105, which expired on January 11, 2009. On April 10, 2015, East Cocalico Township Authority submitted an application to the Commission requesting approval for withdrawal from Well 7. The addition of new sources after 2007 (Wells M and F) required Commission review and approval of Wells 3A, 4, 5, and 6, which were initiated prior to the Commission's groundwater withdrawal regulations. On April 10 and 14, 2015, East Cocalico Township Authority submitted applications to the Commission requesting approval for withdrawals from Wells 3A, 4, 5, and 6. This approval authorizes the use of Wells 3A, 4, 5, 6, and 7 at the requested withdrawal rates and establishes a total system withdrawal limit.

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 5. Approved Withdrawal Quantities and Limitations

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

Approved Withdrawal Quantities and Limitations				
Source	30-Day Average Withdrawal (mgd)	Maximum Instantaneous Withdrawal Rate (gpm) (not to exceed)	Wellfield Withdrawal Limit (30-day average) (mgd)	Total System Withdrawal Limit* (30-day average) (mgd)
Well 3A	0.059	133	Not Applicable	1.395
Well 4	0.023	47	Not Applicable	
Well 5	0.056	102	0.073	
Well 6	0.022	83	(Wellfield 5-6)	
Well 7	0.046	110	Not Applicable	
gpm – gallons per minute * Total system limit includes withdrawals from Wells 2A, 3A, 4, 5, 6, 7, 8A, 9, 10, 11, 12, 14, M, and F.				

The withdrawals are also subject to all other conditions set forth in this docket approval.

Section 6. Existing Approved Withdrawals

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

Existing Approved Groundwater Withdrawals			
Source	30-Day Average Withdrawal (mgd)	Commission Docket No.	Docket Expiration Date
Well 2A (replaced Well 2)	0.576	19990901	September 9, 2024
Well 8A (replaced Well 8)	0.072	20031007	October 9, 2028
Wells 9 and 10 (included Well 8 prior to replacement)	0.366	19890101	January 12, 2019
Wells 11 and 12	0.240	19920702	July 9, 2022
Well 14	0.266	19981202	December 3, 2023
Well F	1.150	20070606	June 13, 2022
Well M	1.395	20070606	June 13, 2022

Section 7. Grandfathering Determination – Withdrawals

The project did not utilize surface water withdrawals prior to November 11, 1995.

The project used five wells (Wells 2, 3A, 4, 5, and 6) prior to July 13, 1978, of which Well 2 was replaced by Well 2A and approved by Commission Docket No. 19990901. In accordance with Commission Regulation 18 CFR § 806.4, the addition of new sources in 2007

(Wells F and M) subjected the pre-regulation withdrawals to Commission review and approval. With this approval, all withdrawals used by East Cocalico Township Authority will have Commission approval.

Section 8. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, 18 CFR Parts 801, 806, and 808. This project is subject to the annual compliance and monitoring fee as specified in the Commission's Regulatory Program Fee Schedule, which may be modified over the term of the approval.

2. The project sponsor shall adhere to the metering plan reviewed and approved by Commission staff. Any modifications proposed for the metering plan shall be submitted for review and, if appropriate, approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan.

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

4. The project sponsor shall maintain the totalizing meter and other flow and volume measuring devices, accurate to within five (5) percent, so as to provide an accurate record of withdrawals, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

5. The project sponsor shall adhere to the groundwater elevation monitoring plan reviewed and approved by Commission staff for the sources listed in Section 3. Any modifications proposed for the groundwater elevation monitoring 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. 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.

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. 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.

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

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

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

Section 9. Special Conditions

20. The date of the last meter certifications were October 23, 2012; therefore, the next meter certifications are due no later than October 23, 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.

21. 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 records, and shall report the same to the Commission upon request, of all persons supplied water from the project that maintain a permanent connection to the public water supply system. The project sponsor shall also keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project that do not maintain a permanent connection to the public water supply system for uses other than hydrocarbon development, including daily quantities supplied.

Section 10. Term

23. This approval is effective until March 9, 2031. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before September 9, 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 March 10, 2016.

Dated: March 11, 2016


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. 20160305

Approval Date: March 10, 2016

EQT PRODUCTION COMPANY

**Surface Water Withdrawal (Peak Day), Variable, of up to 0.720 mgd
from Wilson 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 renewal of the project described herein in accordance with the conditions set forth below.

This approval is a renewal of Commission Docket No. 20120307 that was originally approved March 15, 2012, with a peak day withdrawal rate of 0.740 million gallons per day (mgd) and special flow protection requirements. The project sponsor has requested a reduction to the maximum peak day withdrawal rate and has also requested variable (monthly) peak day withdrawal rates. 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:	EQT Production Company
Approval Type:	Surface Water Withdrawal
Original Docket No.:	20120307
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Duncan 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:	Wilson Creek
Subbasin:	West Branch Susquehanna
Watershed Boundary Dataset (WBD):	0205020504 (Babb Creek)
Water Use Designation:	Cold Water Fishery (CWF)
Withdrawal Location (degrees):	Lat: 41.620783 N Long: 77.293140 W
Site Flow Statistics (cfs):	Q7-10 = 0.4; Average Daily Flow = 29.9
Drainage Area (square miles):	19.1
Aquatic Resource Class*:	2
Special Flow Protection Required:	Yes
cfs – cubic feet per second	
*Refer to Commission Policy No. 2012-01 (Low Flow Protection Policy Related to Withdrawal Approvals)	

Section 4. Approved Withdrawal Quantities and Limitations

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

Approved Withdrawal Quantities and Limitations				
Peak Day Withdrawal Amount (mgd):	Not to Exceed Values Contained in the “Withdrawal and Passby Schedule,” When Available			
Maximum Instantaneous Withdrawal Rate (gpm):	Not to Exceed Values Contained in the “Withdrawal and Passby Schedule,” When Available			
Flow Protection Type:	Seasonal passby expressed as monthly values			
Method for Monitoring Flow Protection:	Off-site monitoring of USGS Real-Time Gage 01549500; Blockhouse Creek near English Center, Pennsylvania			
Withdrawal and Passby Schedule:				
<i>Month</i>	<i>Peak Day Withdrawal (mgd)</i>	<i>Maximum Instantaneous Withdrawal (gpm)</i>	<i>On-Site Flow Protection Rate (cfs)</i>	<i>Off-Site Monitoring Threshold for Flow Protection (cfs)*</i>
January	0.720	500	8.6	20
February	0.720	500	10	23
March	0.720	500	21	45
April	0.720	500	24	51

Approved Withdrawal Quantities and Limitations (continued)				
Withdrawal and Passby Schedule:				
<i>Month</i>	<i>Peak Day Withdrawal (mgd)</i>	<i>Maximum Instantaneous Withdrawal (gpm)</i>	<i>On-Site Flow Protection Rate (cfs)</i>	<i>Off-Site Monitoring Threshold for Flow Protection (cfs)*</i>
May	0.720	500	14	30
June	0.720	500	5.6	14
July	0.417	289	2.6	6.4
August	0.237	164	1.5	3.7
September	0.205	142	1.3	3.2
October	0.360	250	2.2	5.5
November	0.720	500	7.1	17
December	0.720	500	12	26

USGS– U.S. Geological Survey
1 cfs = 448.8 gallons per minute (gpm)
* Flow Protection Threshold

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

Section 5. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, 18 CFR Parts 801, 806, and 808. This project is subject to the annual compliance and monitoring fee as specified in the Commission’s Regulatory Program Fee Schedule, which may be modified over the term of the approval.

2. The project sponsor shall adhere to the metering plan reviewed and approved by Commission staff. Any modifications proposed for the metering plan shall be submitted for review and, if appropriate, approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan.

3. 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. 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 April 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 has remained above such flow protection threshold for 48 hours.

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. 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 approval shall be effective April 1, 2016, and shall remain effective until March 31, 2020. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before September 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.

26. Commission Docket No. 20120307 shall remain effective through March 31, 2016, 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 March 10, 2016.

Dated: March 11, 2016


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. 20160306

Approval Date: March 10, 2016

**FURMAN FOODS, INC.
dba FURMANO'S**

**Phased Implementation of Seasonal
Groundwater Withdrawal Limits
for Well 1, Well 4, and Well 7; and
Total System Withdrawal Limit as Provided in Section 5**

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

Furman Foods, Inc.'s (Furman's) water supply system includes Wells 1, 4, 7, 9, and 10, herein referred to as the "Total System," and service from the public water supply system and steam from an adjacent electric generating facility, which are not included in the Total System. Based on information provided by Furman, no other sources are used by the project.

On September 12, 1985, the Commission approved the 30-day average withdrawal of 0.775 million gallons per day (mgd) from Wells 1, 4, and 7 under Commission Docket No. 19850901. Commission staff recommends approval of withdrawal from Wells 1, 4, and 7 in accordance with the requested phased implementation schedule for reduction of withdrawals provided in Section 5, approval of seasonal withdrawal limits that coincide with Furman's peak season and off-season, and approval of a total system limit for Wells 1, 4, 7, 9, and 10 that supersedes the total system limit provided in prior approvals.

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:	Furman Foods, Inc., dba Furmano's
Approval Type:	Groundwater Withdrawal
Original Docket No.:	19850901
Authorized Water Use Purpose:	Industrial Food Processing and Incidental Uses
Municipality:	Point Township
County:	Northumberland 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:	Wells 1, 4, and 7	
Subbasin:	West Branch Susquehanna	
Watershed Boundary Dataset (WBD):	0205020612 (West Branch Susquehanna River)	
Withdrawal Location (degrees):		
Well 1	Lat: 40.915285 N	Long: 76.817048 W
Well 4	Lat: 40.917618 N	Long: 76.816086 W
Well 7	Lat: 40.917493 N	Long: 76.813825 W
Special Flow Protection Required:	No	

Section 4. Aquifer Testing

The project sponsor requested that the constant-rate aquifer testing required by Commission Regulation 18 CFR § 806.12 for groundwater withdrawals be waived. In support of the waiver request, the project sponsor submitted historical operational water level and withdrawal data, and historical aquifer testing data for Wells 1, 4, and 7.

Historical water level and withdrawal data demonstrates that water levels in Wells 1, 4, and 7 have declined since at least 1998, and significant declines in water levels appear to coincide with the combination of peak season use with increased off-season use of the wells. The declining water levels in Well 4 during 2014 and decreased water quality of Well 1 in 2015 prompted Furman to request emergency certificates for temporary approvals to increase withdrawals from Well 9 and to withdraw water from a nearby facility. Based on the evidence that the previously approved withdrawal quantity is not sustainable, Furman requested a reduced combined withdrawal limit for Wells 1, 4, and 7, as provided in Section 5, that includes seasonal withdrawal limits and a phased implementation of reductions of the seasonal withdrawal limits. The phased implementation is needed to allow Furman sufficient time to develop and implement water conservation measures and new water sources at the facility to offset the reductions in withdrawals from Wells 1, 4, and 7. Furman's 15-year projected demand exceeds the combined

available quantity from all sources, including the public water supply system. Therefore, staff recommends that Furman develop a water resource development plan as described in Special Condition 22.

Commission staff determined that the withdrawals from Wells 1, 4, and 7 at the requested withdrawal rates should not cause permanent loss of aquifer storage, render unmitigated competing supplies unreliable, or cause adverse impacts to the water resources of the basin. Therefore, the aquifer testing requirements for Wells 1, 4, and 7 are hereby waived.

Section 5. Approved Withdrawal Quantities and Limitations

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

Approved Withdrawal Quantities and Limitations				
Effective Year	Off-Season ^{1*}		Peak Season ^{2*}	
	Wells 1, 4, and 7	Total System Limit ³	Wells 1, 4, and 7	Total System Limit ³
2016	0.600	1.104	0.600	1.104
2017-2018	0.505	1.009	0.505	1.009
2019	0.400	0.904	0.505	1.009
2020	0.300	0.804	0.505	1.009
2021	0.150	0.654	0.505	1.009
		Well 1	Well 4	Well 7
Maximum Instantaneous Withdrawal Rates (gallons per minute):		400	400	100
*Combined 30-Day Average Withdrawals (mgd)				
¹ Off-season is defined as January through July and December.				
² Peak season is defined as August through November.				
³ Total system limit includes withdrawals from Wells 1, 4, 7, 9, and 10.				

The withdrawals are also subject to all other conditions set forth in this docket approval.

Section 6. Existing Approved Withdrawals and Consumptive Water Uses

Quantities applicable to the existing approved withdrawals and consumptive water uses are listed in the tables below.

Existing Approved Groundwater Withdrawals			
Source	30-Day Average Withdrawal (mgd)	Commission Docket No.	Docket Expiration Date
Well 9	0.288	19930908	July 14, 2024
Well 10	0.504 from Well 10; 0.504 from Wells 9 and 10 (combined); Interim Total System Limit of 1.104 (Wells 1, 4, 7, 9, and 10)	20150607	June 3, 2030

Existing Approved Consumptive Water Uses			
Source	Peak Day Consumptive Water Use (mgd)	Commission Docket No.	Docket Expiration Date
Wells 1, 4, 7, and 9; an Adjacent Electric Generating Facility; and Public Water Supply	0.900	20130608	June 19, 2028
Addition of Well 10	0.900	20130608-1	June 19, 2028

Section 7. Grandfathering Determination – Withdrawals

The project did not utilize surface water withdrawals prior to November 11, 1995.

The project previously utilized one well (Sulfur Well) prior to July 13, 1978. The Sulfur Well has not been utilized for more than 5 years due to the sulfur content in the well. Furman indicated that the Sulfur Well is no longer connected to the system and cannot be used. Grandfathering for the Sulfur Well was forfeited with the addition of Well 10, which was approved in June 2015. Future withdrawals from the Sulfur Well will require prior Commission review and approval.

Section 8. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, 18 CFR Parts 801, 806, and 808. This project is subject to the annual compliance and monitoring fee as specified in the Commission’s Regulatory Program Fee Schedule, which may be modified over the term of the approval.

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

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

4. The project sponsor shall maintain the totalizing meters 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 Section 3. 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 withdrawals and water levels 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.

9. This approval is conditioned on the project sponsor maintaining legal access to the withdrawal locations 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. 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.

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 or to add a source used for consumptive use that is not listed in Section 3.

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

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

Section 9. Special Conditions

20. The project sponsor shall implement the phased seasonal withdrawal limits as described in Section 5. The final combined withdrawal limits shall be implemented by 2021 and will remain effective through the duration of this approval.

21. Peak season shall be defined as August 1 through November 30 of each year. Off-season shall be defined as January 1 through July 31, and December 1 through December 31 of each year. The project sponsor must transition withdrawals from Wells 1, 4, and 7 into the off-season withdrawal limits beginning in December and shall meet the off-season combined 30-day average withdrawal limit no later than January 1 of the following year.

22. Within six (6) months from the date of this approval and in accordance with Commission Regulation 18 CFR § 806.23, the project sponsor shall submit for review and, if appropriate, approval by Commission staff a water resource development plan designed to evaluate the project sponsor's ability to meet its anticipated reasonably foreseeable maximum projected 15-year consecutive 30-day average water demands. The water resource development plan shall identify water resources available through a 1-in-10-year drought recurrence interval for development in the vicinity of the project sponsor's facility.

The water resource development plan shall describe a practical, phased approach for the development of additional sources, if needed, to meet the projected water demands. The plan must consider that the current water supply system cannot sustain the expected demand during a 1-in-10-year drought and that an additional source(s) of water is necessary. Once approved, the plan shall be implemented by 2021 to meet the 15-year projected demand.

As part of this condition, the project sponsor shall submit annual progress reports regarding the status of the implementation of water conservation and resource development projects. These reports shall be submitted within thirty (30) days of the close of the fourth (4th) quarter of the preceding year, beginning the year after this approval. The progress reports shall continue until the water resource development plan has been fully implemented and Furman's sources are sufficient to meet the 15-year projected demand.

23. The date of the last meter certifications was February 6, 2014; therefore, the next meter certifications are due no later than February 6, 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.

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

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

26. Prior to supplying water for any use not authorized pursuant to Section 2 of this approval, the project sponsor shall first submit a request for 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.

27. The interim total system limit approved in Commission Docket No. 20150607 is hereby superseded by the total system limit provided herein. All other conditions of Commission Docket No. 20150607 remain in effect.

Section 10. Term

28. This approval shall be effective April 1, 2016, and shall remain effective until March 31, 2031. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before September 30, 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.

29. Commission Docket No. 19850901 shall remain effective through March 31, 2016, 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 March 10, 2016.

Dated: March 11, 2016


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. 20110617-1

Approval Date: June 23, 2011

Modification Date: March 10, 2016

MOUNT JOY BOROUGH AUTHORITY

**Groundwater Withdrawals (30-Day Averages)
of 1.227 mgd from Well 1 and 1.270 mgd from Well 2;
Combined Withdrawal Limit (30-day Average) of 1.799 mgd
from Wells 1 and 2; and
Total System Withdrawal Limit (30-Day Average) of 2.600 mgd**

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission has determined that the potential impacts anticipated by the operation of this project are acceptable in the interest of public health and welfare, 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 modification of the project described herein in accordance with the conditions set forth below.

The Mount Joy Borough Authority's (Authority's) public water supply system includes three sources (Wells 1, 2, and 3), which are herein referred to as the "Total System." Based on information provided by the Authority, there are no other sources used by the project.

This approval is a modification of Commission Docket No. 20110617 that was originally approved June 23, 2011, for the withdrawal of 1.227 million gallons per day (mgd) (30-day average) from Well 1, 1.165 mgd (30-day average) from Well 2, a combined withdrawal limit of 1.600 mgd (30-day average) from Wells 1 and 2, and a total system limit of 2.600 mgd (30-day average) from Wells 1, 2, and 3. Initiation of withdrawal from Well 3 was delayed by property acquisition, design, permitting, and construction issues, but is expected to be operational in 2017. Current and projected short-term system demand has increased and may exceed the limits of Commission Docket No. 20110617 prior to operation of Well 3, which is conditioned with flow protection requirements. To meet system demands, the Authority has requested an increase in the maximum instantaneous and 30-day average withdrawal rate for Well 2, an increase of 0.199 mgd in the combined withdrawal limit for Wells 1 and 2, and an increase in the total system limit. Following technical review, and consistent with applicable regulatory standards, Commission staff recommended that the requested rates of 1.270 mgd (30-day average) and 1,250 gallons per minute (gpm) (maximum instantaneous) for Well 2, and 1.799 mgd (30-day average) combined from Wells 1 and 2 be approved as an interim operating condition until additional uninterruptible sources are developed or other actions are completed that enables the Authority to meet projected demands. Commission staff does not recommend approval of the

Source Information (continued)	
Aquatic Resource Class**†:	1
Special Flow Protection Required:	No
cfs – cubic feet per second	
* Specific location information concerning discrete water-related project features has been withheld for security reasons.	
** Refer to Commission Policy No. 2012-01 (Low Flow Protection Policy Related to Withdrawal Approvals).	
† Based on the anticipated point of impact to surface water (Charles Spring).	

Section 4. Aquifer Testing

The constant-rate aquifer testing required by Commission Regulation 18 CFR § 806.12 for groundwater withdrawals was completed with prior Commission approval for both Wells 1 and 2. A 72-hour, constant-rate aquifer test of Well 2 was conducted from April 28, 2015 through May 1, 2015, pumping at an average rate of 1,263 gpm. A 72-hour, constant-rate aquifer test of Well 1 was conducted from May 5 through 8, 2015, pumping at an average rate of 1,053 gpm. In addition to the Authority’s wells, nine wells, one weir located on an unnamed tributary to Donegal Creek, and one flume located at Charles Spring were monitored during the testing.

The aquifer testing data demonstrated that flow from the Charles Spring was reduced or interrupted during testing of Wells 1 and 2. Wells 1 and 2 have been in operation since 1973 and continue to be the Authority’s only uninterruptible sources and currently operational sources. During previous review of the project, available aquifer testing results and operational data did not indicate the magnitude of impact to flow from Charles Spring that was demonstrated during aquifer testing completed in 2015. Based on the previously available data, and considering that Wells 1 and 2 were the only uninterruptible sources, no special flow protection had been required with the original approval of these wells. Considering that Wells 1 and 2 are the only operational sources for this system, the delays in bringing Well 3 online, the current and increasing system demands, and the uncertainty in the magnitude of potential impacts due to flow reduction at Charles Spring below the point of discharge to the unnamed tributary and Donegal Creek, Commission staff recommends approval of the requested combined withdrawal limit for Wells 1 and 2, requirement for the development and implementation of a water resource development plan, and monitoring of flow from Charles Spring. Following completion of the water resource development plan, staff recommends that the Commission should evaluate system demands, ability of sources to meet demands, and monitoring data collected from Charles Spring to determine if withdrawals from Wells 1 and 2 should be conditioned with special flow protection to avoid potential long-term significant adverse impacts to surface water features.

Commission staff determined that the withdrawals from Wells 1 and 2 at the requested withdrawal rates should not cause permanent loss of aquifer storage or render competing supplies unreliable. Potential adverse impacts are acceptable in the interest of public health and welfare during the interim operating period for the implementation of the water resource development plan, subject to the conditions set forth below.

Section 5. Approved Withdrawal Quantities and Limitations

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

Approved Withdrawal Quantities and Limitations		
	Well 1	Well 2
30-Day Average Withdrawal (mgd):	1.227	1.270
Maximum Instantaneous Withdrawal Rate (gpm) (Not to Exceed):	1,100	1,250
Combined Withdrawal Limit – Wells 1 and 2 (30-Day Average) (mgd):	1.799	
Total System Withdrawal Limit – Wells 1, 2, and 3 (30-Day Average) (mgd):	2.600	

The withdrawals are also subject to all other conditions set forth in this docket approval.

Section 6. Existing Approved Withdrawals

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

Existing Approved Groundwater Withdrawals			
Source	30-Day Average Withdrawal (mgd)	Commission Docket No.	Docket Expiration Date
Well 3	1.020	20070607	June 13, 2022

Section 7. Grandfathering Determination – Withdrawals

The project initiated groundwater withdrawals from Wells 1 and 2 prior to July 13, 1978, and surface water withdrawals from the Charles Spring and Little Chiques Creek prior to November 11, 1995. The surface water sources were abandoned prior to 2007. In accordance with Commission Regulation 18 CFR § 806.4, the addition of a new source (Well 3) in 2007 required Commission review and approval of all unapproved sources for continued use. All sources used by the Authority have been reviewed and approved by the Commission.

Section 8. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, 18 CFR Parts 801, 806, and 808. This project is subject to the annual compliance and monitoring fee as specified in the Commission’s Regulatory Program Fee Schedule, which may be modified over the term of the approval.

2. The project sponsor shall adhere to the metering plan reviewed and approved by Commission staff. Any modifications proposed for the metering plan shall be submitted for

review and, if appropriate, approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan.

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

4. The project sponsor shall maintain the totalizing meters 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 withdrawals 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.

9. This approval is conditioned on the project sponsor maintaining legal access to the withdrawal locations 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. 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.

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

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

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

Section 9. Special Conditions

20. Within sixty (60) days from the date of this approval, a plan shall be submitted for installation of flow measurement and recording equipment in Charles Spring for review and, if appropriate, approval by Commission staff. The plan shall be implemented within sixty (60) days of plan approval. The project sponsor shall notify the Commission, in writing, and submit photographs of the flow monitoring equipment when it has been installed and certify the accuracy of the measuring devices. The flow 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 flow monitoring plan shall be submitted for review and approval by Commission staff. Modifications shall not be made until the project sponsor receives written approval of the amended plan.

21. All other conditions in Commission Docket No. 20110617 not inconsistent herewith shall remain effective.

22. Under Commission Docket No. 20110617, the project sponsor was required to reduce system losses to less than twenty (20) percent to comply with Commission Regulation 18 CFR § 806.25(a)(1). Although the project sponsor has not met this requirement, significant efforts have been made to reduce system losses and an extension to the deadline is appropriate. Therefore, the deadline to reduce system losses to less than twenty (20) percent is hereby extended through March 10, 2021. The project sponsor shall reduce system losses and achieve compliance with the water conservation requirements by March 10, 2021, unless the Commission grants an extension of time due to extenuating circumstances described, in writing, by the project sponsor. The project sponsor shall report to the Commission annually on the progress made pursuant to this requirement. Annual reports are due within sixty (60) days after the close of the preceding year.

23. The date of the last meter certification was September 14, 2011; therefore, the next meter certification is due no later than September 14, 2016. Certification of meter accuracy shall be provided to the Commission no less frequent than once every five (5) years from the date of the last certification.

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

25. The project sponsor shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for use in hydrocarbon development, including daily quantities supplied. The project sponsor also shall keep records, and shall report the same to the Commission upon request, of all persons supplied water from the project that maintain a permanent connection to the public water supply system. The project sponsor shall also keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project that do not maintain a permanent connection to the

public water supply system for uses other than hydrocarbon development, including daily quantities supplied.

26. Within six (6) months from the date of this approval, the project sponsor shall submit for review and, if appropriate, approval by Commission staff a water resource development plan designed to evaluate the project sponsor's ability to meet its anticipated, reasonably foreseeable, maximum 15-year and 25-year water demands. The water resource development plan shall identify water resources available for development and assess the sustainability of future proposed withdrawals through a 1-in-10-year drought recurrence interval.

The plan shall describe a practical, phased approach for the investigation and development of additional uninterrupted sources, interconnections, additional storage, or water conservation measures to meet the projected water demands. The plan must consider that the current water supply system does not have sufficient operational and uninterrupted sources to meet the projected demand for the term of this approval and that additional uninterrupted sources, storage, and/or water conservation measures are needed. Once approved, the plan shall be implemented so as to ensure that the Authority can meet the projected demands.

As part of this condition, the project sponsor shall submit annual progress reports regarding the status of the water resource development plan. These reports shall be due by January 31 of each year, beginning the year after the plan is approved by Commission staff. The progress reports shall continue until the project sponsor demonstrates ability to meet system demands. No later than following the submittal of the fifth (5th) year annual progress report, the Commission will evaluate system demands, ability of sources to meet demands, Well 1 and Well 2 withdrawal data, and Charles Spring flow data to determine if withdrawals from Wells 1 and 2 should be conditioned with special flow protection to avoid potential long-term significant adverse impacts to surface water features. The Commission may reopen this docket to establish special flow protections should it make a determination that such protections are necessary.

27. The project sponsor has requested an increase to the withdrawal rate for Well 1 to 1.300 mgd on a 30-day average that would not increase the combined withdrawal limit for Wells 1 and 2 set forth in Section 5. This request was not part of the original application that was submitted to the Commission and, therefore, was not available for public comment during the comment period that ended February 15, 2016. The aquifer testing for Well 1 performed by the project sponsor was adequate to allow the Commission to reach technical conclusions regarding this requested withdrawal rate. The Commission shall include this requested change to the withdrawal rate for Well 1 in the next notice for public hearing on projects to be before the Commission at its next quarterly business meeting to allow receipt of public comment on this request. If after reviewing any public comment received and the technical recommendations of Commission staff on the requested withdrawal rate from Well 1, the Executive Director may modify the docket to establish a new withdrawal rate for Well 1.


Section 10. Term

28. This modified approval shall be effective April 1, 2016, and shall remain effective until June 22, 2026, the term of the original approval. As specified in Commission Regulation

18 CFR § 806.31(e), if the project sponsor submits an application on or before December 22, 2025, 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 March 10, 2016.

Dated: March 11, 2016


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. 20160307

Approval Date: March 10, 2016

MUNCY BOROUGH MUNICIPAL AUTHORITY

Groundwater Withdrawals (30-Day Averages) of 0.324 mgd from Well 5, 0.352 mgd from Well 6, 0.126 mgd from Well 7, and 0.276 mgd from Well 8; and Total System Withdrawal Limit (30-Day Average) of 0.651 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 Muncy Borough Municipal Authority (Authority) public water supply system is sourced by groundwater from four wells (Wells 5, 6, 7, and 8), all of which were drilled in 1995 or 1996 and placed in service by 2001.

The Authority's public water supply system currently includes groundwater withdrawals from Wells 5, 6, 7, and 8, herein referred to the "Total System." Based on information provided by the Authority, no other sources are used by the project. In consideration of the 15-year projected demand and the reasonably foreseeable need of the project, Commission staff recommended that a total system limit be established and that individual withdrawals from Wells 5, 6, 7, and 8 be approved at the requested rates. 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.

Commission staff determined that the withdrawals from Wells 5, 6, 7, and 8 at the requested withdrawal rates should not cause permanent loss of aquifer storage, render competing supplies unreliable, or cause adverse impacts to the water resources of the basin.

Section 5. Approved Withdrawal Quantities and Limitations

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

Approved Withdrawal Quantities and Limitations			
Source	30-Day Average Withdrawal (mgd)	Maximum Instantaneous Withdrawal Rate (gpm) (not to exceed)	Total System Withdrawal Limit* (30-day average) (mgd)
Well 5	0.324**	225	0.651
Well 6	0.352**	245	
Well 7	0.126**	88	
Well 8	0.276**	192	
mgd – million gallons per day gpm – gallons per minute * Total system limit includes withdrawals from Wells 5, 6, 7, and 8. ** Also represents a peak day limit due to associated maximum instantaneous withdrawal rate.			

The withdrawals are also subject to all other conditions set forth in this docket approval.

Section 6. Existing Approved Withdrawals

The project does not have existing approved withdrawals.

Section 7. Grandfathering Determination – Withdrawals

The project sponsor no longer utilizes surface water or groundwater sources that were in existence prior to November 11, 1995, or July 13, 1978, respectively.

Section 8. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, 18 CFR Parts 801, 806, and 808. This project is subject to the annual compliance and monitoring fee as specified in the Commission’s Regulatory Program Fee Schedule, which may be modified over the term of the approval.

2. The project sponsor shall adhere to the metering plan reviewed and approved by Commission staff. Any modifications proposed for the metering plan shall be submitted for review and, if appropriate, approval by Commission staff in accordance with Commission

Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan.

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

4. The project sponsor shall maintain the totalizing meters 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 Section 3. 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 withdrawals 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.

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. 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.

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

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

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

Section 9. Special Conditions

20. The project sponsor shall comply with the water conservation requirements and reduce system water losses to less than twenty (20) percent to comply with Commission Regulation 18 CFR § 806.25(a)(1). The project sponsor shall reduce system losses and achieve

compliance with the water conservation requirements within five (5) years of the effective date of this docket approval (March 10, 2021) unless the Commission grants an extension of time due to extenuating circumstances described, in writing, by the project sponsor. The project sponsor shall report to the Commission annually on the progress made pursuant to this requirement. Annual reports are due within sixty (60) days after the close of the preceding year.

21. The dates of the last meter certifications were May 5 and 6, 2014; therefore, the next meter certifications are due no later than May 5, 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. 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 records, and shall report the same to the Commission upon request, of all persons supplied water from the project that maintain a permanent connection to the public water supply system. The project sponsor shall also keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project that do not maintain a permanent connection to the public water supply system for uses other than hydrocarbon development, including daily quantities supplied.

Section 10. Term

24. This approval is effective until March 9, 2031. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before September 9, 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 March 10, 2016.

Dated: March 11, 2016


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. 20160308

Approval Date: March 10, 2016

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Total System Groundwater Withdrawal Limit (30-Day Average) of 6.300 mgd from the Cresson No. 9, Gallitzin Shaft, and Argyle Stone Bridge Mine Pools

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 unmitigated 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 Cresson Acid Mine Drainage Abatement Project involves the withdrawal and treatment of mine pool water from three inactive coal mine pools: Cresson No. 9, Gallitzin Shaft, and Argyle Stone Bridge. The project’s primary purpose is to eliminate untreated mine discharges to Bradley Run, Trapp Run, and Sugar Run. The project is also intended to provide approximately 5.700 million gallons per day (mgd) to the Susquehanna River Basin for low flow augmentation, meeting part of the Commonwealth’s objective of offsetting a total of 15.700 mgd of agricultural consumptive use.

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:	Pennsylvania Department of Environmental Protection
Approval Type:	Groundwater Withdrawal
Authorized Water Use Purpose:	Acid Mine Drainage Abatement and Low Flow Augmentation to Partially Offset Agricultural Consumptive Use
Municipality:	Cresson and Gallitzin Townships and Cresson Borough
County:	Cambria County
State:	Pennsylvania

Section 3. Source Information

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

Source Information		
Withdrawal Type:	Groundwater	
Approved Sources:	Cresson No. 9, Gallitzin Shaft, and Argyle Stone Bridge Mine Pools	
Subbasins:	West Branch Susquehanna River and Juniata River	
Watershed Boundary Dataset (WBD):		
Cresson No. 9 and Gallitzin Shaft	0205020103 (West Branch Susquehanna River)	
Argyle Stone Bridge	0205030202 (Frankstown Branch Juniata River)	
Planned Mine Pool Extraction Locations (degrees)*:		
Cresson No. 9 Well CR9W1	Lat: 40.477145 N	Long: 78.591465 W
Gallitzin Shaft Well GSW2A	Lat: 40.480361 N	Long: 78.576639 W
Gallitzin Shaft Well GSW2B	Lat: 40.480553 N	Long: 78.576308 W
Argyle Stone Bridge Well ASBW3	Lat: 40.465191 N	Long: 78.552442 W
* Withdrawal locations represent coordinates of proposed extraction wells to access mine pools and are subject to change.		

Section 4. Aquifer Testing

The project sponsor requested that the constant-rate aquifer testing required by Commission Regulation 18 CFR § 806.12 for groundwater withdrawals be waived. Commission staff determined that the withdrawals and subsequent discharge of significant quantities of untreated impaired mine pool waters to local receiving streams during an aquifer test would cause unacceptable impacts to the water quality of those streams. Because the project is intended to manage mine pool levels to achieve water quality improvements and provide low flow augmentation, sustainability of the withdrawals is not a goal or requirement and the standard groundwater availability analysis is not necessary. In addition, Commission staff concluded that the abatement project represents a net benefit to the water resources of the basin. For these reasons, the requirements for aquifer testing are hereby waived.

The project sponsor concluded that 22 properties with private wells located along Vampire Road will be significantly and adversely impacted by the proposed withdrawal from the Gallitzin Shaft mine pool. The project sponsor provided a mitigation plan with the applications for these properties, which indicated that the properties will be connected to the existing public water supply system. The project sponsor has identified two additional private wells located along Gallitzin Road that may be significantly and adversely impacted by the Gallitzin Shaft mine pool withdrawal for which mitigation is proposed, but the form of the mitigation has not been determined. Provided that mitigation of the properties that may be significantly and adversely impacted by the proposed withdrawal from the Gallitzin Shaft mine pool is completed in accordance with the mitigation plan provided with the application and Conditions 16 and 17 of

this approval, no unmitigated adverse impacts to competing groundwater users are expected to occur.

Commission staff identified three nonresidential wells during the review of the applications that are near the proposed withdrawals, including a golf course and two municipal public water supplies (Cresson Township Municipal Authority [CTMA] and Gallitzin Water Authority [GWA]). Staff evaluated the information provided to support the waiver from aquifer testing and the applications, and found that impacts to CTMA and the golf course are unlikely to occur during normal or low flow augmentation withdrawals from the mine pools. Staff also found that the GWA well, located near the Gallitzin Shaft mine pool, is unlikely to be impacted by normal withdrawals from the Gallitzin Shaft mine pool intended to eliminate the known discharge from the mine. Because the GWA well may be impacted by the withdrawal from the mine pool during low flow augmentation periods, staff recommends notifications of operation and water level monitoring of the GWA well in accordance with the operations plan required by Condition 22 to confirm that adverse impacts do not occur.

Commission staff finds that the withdrawals from the mine pools described herein at the requested withdrawal rates should not cause permanent loss of aquifer storage, render unmitigated competing supplies unreliable, or cause adverse impacts to the water resources of the basin, provided the conditions set forth below are satisfied.

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 (30-Day Average) (mgd):	6.300

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

Section 6. Existing Approved Withdrawals

The project does not have existing approved withdrawals.

Section 7. Grandfathering Determination – Withdrawals and Consumptive Water Use

The project did not utilize groundwater withdrawals prior to July 13, 1978, nor did it consumptively use water prior to January 23, 1971.

Section 8. Conditions

1. The project sponsor shall comply with all Commission regulations, 18 CFR Parts 801, 806, and 808.
2. The project sponsor shall adhere to the metering plan reviewed and approved by Commission staff. Modifications to the metering plan shall be made in accordance with the operations plan required by Condition 22.
3. Prior to any withdrawal from the sources listed in Section 3, the project sponsor shall install and maintain metering in accordance with the operations plan and Commission Regulation 18 CFR § 806.30. Notification of meter installation and certification requirements shall be made in accordance with the operations plan required by Condition 22.
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 the accuracy of all flow measuring devices to the Commission once every five (5) years in accordance with the operations plan under Condition 22.
5. The project sponsor shall adhere to the groundwater elevation monitoring plan reviewed and approved by Commission staff for the mine pools listed in Section 3 from all extraction points. Modifications to the groundwater elevation monitoring plan, notification of installation of the groundwater elevation measuring devices, and certification of the accuracy of the measuring devices shall be made in accordance with the operations plan required by Condition 22.
6. The project sponsor shall keep daily records of the project's total withdrawal and groundwater elevation data and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and approval by Commission staff 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. This approval is conditioned on the project sponsor maintaining legal access to the withdrawal 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. 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.

11. Pursuant to Commission Regulation 18 CFR § 806.32, the Commission may at any time reopen any project approval or take any lawful action, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment.

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. 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.

15. 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. Any determination under this paragraph is subject to appeal under Commission Regulation 18 CFR Part 808.

16. Prior to initiation of the Gallitzin Shaft withdrawal, the project sponsor shall implement the approved mitigation plan for the properties located along Vampire Road and shall provide the Commission with written correspondence and evidence documenting that the mitigation has been completed. Operation of the Gallitzin Shaft withdrawal shall not commence until the approved mitigation plan has been fully implemented.

17. Within one hundred eighty (180) days from the date of this approval, or such other time frame as approved by the Executive Director, the project sponsor shall submit a mitigation plan for the two identified properties located along Gallitzin Road for review and approval by Commission staff. Following approval of the mitigation plan, the project sponsor shall implement the plan and provide the Commission with written correspondence and evidence documenting that the mitigation has been completed. Operation of the Gallitzin Shaft withdrawal shall not commence until the approved mitigation plan has been fully implemented.

18. The project sponsor shall operate and manage the mine pools in accordance with the mine pool management plan provided with the groundwater withdrawal applications and the operations plan as required by Condition 22.

19. Studies conducted by the project sponsor indicate that lowering of the mine pool will not significantly increase the risk of subsidence as a result of the loss of hydrostatic pressures. However, should the project sponsor be made aware of a subsidence occurrence within the project area, the project sponsor should submit written notification to the Commission within ten (10) days of the discovery in accordance with the approved operations plan.

20. Any changes in the authorized water use must be approved by the Executive Director.

21. The project sponsor shall notify the Commission of any changes in status of the extraction wells or the installation of additional extraction wells in accordance with the operations plan required by Condition 22.

22. Within one hundred eighty (180) days from the date of this approval, the project sponsor, in conjunction with the Commission, shall develop and submit an operations plan to the Commission. At a minimum, this plan shall provide:

- a. Procedures for modifying the metering and groundwater elevation monitoring plans submitted by the project sponsor and approved by the Commission.
- b. Procedures for notifying the Commission of the installation and certification of the accuracy of the meters and groundwater elevation measuring devices.
- c. Procedures for meeting meter certification requirements and certification protocol throughout the term of this approval.
- d. Health and safety protocols for Commission personnel on the project site.
- e. Actions necessary for monitoring the GWA well.
- f. Procedures for managing the mine pools, including modifications to operational mine pool elevations.
- g. Procedures for notifying the Commission regarding the status of operations of the treatment facility.
- h. Procedure for notifying the Commission of changes in the status of extraction wells or addition of new extraction wells.
- i. Procedures for initiation and management of flow augmentation as conditions warrant during low flows.

Section 9. Term

23. The project sponsor has a period of five (5) 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).

24. This approval is effective until March 9, 2046. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before September 9, 2045, 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 March 10, 2016.

Dated: March 11, 2016



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. 20160309

Approval Date: March 10, 2016

SWN PRODUCTION COMPANY, 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 the project described herein in accordance with the conditions set forth below.

The project sponsor requested a peak day withdrawal quantity of 2.000 million gallons per day (mgd). The project sponsor cannot feasibly withdraw, store, and move off-site the full requested quantity due to the known peak day volume limitations of hauling by truck. Commission staff recommended that the approved peak day withdrawal rate be reduced to 1.500 mgd. 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
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Mehoopany Township
County:	Wyoming County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Approved Source:	Susquehanna River
Subbasin:	Middle Susquehanna
Watershed Boundary Dataset (WBD):	0205010614 (Lower Susquehanna River)
Water Use Designation:	Warm Water Fishery (WWF)
Withdrawal Location (degrees):	Lat: 41.540980 N Long: 76.036804 W
Site Flow Statistics (cfs):	Q7-10 = 660; Average Daily Flow = 13,115
Impairment:	Mercury/Polychlorinated Biphenyl (PCB)
Drainage Area (square miles):	8,880
Aquatic Resource Class*:	6
Special Flow Protection Required:	Yes
cfs – cubic feet per second	
*Refer to Commission Policy No. 2012-01 (Low Flow 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):	1.500 (Not to Exceed, When Available)	
Maximum Instantaneous Withdrawal Rate (gpm):	1,389 (Not to Exceed)	
Flow Protection Type:	Seasonal passby 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:		
<i>Month</i>	<i>On-Site Flow Protection Rate (cfs)</i>	<i>Off-Site Monitoring Threshold for Flow Protection (cfs)*</i>
January	--	--
February	--	--
March	--	--
April	--	--
May	--	--
June	--	--
July	1,140	1,130

Approved Withdrawal Quantities and Limitations (continued)		
Passby Schedule:		
<i>Month</i>	<i>On-Site Flow Protection Rate (cfs)</i>	<i>Off-Site Monitoring Threshold for Flow Protection (cfs)*</i>
August	838	827
September	801	791
October	1,050	1,040
November	--	--
December	--	--
1 cfs = 448.8 gallons per minute (gpm)		USGS – U.S. Geological Survey
* Flow Protection Threshold		-- – No special flow protection required

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

Section 5. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, 18 CFR Parts 801, 806, and 808. This project is subject to the annual compliance and monitoring fee as specified in the Commission’s Regulatory Program Fee Schedule, which may be modified over the term of the approval.

2. The project sponsor shall adhere to the metering plan reviewed and approved by Commission staff. Any modifications proposed for the metering plan shall be submitted for review and, if appropriate, approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan.

3. 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-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 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. 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 March 9, 2020. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before September 9, 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 March 10, 2016.

Dated: March 11, 2016


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. 20160310

Approval Date: March 10, 2016

SWN PRODUCTION COMPANY, LLC

**Surface Water Withdrawal (Peak Day) of up to 3.000 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. 20120311 that was originally approved on March 15, 2012. The project sponsor did not request any changes to the conditions of the original docket. Consistent with the Commission's Low Flow Protection Policy, Commission staff did not recommend flow protection conditions.

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.:	20120311
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Oakland Township
County:	Susquehanna County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Approved Source:	Susquehanna River
Subbasin:	Upper Susquehanna
Watershed Boundary Dataset (WBD):	0205010113 (Lower Susquehanna River)
Water Use Designation:	Warm Water Fishery (WWF)
Withdrawal Location (degrees):	Lat: 41.942286 N Long: 75.626761 W
Site Flow Statistics (cfs):	Q7-10 = 169.3; Average Daily Flow = 3,298
Impairment:	Mercury
Drainage Area (square miles):	2,010
Aquatic Resource Class*:	5
Special Flow Protection Required:	No
cfs – cubic feet per second	
*Refer to Commission Policy No. 2012-01 (Low Flow 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):	3.000 (Not to Exceed)
Maximum Instantaneous Withdrawal Rate (gpm):	2,084 (Not to Exceed)
mgd – million gallons per day	
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. 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. The date of the last meter certification was May 22, 2015; therefore, the next meter certification is due no later than May 22, 2020. Certification of meter accuracy shall be provided to the Commission no less frequent than once every five (5) years from the date of the last certification.

20. The project sponsor shall adhere to recommendations for avoiding adverse impact to documented occurrences of rare, threatened, or endangered species at or in proximity to the project location. The documented species includes the triangle floater (*Alasmidonta undulata*), which is a special concern mussel species.

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 approval shall be effective April 1, 2016, and shall remain effective until March 31, 2020. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before September 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.

26. Commission Docket No. 20120311 shall remain effective through March 31, 2016, 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 March 10, 2016.

Dated: March 11, 2016


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. 20160311

Approval Date: March 10, 2016

SWN PRODUCTION COMPANY, LLC

Surface Water Withdrawal (Peak Day) of up to 1.218 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 renewal of the project described herein in accordance with the conditions set forth below.

This approval is a renewal of Commission Docket No. 20120312 that was originally approved March 15, 2012, with a peak day withdrawal rate of 1.218 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:	SWN Production Company, LLC
Approval Type:	Surface Water Withdrawal
Original Docket No.:	20120312
Authorized Water Use Purpose:	Hydrocarbon Development and Related Incidental Uses
Municipality:	Lenox Township
County:	Susquehanna County
State:	Pennsylvania

Section 3. Source Information

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

Source Information	
Approved Source:	Tunkhannock Creek
Subbasin:	Middle Susquehanna
Watershed Boundary Dataset (WBD):	0205010612 (Tunkhannock Creek)
Water Use Designation:	Cold Water Fishery (CWF)
Withdrawal Location (degrees):	Lat: 41.712314 N Long: 75.669172 W
Site Flow Statistics (cfs):	Q7-10 = 2.1; Average Daily Flow = 68.3
Wild Trout Classification:	Naturally Reproducing Wild Trout
Drainage Area (square miles):	46.8
Aquatic Resource Class*:	2
Special Flow Protection Required:	Yes
cfs – cubic feet per second	
*Refer to Commission Policy No. 2012-01 (Low Flow 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):	1.218 (Not to Exceed, When Available)	
Maximum Instantaneous Withdrawal Rate (gpm):	846 (Not to Exceed)	
Flow Protection Type:	Seasonal passby expressed as monthly values	
Method for Monitoring Flow Protection:	Off-site monitoring of USGS Real-Time Gage 01534000; Tunkhannock Creek near Tunkhannock, Pennsylvania	
Passby Schedule:		
<i>Month</i>	<i>On-Site Flow Protection Rate (cfs)</i>	<i>Off-Site Monitoring Threshold for Flow Protection (cfs)*</i>
January	21	184
February	24	214
March	53	449
April	58	485
May	30	261
June	17	153
Approved Withdrawal Quantities and Limitations (continued)		

Passby Schedule:		
<i>Month</i>	<i>On-Site Flow Protection Rate (cfs)</i>	<i>Off-Site Monitoring Threshold for Flow Protection (cfs)*</i>
July	17	153
August	17	153
September	17	153
October	17	153
November	17	153
December	25	219
USGS– U.S. Geological Survey 1 cfs = 448.8 gallons per minute (gpm) * Flow Protection Threshold		

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

Section 5. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, 18 CFR Parts 801, 806, and 808. This project is subject to the annual compliance and monitoring fee as specified in the Commission’s Regulatory Program Fee Schedule, which may be modified over the term of the approval.

2. The project sponsor shall adhere to the metering plan reviewed and approved by Commission staff. Any modifications proposed for the metering plan shall be submitted for review and, if appropriate, approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan.

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

4. The project sponsor shall maintain the totalizing meter and other flow and volume measuring devices, accurate to within five (5) percent, so as to provide an accurate record of withdrawals, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

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

6. The project sponsor shall keep daily records of the project’s withdrawal and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative

measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and, 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 April 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 has remained above such flow protection threshold for 48 hours.

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 July 2, 2015; therefore, the next meter certification is due no later than July 2, 2020. Certification of meter accuracy shall be provided to the Commission no less frequent than once every five (5) years from the date of the last certification.

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 April 1, 2016, and shall remain effective until March 31, 2020. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before September 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. 20120312 shall remain effective through March 31, 2016, 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 March 10, 2016.

Dated: March 11, 2016


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. 20160312
Approval Date: March 10, 2016

GAS FIELD SPECIALISTS, INC.

**Into-Basin Diversion (Peak Day) of up to 1.170 mgd
 from the Wayne Gravel Products Quarry
 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.

The project involves the diversion of water from the Wayne Gravel Products Quarry in Ceres Township, McKean County, into the Susquehanna River Basin for bulk supply for hydrocarbon development and related incidental uses. This approval is a reactivation of an expired project originally approved by Commission Docket No. 20110318 on March 10, 2011, which expired on March 9, 2015, with a peak day diversion rate of 1.170 million gallons per day (mgd). The project sponsor has not requested any changes from the original approval.

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:	Gas Field Specialists, Inc.
Approval Type:	Into-Basin Diversion from the Ohio River Basin
Authorized Water Use Purpose:	Bulk Supply for Hydrocarbon Development and Related Incidental Uses
Municipality:	Ceres Township
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 Source:	Wayne Gravel Products Quarry
Basin:	Ohio River Basin
Watershed Boundary Dataset (WBD):	0501000102 (Allegheny River)
Withdrawal Location (degrees):	Lat: 41.99334972 N Long: 78.25805333 W
Impairment:	Quarry water quality parameters within normal ranges; two invasive algal species identified

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):	1.170 (Not to Exceed)

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 that accounts for all water diverted into the Susquehanna River Basin 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 surface water 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. 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

16. 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.

17. The project sponsor shall certify the accuracy of the measuring device to within five (5) percent of actual flow. Diversions shall not commence until Commission staff has approved the meter certification and notified the project sponsor of such approval.

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

19. 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 20, including daily quantities supplied.

20. 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.

21. 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. The project sponsor shall adhere to the invasive algal species disinfection methodologies outlined in the project sponsor's Disinfection Plan prior to any water being diverted into the Susquehanna River Basin.

Section 7. Term


22. The project sponsor has a period of three (3) years from the date of this approval to commence the diversion 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.

23. This approval is effective until March 9, 2020. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before September 9, 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 March 10, 2016.

Dated: March 11, 2016


Stephanie L. Richardson