



SUSQUEHANNA RIVER
BASIN COMMISSION

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NY ■ PA ■ MD ■ USA

February 22, 2017

TO ALL CONCERNED:

At the December 8, 2016, Commission meeting, the draft minutes of the September 8, 2016, Commission meeting were approved as written. Please attach this notice to your copy of the September 8, 2016, minutes.

- DRAFT -

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

**MINUTES OF THE
SUSQUEHANNA RIVER BASIN COMMISSION
December 8, 2016
#2016-04**

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

ROLL CALL

Commissioners Present

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

Mr. Ben Grumbles, Secretary, Maryland Department of the Environment (MDE)

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

Mr. Paul J. D'Amato, Region 8 Director, New York State Dept. of Environmental Conservation (NYSDEC)

Alternate Commissioners Present

Ms. Jennifer Orr, Director, Compact and Commissions Office, PADEP

Ms. Virginia Kearney, Deputy Director, Water Management Administration, MDE

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

Ms. Gwyn Rowland, Manager, Governmental & Public Affairs

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 *Heather Cisar*, USACE, Baltimore District

1. Opening Remarks from the Chair

Chairman Grumbles opened the meeting by outlining the rules of conduct for the meeting. He noted that a public hearing was previously held on November 3, 2016. The Commissioners introduced themselves.

2. Presentation on Drought Planning Tool for the Susquehanna River Basin

SRBC Planning & Operations Manager John Balay provided an overview of work performed to date in developing a basin-wide framework for drought forecasting and planning in support of the National Integrated Drought Information System (NIDIS). As part of a NOAA grant and with partners at Hazen and Sawyer, University of Massachusetts Amherst, and City of Baltimore, the initiative is focused on ensuring sustainable water supplies during times of drought in the Chesapeake Bay region.

3. Minutes of September 8, 2016, Commission Meeting

On a motion by Commissioner Heffner, seconded by Commissioner Chamberlayne, the minutes of the regular business meeting of September 8, 2016, were unanimously approved as written.

4. FY2018 Funding of the Groundwater and Streamflow Information Program

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

On a motion by Commissioner Heffner, seconded by Commissioner D'Amato, the Commission unanimously approved the resolution (Exhibit A).

5. Contracts and Grants

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

a. Contract Ratification – Sandy Run Mine Drainage Treatment System (Masters Excavating, LLC)

In 2013, the Commission and the Clinton County Conservation District obtained a Pennsylvania Growing Greener grant to restore water quality conditions degraded by abandoned mine drainage in the Sandy Run watershed. Permitting and design work to construct a manual flush oxalic limestone drain for the treatment of legacy coal deep mine discharge into Sandy Run have been completed, and staff recently conducted a public bid to select a contractor to construct the treatment system. The Commission received six (6) proposals in response to the bid request.

The lowest responsible bid was submitted by Masters Excavating, LLC. Staff requested that the Commission ratify the award of a contract to Masters Excavating, LLC. The contract will not exceed \$157,194 with PADEP providing \$102,000 and SRBC providing \$55,194.

b. Agreement Approval – Water Resources Support (U.S. Army Corps of Engineers)

Staff requested that the Commission approve the signing of an Interagency Agreement with the U.S. Army Corps of Engineers to provide water resources support, with tasks to include flood mapping, surveying, water quality monitoring and sampling, water resource planning, GIS, and environmental compliance activities.

Under the first task, staff will provide data collection services to USACE in support of a detailed flood study being undertaken on the Swatara Creek in Dauphin and Lebanon Counties in Pennsylvania. The work will include collection of bathymetric data for an entire length of the Swatara Creek from Pine Grove, Pa. to the confluence with the Susquehanna River at Middletown, Pa. The expected cost of this task is \$35,000 with USACE providing all funds.

c. Agreement Approval – Octoraro Watershed Agricultural Best Management Practices (Alliance for the Chesapeake Bay)

The Alliance for the Chesapeake Bay (the Alliance), in partnership with the Octoraro Watershed Association (OWA) and the Environmental Finance Center, has received a grant from the National Fish and Wildlife Foundation to implement agricultural best management practices (BMPs) on Plain Sect farms in the Octoraro Watershed. The project's main objectives are to install agricultural BMPs with a focus on source water protection, and to build the capacity of OWA and partners to continue the work after the grant is completed.

The stations will continuously monitor water quality before and after BMP construction. Staff will also collect periodic grab samples to monitor nutrients. Data collected prior to and following construction will be compared to quantify the impact of the installed BMPs. The Commission will participate in the project as a subcontractor to the Alliance. Commission staff will install two monitoring stations in streams near participating farms. Staff requested approval of this agreement with Alliance providing \$40,000 for the project.

On a motion by Commissioner D'Amato, seconded by Commissioner Chamberlayne, the Commission unanimously approved the contract ratification and agreements.

6. Regulatory Program Actions

a. Compliance Action

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:

- Panda Hummel Station LLC; \$22,750
- Panda Liberty LLC; \$30,000
- Panda Patriot LLC; \$44,250

b. Report on Delegated Settlements

Mr. Oyler reported on four delegated settlements staff completed over the previous quarter. Pursuant to SRBC Resolution No. 2014-15, the Executive Director entered into the following settlements to resolve compliance and enforcement matters:

A settlement with Lewistown Borough Municipal Authority (Lewistown):

- Lewistown is a public water supplier located in Mifflin County.
- Lewistown developed three new groundwater wells and since 2012 at least has been operating those wells above the Commission's jurisdictional threshold without Commission approval.
- In compliance with a staff directive issued by the Commission, Lewistown did submit applications for these wells, which are currently under review by Commission staff.
- A Consent Order and Agreement has been entered into where Lewistown will be able to operate these wells for public water supply in accordance with the COA while the Commission reviews the three groundwater well applications.
- This is the first compliance issue for Lewistown.
- The settlement is for **\$5,250**.

A settlement with Columbia Water Company (Columbia):

- Columbia Water is a privately held water company that is regulated by the PA Public Utility Commission located in Columbia Borough, Lancaster County.
- In 2012, Columbia Water purchased the Marietta Gravity Company. Marietta Gravity operated three grandfathered wells, but because these wells were changing ownership, by operation of Commission regulation 806.4 and 806.6, Columbia needed to make application to transfer AND operate the wells within 90 days of the change of ownership. Columbia Water did not do so and has been operating these wells without Commission approval.
- A Consent Order and Agreement has been entered where Columbia Water will apply for approval of the three wells that were acquired with the Marietta Gravity Company.
- The settlement is for **\$7,500**.

A settlement with Eagle Lake Community Association (Eagle Lake):

- Eagle Lake operates a seasonal mobile home resort facility in Covington Township, Lackawanna County.

- Eagle Lake operates three groundwater wells in excess of the 100,000 gallons per day threshold in 18 CFR section 806.4(a). Eagle Lake also sends its treated effluent to be discharged in a water that is in the Delaware River Basin.
- Eagle Lake does not have an approval from the Commission for the groundwater withdrawals or the diversion of water (or the related consumptive use).
- A Consent Order and Agreement where Eagle Lake will apply for approval of aquifer test plans or waivers for the groundwater sources has been entered. Commission staff will establish due dates for the groundwater, diversion and consumptive use applications.
- Eagle Lake has no prior compliance history with the Commission.
- The settlement is for **\$7,500**.

A settlement with Fox Hills Country Club (Fox Hills):

- Fox Hills is a golf course that has a docket for Consumptive Use with the SRBC (20020605) and is located in Exeter Borough, Luzerne County.
- As recognized in the Docket, Fox Hills withdrawals from a grandfathered groundwater source. Upon a recent compliance inspection, it was discovered that Fox Hills was operating the well over 100,000 gpd above the grandfathered amount, requiring the well to be subject to review and approval. They operated above this threshold for 54 days.
- Fox Hills believe they can operate below their grandfathered threshold.
- Accordingly, Commission staff will not require them to submit an application for the source as long as they maintain a withdrawal below 125,000 gpd. Commission staff will monitor usage, however, and Fox Hills will need to submit an application for the well if they exceed the threshold again.
- This is the first compliance issue for Fox Hills.
- The settlement is for **\$5,000**.

There was no documented environmental harm noted from any of these violations.

c. Extension of Public Comment Period for Consumptive Use Mitigation Policy

Mr. Oyler noted that, at this time, SRBC is in the midst of a 120-day public comment period for proposed rulemaking that ends on January 30, 2017. At the same time, there is also a proposed Consumptive Use Mitigation Policy 90-day comment period. There has been a request from some members of the regulated community to align these two comment periods to expire on January 30, 2017. Staff considered that request and recommended that the commissioners extend the proposed policy deadline from January 6, 2017, to coincide with the proposed rulemaking comment deadline of January 30, 2017.

d. Emergency Certificate

Todd Eaby, Manager of Project Review, presented a request for the extension of an Emergency Certificate by Hazleton City Authority.

On October 14, 2016, and in accordance with 18 CFR § 806.34, the Executive Director issued an emergency certificate to the Authority to allow the withdrawal of groundwater from Barnes Run Well 3 located in Hazle Township, Luzerne County, Pennsylvania. The conditions that led to the issuance of the above mentioned emergency certificate continue to exist. Staff recommended that this emergency certificate be extended to December 8, 2017 by Resolution 2016-11 (Exhibit B).

e. Docket Actions

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

1. Cabot Oil & Gas Corporation (Bowman Creek) Wyoming County, Pa. (Exhibit C1)
2. Cabot Oil & Gas Corporation (Susquehanna River) Susquehanna County, Pa. (Exhibit C2)
3. Chester Water Authority, Chester County, Pa. (Exhibit C3)
4. Conyngham Borough Authority (Well 6) Luzerne County, Pa. (Exhibit C4)
5. Exelon General Company, LLC, Lancaster County, Pa. (Exhibit C5)
- 6-8. Future Power PA, LLC (Wells RW-1, RW-2) Schuylkill County, Pa. (Exhibit C6)
- 9-10. Gilberton Power Company,(Gilberton Mine Pool) Schuylkill County, Pa. (Exhibit C7)
11. Keystone Clearwater Solutions, LLC (Moshannon Creek) Centre County, Pa. (Exhibit C8)
12. Lycoming County Water and Sewer Authority, Lycoming County, Pa. (Exhibit C9)
13. Moxie Freedom LLC, Luzerne County, Pa. (Exhibit C10)
14. Moxie Freedom LLC, (Production Well 2) Luzerne County, Pa. (Exhibit C11)
- 15-16. Town of Nichols (Wells PW-1 & PW-2) Tioga County, N.Y. (Exhibit C12)
17. Town of Rising Sun, Cecil County, Md. (Exhibit C13)
18. Sunoco Pipeline, L.P. (Conodoguinet Creek) Cumberland County, Pa. (Exhibit C14)
19. Sunoco Pipeline, L.P. (Frankstown Branch Juniata River) Blair County, Pa. (Exhibit C15)
20. Sunoco Pipeline, L.P. (Susquehanna River) Dauphin County, Pa. (Exhibit C16)
21. Sunoco Pipeline, L.P. (Swatara Creek) Dauphin County, Pa. (Exhibit C17)
22. Sunoco Pipeline, L.P. (Tuscarora Creek) Juniata County, Pa. (Exhibit C18)
23. SWEPI LP (Cowanesque River) Tioga County, Pa. (Exhibit C19)
- 24-25. Transcontinental Gas Pipe Line Company LLC (Fishing Creek) Columbia County, Pa.(Exhibit C20)
26. Gilberton Power Company (Delaware River Basin) into Basin diversion, Schuylkill County, Pa. (Exhibit C21)
27. JKLM Energy, LLC (Ohio River Basin) into Basin diversion, Potter County, Pa. (Exhibit C22)

All projects on the above list were recommended for approval.

Commissioner Chamberlayne moved and Commissioner D’Amato seconded a motion that the Commission adopt the emergency certificate request, approve the three settlements, extend the public comment deadline for the CU Mitigation Policy, and adopt the recommendations of staff for the 27 project applications.

Prior to the vote, an amendment to the motion was proposed by Chairman Grumbles, and seconded by Commissioner Heffner, to revise the proposed Docket 20161212 for the Town of Rising Sun. The amendment would remove the second sentence of paragraph 13 and replace it with the following: “Both the wells and the interconnection may be operated simultaneously

until completion of the transition activities, if approved by the Maryland Department of the Environment.” The amendment to the motion was unanimously adopted by the Commission.

The motion as amended was, then, unanimously adopted by the Commission.

7. Notice to Appear and Show Cause

General Counsel Oyler presented the settlement offer and recommendation of staff regarding violation of Montage Mountain Resorts, LP. At the September 2016 Commission meeting, a continuance in this matter was issued. In the interim, a settlement agreement was reached with Montage so there was no need for a hearing. The settlement, in the amount of \$72,000, will be paid in three installments. Staff recommended that this settlement be approved with the contingency that Montage Mountain complies with the terms of the settlement agreement.

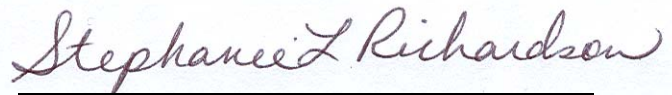
A motion was made by Commissioner D’Amato and seconded by Commissioner Heffner to accept this settlement. The motion was unanimously adopted by the Commission.

ADJOURNMENT

Commissioner Chamberlayne moved and Commissioner Heffner seconded a motion that the meeting be adjourned. Chairman Grumbles adjourned the meeting at 10:00 a.m.

March 9, 2017

Date Adopted



Stephanie L. Richardson

RESOLUTION NO. 2016-10

A RESOLUTION of the Susquehanna River Basin Commission (the “Commission”) urging the President and the Congress of the United States to provide financial support to the Groundwater and Streamflow Information Program in FY 2018, thereby supporting the Susquehanna Flood Forecast and Warning System.

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

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

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

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

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

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

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

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

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

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

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

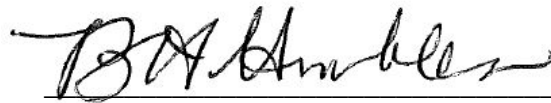
WHEREAS, full implementation of the federally funded network will offset costs incurred by other federal streamgauge programs, offset associated costs to cooperators within these same programs, and create a sustainable network to protect the lives and property of our nation's citizenry; and

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

NOW THEREFORE BE IT RESOLVED THAT:

1. The Commission recommends the President include the amount of \$122 million in the FY 2018 budget to fully fund all GSIP eligible gages in the nation, thereby providing sustainable funding for the SFFWS.
2. The Congress of the United States is likewise encouraged to support the above stated appropriation request for FY 2018.
3. This resolution shall be effective immediately.

Dated: December 8, 2016



Ben Grumbles, Chair
Maryland

RESOLUTION NO. 2016-11

A RESOLUTION of the Susquehanna River Basin Commission (Commission) providing an extension of an emergency certificate issued to Hazleton City Authority (Authority).

WHEREAS, on October 14, 2016, and in accordance with 18 CFR § 806.34, the Executive Director issued an emergency certificate to the Authority to allow the withdrawal of groundwater from Barnes Run Well 3 located in Hazle Township, Luzerne County, Pennsylvania; and


WHEREAS, this withdrawal from Barnes Run Well 3 was requested due to the ongoing dry conditions and because the operation of this well is critical to the Authority's drought management and operations; and

WHEREAS, the emergency condition will persist past December 8, 2016.

NOW THEREFORE BE IT RESOLVED THAT:

1. Pursuant to 18 CFR § 806(d)(1), the Commission hereby extends the term of the October 14, 2016, emergency certificate.
2. All of the terms and conditions of the emergency certificate shall remain in full force and effect.
3. This extension shall be effective immediately and remain in effect until December 8, 2017, unless terminated earlier by the Executive Director in accordance with 18 CFR § 806.34(e).

Dated: December 8, 2016



Ben Grumbles, Chair
Maryland



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20161201

Approval Date: December 8, 2016

CABOT OIL & GAS CORPORATION

**Surface Water Withdrawal (Peak Day) of up to 0.290 mgd
from Bowman Creek**

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission has determined that no significant adverse impacts are anticipated by the operation of this project as described and conditioned herein, 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. 20121201 that was originally approved December 14, 2012, with a peak day withdrawal rate of 0.290 million gallons per day (mgd) and no special flow protection requirements. The project sponsor has not requested any changes to the project. Commission staff recommended the addition of special flow protection requirements with this approval to reflect current policy. This approval incorporates those recommendations.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), the Department of Conservation and Natural Resources (DCNR), and the Pennsylvania Fish and Boat Commission (PFBC) during review of this project.

Section 2. Project Information

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

| Project Information | |
|--------------------------------------|---|
| Project Sponsor: | Cabot Oil & Gas Corporation |
| Approval Type: | Surface Water Withdrawal |
| Past Docket No.: | 20121201 |
| Authorized Water Use Purpose: | Hydrocarbon Development and Related Incidental Uses |
| Municipality: | Eaton 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: | Bowman Creek |
| Subbasin: | Middle Susquehanna |
| Watershed Boundary Dataset (WBD): | 0205010613 (Bowman Creek) |
| Water Use Designation: | High Quality, Cold Water Fishery (HQ-CWF) |
| Withdrawal Location (degrees): | Lat: 41.517478 N Long: 75.957964 W |
| Site Flow Statistics (cfs): | Q7-10 = 5.3; Average Daily Flow = 172 |
| Wild Trout Classification: | Naturally Reproducing Wild Trout |
| Drainage Area (square miles): | 118 |
| Aquatic Resource 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): | 0.290 (Not to Exceed, When Available) | |
| Maximum Instantaneous Withdrawal Rate (gpm): | 201 (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 | -- | -- |
| February | -- | -- |
| March | -- | -- |
| April | -- | -- |
| May | 67 | 221 |
| June | -- | -- |

| 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 | 16 | 55 |
| August | 12 | 40 |
| September | 11 | 39 |
| October | 16 | 54 |
| November | -- | -- |
| December | 55 | 182 |
| USGS– U.S. Geological Survey 1 cfs = 448.8 gallons per minute (gpm) | | -- -- No special flow protection required * Flow Protection Threshold |

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

Section 5. Standard Conditions

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

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

3. 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, 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 approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

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

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

12. If the project sponsor fails to comply with the provisions of the Susquehanna River Basin Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the project sponsor is subject to enforcement actions pursuant to Commission Regulation 18 CFR Part 808.

13. Commission approval shall not be construed to exempt the project sponsor from obtaining and maintaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. All such permits and/or approvals shall be obtained prior to the withdrawal of water. The Commission may modify, suspend, or revoke this approval if the project sponsor fails to obtain or maintain such permits and/or approvals.

14. The Commission may at any time reopen any project approval or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment, pursuant to Commission Regulation 18 CFR § 806.32.

15. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

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

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

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

Section 6. Special Conditions

19. Effective January 1, 2017, 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 March 1 2016; therefore, the next meter certification is due no later than March 1, 2021. Certification of meter accuracy shall be provided to the Commission no less frequent than once every five (5) years from the date of the last certification.

22. The project sponsor shall adhere to the recommendations provided by PFBC for avoiding adverse impact to documented occurrences of a naturally reproducing wild trout population at or in proximity to the project location. The project sponsor shall avoid modification of the intake or any other instream construction from October 1 through December 31, unless otherwise approved by PFBC in writing and submitted to the Commission.

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

24. The project sponsor shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for use in hydrocarbon development, including daily quantities supplied. The project sponsor also shall keep 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 25, including daily quantities supplied.

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

26. 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

27. This approval shall be effective January 1, 2017, and shall remain effective until December 31, 2020. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 30, 2020, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

28. Commission Docket No. 20121201 shall remain effective through December 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 December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

4423 North Front Street • Harrisburg, Pennsylvania 17110-1788

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Docket No. 20161202

Approval Date: December 8, 2016

CABOT OIL & GAS CORPORATION

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 significant adverse impacts are anticipated by the operation of this project as described and conditioned herein, 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 and modification of Commission Docket No. 20120903 that was originally approved September 20, 2012, with a peak day withdrawal rate of 1.500 million gallons per day (mgd) and special flow protection requirements. The project sponsor has requested an increase in the instantaneous withdrawal rate from 1,042 gallons per minute (gpm) to 1,500 gpm. Following technical review, and consistent with applicable regulatory standards, Commission staff recommended that the approved maximum instantaneous withdrawal rate be increased to 1,500 gpm. Considering the withdrawal individually and with respect to cumulative upstream water use consistent with Commission Policy No. 2012-01 (Low Flow Protection Policy), Commission staff did not recommend flow protection conditions. This approval incorporates those recommendations.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), the Department of Conservation and Natural Resources (DCNR), and the Pennsylvania Fish and Boat Commission (PFBC) during review of this project.

Section 2. Project Information

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

| Project Information | |
|--------------------------------------|---|
| Project Sponsor: | Cabot Oil & Gas Corporation |
| Approval Type: | Surface Water Withdrawal |
| Past Docket No.: | 20120903 |
| Authorized Water Use Purpose: | Hydrocarbon Development and Related Incidental Uses |
| Municipality: | Susquehanna Depot Borough |
| 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: 41.947805 N Long: 75.606861 W |
| Site Flow Statistics (cfs): | Q7-10 = 169; Average Daily Flow = 3,290 |
| Impairment: | Mercury; Polychlorinated Biphenyl (PCB) |
| Drainage Area (square miles): | 2,007 |
| 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): | 1.500 (Not to Exceed) |
| Maximum Instantaneous Withdrawal Rate (gpm): | 1,500 (Not to Exceed) |

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

Section 5. Standard Conditions

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

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

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

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

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

6. The project sponsor shall keep daily records of the project's withdrawal and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

interested person would have unrestricted access to legibly view such sign. The project sponsor shall submit photographs as proof of installation of the updated sign.

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

9. 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 April 21, 2015; therefore, the next meter certification is due no later than April 21, 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 is fully constructed and no changes are proposed. However, if changes are proposed or maintenance requires instream work, the project sponsor should adhere to recommendations provided by PFBC in the May 19, 2016, Pennsylvania Natural Diversity Inventory (PNDI) response for avoiding adverse impact to documented occurrences of rare species at or in proximity to the project location. The documented species are the elktoe mussel (*Alasmidonta marginata*) and triangle floater mussel (*Alasmidonta undulata*).

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 minor modification under Commission Regulation 18 CFR § 806.18(c)(4) for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

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 January 1, 2017, and shall remain effective until December 31, 2020. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 30, 2020, 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. 20120903 shall remain effective through December 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 December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20161203

Approval Date: December 8, 2016

CHESTER WATER AUTHORITY

Transfer via Interconnection to the Town of Rising Sun

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission has determined that no significant adverse impacts are anticipated by the operation of this project as described and conditioned herein, 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.

Chester Water Authority's (CWA's) right to divert up to 30,000 million gallons per day (mgd) from the Octoraro Reservoir on Octoraro Creek and 30,000 mgd from the Susquehanna River is recognized in the Commission's Comprehensive Plan as an authorized "pre-Compact" diversion. Over the years, CWA has expanded its service area beyond that proposed when the applications and associated permits for the 60,000 mgd were issued. The expansion of service of bulk supply to the Town of Rising Sun, Maryland, is not covered by the pre-Compact authorization and is subject to Commission review and approval.

CWA requested approval to provide bulk water supply to the Town of Rising Sun of up to 1,800 mgd (peak day) and up to 1,000 mgd (30-day average), basing the requested quantity on a 30-year projected demand of the Town of Rising Sun. Staff recommended that a quantity limitation not be included with this approval and instead rely on quantity limitations established with an approval for the receiving system supported by the Town of Rising Sun's reasonable projected demand for the term of the approval. Staff has also recommended that the requested 30-year term be reduced to 22 years to coincide with the Pennsylvania Department of Environmental Protection's (PADEP's) water allocation permit under which CWA operates the withdrawals from their sources. This approval incorporates those recommendations.

Commission staff has coordinated with PADEP, the Department of Conservation and Natural Resources (DCNR), the Pennsylvania Fish and Boat Commission (PFBC), and the Maryland Department of the Environment (MDE) 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: | Chester Water Authority |
| Approval Type: | Interstate Project/Interconnection |
| Authorized Water Use Purpose: | Bulk Supply to the Town of Rising Sun, Maryland, for Public Water Supply |
| Municipality: | West Nottingham Township |
| County: | Chester County |
| State: | Pennsylvania |

Section 3. 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 bulk supply to the Town of Rising Sun, the project sponsor shall install and maintain metering on the interconnection 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. Bulk supply 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 or any other person representing the project sponsor shall allow authorized employees or agents of the Commission, without advance notice, at any reasonable time and upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas where the project is being constructed, operated, or maintained, or otherwise exercise all investigative powers authorized under Commission Regulation 18 CFR § 808.12.

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

7. This approval is conditioned on the project sponsor maintaining legal access to the interconnection pipeline and associated infrastructure location for the duration of the approval.

8. 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.

9. If the project sponsor fails to comply with the provisions of the Susquehanna River Basin Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the project sponsor is subject to enforcement actions pursuant to Commission Regulation 18 CFR Part 808.

10. Commission approval shall not be construed to exempt the project sponsor from obtaining and maintaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. 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. The Commission may at any time reopen any project approval or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment, pursuant to Commission Regulation 18 CFR § 806.32.

12. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

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

Section 4. Term

14. 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.

15. This approval is effective until March 31, 2038. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before September 30, 2037, the project sponsor may continue operation of this project pursuant to the

terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson



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Docket No. 20161204

Approval Date: December 8, 2016

CONYNGHAM/SUGARLOAF JOINT MUNICIPAL AUTHORITY

**Groundwater Withdrawal (30-Day Average) of 0.120 mgd from Well 6, and
Total System Withdrawal Limit (30-Day Average) of 0.248 mgd**

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission has determined that no significant adverse impacts are anticipated by the operation of this project as described and conditioned herein, 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 Conyngham/Sugarloaf Joint Municipal Authority (Authority) assumed ownership of the Conyngham Borough Authority (CBA) water system effective May 28, 2016. Commission Docket No. 20070301 was transferred from CBA to the Authority effective November 18, 2016. The Authority supplies water to residents of Conyngham Borough and parts of Sugarloaf Township, Pennsylvania. The Authority system includes five sources (Wells 1, 3, 5, 6, and 7), all of which are incorporated into the total system limit. According to information provided by the Authority, no other sources are used by the project. During technical review of the Well 6 groundwater withdrawal application, the Authority revised its application, reducing the requested withdrawal quantity from 0.252 million gallons per day (mgd) to 0.120 mgd. This approval authorizes the use of Well 6 at the revised reduced withdrawal rate and establishes an updated total system withdrawal limit based on the current 15-year projected demand.

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

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

Section 2. Project Information

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

Section 5. Approved Withdrawal Quantities and Limitations

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

| Approved Withdrawal Quantities and Limitations | |
|--|---------------------|
| 30-Day Average Withdrawal (mgd): | 0.120 |
| Maximum Instantaneous Withdrawal Rate (gpm): | 175 (Not to Exceed) |
| Total System Withdrawal Limit – Wells 1, 3, 5, 6, and 7 (30-Day Average) (mgd): | 0.248 |

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

Section 6. Existing Approved Withdrawals

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

| Existing Approved Groundwater Withdrawals | | | |
|--|--|------------------------------|-------------------------------|
| Source | 30-Day Average Withdrawal (mgd) | Commission Docket No. | Docket Expiration Date |
| Well 1 | 0.023 | 20070301 | March 14, 2022 |
| Well 3 | 0.078 | 20070301 | March 14, 2022 |
| Well 7 | 0.216 | 20070301 | March 14, 2022 |

Well 5 is included in the total system limit. Operation of Well 5 must be in accordance with the terms and conditions of the Consent Order and Agreement entered into between the Authority and the Commission, effective August 6, 2015, and the November 17, 2016, agreement.

Section 7. Grandfathering Determination – Withdrawals and Consumptive Water Use

The project did not utilize surface water withdrawals prior to November 11, 1995. The project did not consumptively use water prior to January 23, 1971.

Three wells (Wells 1, 2, and 3) were used prior to July 13, 1978, and did not require Commission review and approval prior to the addition of a new source (Well 7), which subjected all of the Authority’s sources to Commission review and approval under Commission Regulation 18 CFR § 806.4. Wells 1, 2, and 3 were subsequently approved, along with new Well 7, on March 14, 2007, with Commission Docket No. 20070301. Use of Well 2 was subsequently discontinued and is no longer in service.

Section 8. Standard Conditions

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

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

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

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

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

6. The project sponsor shall keep daily records of the project's withdrawal and groundwater elevation and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure, and any modifications proposed for the groundwater elevation monitoring plan, shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

8. 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 accuracy of the meter for Well 6 was certified on January 29, 2015. The next meter certification is due no later than February 16, 2020. Certification of meter accuracy shall be provided to the Commission no less frequent than once every five (5) years from the date of the last certification.

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. To confirm that potential unacceptable interference with a nearby existing residential water supply well will not occur as a result of operating Well 6 in accordance with this approval, the project sponsor shall adhere to and implement the approved residential well groundwater elevation monitoring plan, which identified the well to be monitored, by January 8, 2017. If the residential groundwater elevation monitoring plan cannot be implemented by January 8, 2017, because the property owner has not authorized access to the well, the Authority shall notify the Commission and implement monitoring within thirty (30) days of receiving authorization from the property owner. If access to the well cannot be obtained by March 31, 2017, the Authority shall submit a revised residential well groundwater elevation monitoring plan with alternate monitoring location(s) and methods, as needed, by April 30, 2017. Any modifications proposed for the approved residential well groundwater elevation monitoring plan shall be submitted for review and, if appropriate, approval by Commission staff. Modifications to the residential well monitoring plan shall not be made until the project sponsor receives written approval of the amended plan. The project sponsor shall report the results of the residential well groundwater elevation monitoring to the Commission annually as follows:

- a. The project sponsor shall keep daily groundwater elevation data records collected from the private monitoring well and submit an interpretive report to the Commission annually. Any alternative measuring, monitoring, reporting, 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 suspecting or receiving a

claim that a significant adverse impact to other groundwater users may occur or has occurred as a result of the Authority's groundwater withdrawals.

- b. The annual interpretive report must summarize the data collected, document the results of the residential well monitoring, and evaluate the potential for significant adverse impacts to the residential well as a result of operating Well 6. The project sponsor shall collect, record, and report groundwater elevation data in accordance with the approved residential well monitoring plan for no less than two (2) years. Monitoring may be required for a longer term if any of the following occurs:
 - 1) Well 6 is not operated at or near its approved 30-day average rate;
 - 2) Precipitation is average or above average; or
 - 3) Hydrologic conditions are not sufficient for staff to confirm that no significant adverse impacts will occur.

Commission staff will notify the Authority, in writing, if the residential well monitoring required herein has confirmed that no significant adverse impacts will occur and that the required monitoring may cease.

- c. The first annual report shall be submitted no later than March 31, 2018, and subsequent annual reports shall be submitted by March 31 for the preceding calendar year.

Section 10. Term

24. This approval is effective until December 7, 2031. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 7, 2031, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

4423 North Front Street • Harrisburg, Pennsylvania 17110-1788

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Docket No. 20161205

Approval Date: December 8, 2016

EXELON GENERATION COMPANY, LLC

Hydroelectric Operations at the Muddy Run Pumped Storage Project

Section 1. Approval

This project is subject to review pursuant to Article 3, Section 3.10, and Article 10, Section 10.1, of the Susquehanna River Basin Compact (Compact), P.L. 91-575, 84 Stat. 1509 et seq., and Susquehanna River Basin Commission (Commission) Regulations 18 CFR § 801.12, relating to electric power generation, and § 806.4, relating to projects requiring review and approval.

The Commission authorizes hydroelectric projects in accordance with the “Comprehensive Plan for the Water Resources of the Susquehanna River Basin” (Comprehensive Plan), as mandated by Article 14 of the Compact. Commission authorization of hydroelectric projects should also be consistent with the annual Water Resources Program as further mandated by Article 14.

Commission staff recommended that the plans, specifications, and supporting documents submitted by the project sponsor as part of its original application should be attached hereto and incorporated herein by reference and become a part of this approval. Staff further recommended that no substantial deviations from approved plans or specifications affecting the river flow, migratory fish passage, recreation, metering, monitoring and reporting, or use of waters should be made without written approval from the Commission.

In accordance with Commission Regulation 18 CFR § 801.12, Commission staff reviewed the application considering the direct and indirect effects of the proposed electrical generation project, alteration of natural stream regime, effects on water quality and on the other uses of the stream, and evaluated whether the proposal is in accord with the Comprehensive Plan.

Commission staff participated with other resource agencies and with the project sponsor during review of the relicensing application that enabled advance consideration of the possible effects of the project on the water resources of the basin, as required by Commission Regulation 18 CFR § 801.12. Other factors considered by Commission staff during the review of the proposed relicensing included, but were not limited to, minimum releases, fish passage, and recreation.

After review of the record, including the technical findings of Commission staff, the Commission has determined that the project is physically feasible and does not conflict with or adversely affect the Commission’s Comprehensive Plan as conditioned herein, and accordingly is approved for inclusion in the Commission’s Comprehensive Plan. Additionally, review and approval of this project is required for the optimum planning, development, conservation, utilization, management, and control of the water resources of the basin and may significantly affect the water resources of the basin. The Commission hereby approves the project described herein in accordance with the conditions set forth below.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), the Pennsylvania Department of Conservation and Natural Resources (DCNR), the Pennsylvania Fish and Boat Commission (PFBC), the Maryland Department of Natural Resources (MDNR), the Maryland Department of the Environment (MDE), the United States Fish and Wildlife Services (USFWS), the United States Army Corps of Engineers (USACE), and the Federal Energy Regulatory Commission (FERC) 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: | Exelon Generation Company, LLC |
| Project: | Muddy Run Pumped Storage Project |
| Approval Type: | Hydroelectric |
| Authorized Water Use Purpose: | Operation of a Pumped Storage Hydroelectric Generating Facility and Related Incidental Uses |
| Municipality: | Drumore and Martic Townships |
| County: | Lancaster County |
| State: | Pennsylvania |

Section 3. Source Information

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

| Source Information | |
|--|---|
| Approved Source: | Susquehanna River (Conowingo Reservoir) |
| Subbasin: | Lower Susquehanna |
| Watershed Boundary Dataset (WBD): | 0205030617 (Lower Susquehanna River) |
| Water Use Designation: | Warm Water Fishery (WWF) |
| Withdrawal Location (degrees): | Lat: 39.806998 N Long: 76.298858 W |

| Source Information (continued) | |
|--|--|
| Site Flow Statistics (cfs): | Q7-10 = 3,370; Average Daily Flow = 39,100 |
| Impairment: | Polychlorinated Biphenyl (PCB) |
| Drainage Area (square miles): | 26,804 |
| Aquatic Resource Class*: | 6 |
| 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. Project Features

The Muddy Run Pumped Storage Project (project) was constructed in 1964 and became operational in 1966. The Federal Power Commission issued a 50-year license for the project on September 21, 1964, and the license expired on August 31, 2014. The project sponsor submitted an application to the Federal Energy Regulatory Commission (FERC) on August 29, 2012, for a new 46-year license for FERC Project No. 2355-018 (FERC license). The project relicensing did not include any proposed modifications or changes to operations of the project. The new 40-year FERC license was approved on December 22, 2015.

As a prerequisite to the issuance of the new FERC license, the project sponsor was required to receive a Section 401 Water Quality Certification – PADEP File No. EA 36-033, FERC Project No. 2355-018 (401 Certification), which was issued by the PADEP on June 3, 2014, and clarified on December 9, 2014. Additionally, a settlement agreement, dated February 27, 2015, between the project sponsor and the USFWS was submitted to FERC addressing fish passage issues and the terms and conditions of the USFWS Modified Prescription for Fishways issued pursuant to Section 18 of the Federal Power Act.

Section 5. Current Operations

The project is operated as an 828-megawatt (MW) (previously licensed as 800-MW) pumped storage hydroelectric generation facility, with operations based on regional power demands. The project is one among a series of five hydroelectric facilities on the lower Susquehanna River. The Holtwood and the Conowingo Dams are located upstream and downstream of the project, respectively. Each hydroelectric facility uses storage to manipulate natural river flow for hydroelectric power generation.

Water is pumped from the lower reservoir (Conowingo Reservoir) to the upper reservoir (Muddy Run Reservoir) during low load periods (low energy usage). The powerhouse located along the Conowingo Reservoir houses eight Francis turbines and has a total pumping capacity of 28,000 cfs (3,500 cfs/turbine). During high load periods (high energy usage), the water is released from the Muddy Run Reservoir and returned to the Conowingo Reservoir.

The Muddy Run Reservoir is formed by a 4,800-foot long, 260-foot high earth embankment impounding Muddy Run just above its confluence with the Susquehanna River.

The power intake facilities at the west end of the Muddy Run Reservoir consist of four cylinder gates with trash racks, leading to the eight reversible pump/turbine units in the powerhouse. The turbines have a total hydraulic discharge capacity of 32,000 cfs. Each of the turbines is equipped with a 103.5-MW (previously licensed as 100-MW) generator.

The Conowingo Dam impounds the Susquehanna River a distance extending 14 miles upstream, creating the Conowingo Reservoir that is used as the lower reservoir for this project. The project sponsor owns and coordinates the operation of both the Muddy Run and Conowingo projects to maximize power benefits and maintain reservoir elevations in the Conowingo Reservoir. Although the Conowingo Reservoir is not a licensed facility of the Muddy Run project, Article 403 of the FERC license authorizes joint use of the Conowingo Reservoir by the two projects and requires that Muddy Run’s operation not adversely affect the Conowingo project’s operations.

Section 6. Grandfathering Determination – Withdrawals and Consumptive Water Use

The project has been in operation since 1966, prior to the effective date of surface water and consumptive use regulations. No significant physical or operational changes have been demonstrated to have occurred after the applicable effective dates of the surface water and consumptive use regulations. The quantities applicable to the project’s grandfathering determination for existing surface water withdrawal and consumptive water use are listed in the tables below.

| Grandfathered Surface Water Withdrawal | |
|---|-----------------------------------|
| Source | Peak Withdrawal Rate (cfs) |
| Susquehanna River – Conowingo Reservoir | 28,000 |

| Grandfathered Consumptive Water Use | | |
|--|---------------------|---|
| Consumptive Water Use | Source | Peak Day Consumptive Water Use (mgd) |
| Evaporation | Muddy Run Reservoir | 5.910 |
| mgd – million gallons per day | | |

The grandfathered quantities identified in the tables above are based on information submitted by the project sponsor. The grandfathered quantities or the grandfathered status are subject to change if information becomes available that demonstrates withdrawal or consumptive use occurred at rates that are inconsistent with the data submitted and utilized to support this determination.

Section 7. 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 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.

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

5. 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.

6. If the project sponsor fails to comply with the provisions of the 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.

7. Commission approval shall not be construed to exempt the project sponsor from obtaining and maintaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. The Commission may modify, suspend, or revoke this approval if the project sponsor fails to obtain or maintain such permits and/or approvals.

8. 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.

9. 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.

10. This project is approved for inclusion in the Commission's Comprehensive Plan.

Section 8. Special Conditions

11. The project sponsor is required to apply for and obtain approval prior to any significant changes or modification of the project features or current operation described in the submitted application materials, the FERC license, and the PADEP 401 Certification.

12. The project sponsor shall keep daily and hourly records of the project's withdrawal and discharge, and elevations of the Muddy Run and Conowingo Reservoirs. The project sponsor shall report the daily data to the Commission quarterly and hourly data annually, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports of daily data shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. In addition, the project sponsor shall submit hourly data to the Commission annually in an Excel spreadsheet format, or as otherwise requested by the Commission within sixty (60) days after the close of the calendar year. 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.

13. Conditions of the 401 Certification not inconsistent herewith shall be incorporated into and made a part of this approval.

14. The project sponsor shall provide to the Commission the Lower Susquehanna River OASIS Model (OASIS Model) within thirty (30) days after the Conowingo and Muddy Run water quality certifications and new FERC licenses become final, as per the November 19, 2013, agreement (401 Certification – Appendix 2). The submitted OASIS Model is subject to all conditions listed in the aforementioned agreement.

15. The project sponsor shall protect recreational resources by implementing the Recreation Management Plan as outlined in the FERC license.

16. The project sponsor shall implement a plan to achieve the fish passage requirements as prescribed in the 401 Certification and the February 27, 2015, USFWS settlement agreement.

17. Within sixty (60) days from the date of this approval, the project sponsor shall submit a copy of the drought operations plan for the project.

18. Under the approved terms, the 401 Certification will be revised in 2030, as appropriate, to address demonstrated impacts and subject to the provisions of the certification. If the 401 Certification is modified, application for modification of this docket may be required. The project sponsor shall notify the Commission within thirty (30) days of any submission for, or PADEP issuance of, modification of the 401 Certification.


Section 9. Term

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

20. This approval is effective until December 22, 2055. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 22, 2054, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20161206

Approval Date: December 8, 2016

FUTURE POWER PA, LLC

**Groundwater Withdrawals (30-Day Averages) of
0.252 mgd from Well RW-1 and 0.252 mgd from Well RW-2,
Total System Withdrawal Limit (30-Day Average) of 0.252 mgd,
and Consumptive Water Use (Peak Day) of up to 0.063 mgd
from Wells RW-1 and RW-2**

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission has determined that no significant adverse impacts are anticipated by the operation of this project as described and conditioned herein, 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.

On November 17, 2015, Future Power PA, LLC (Future Power) submitted applications to the Commission requesting approval to withdraw 2.100 million gallons per day (mgd) from Wells RW-1 and RW-2 combined, and to consumptively use 1.850 mgd for use in a proposed natural gas, combined-cycle electric generation facility. Following initial technical review and in response to staff's comments, Future Power changed the facility design to incorporate dry cooling technology. Based on the design changes and resulting changes in water demand, Future Power submitted revised applications on June 27, 2016, with reduced requested withdrawals of 0.252 mgd from Wells RW-1 and RW-2 and a reduced consumptive use request of 0.063 mgd. The revised withdrawal and consumptive use quantities are consistent with expected water demand for a facility utilizing dry cooling technology.

The facility includes two sources (Well RW-1 and Well RW-2), both of which are incorporated into the total system limit. The project will have potable water supplied by the Jolliet public water supply system for domestic use only. Water from the potable water service will not be consumptively used in the operations of the power plant. Use of water from the Jolliet system for construction purposes is not included with this approval.

The Commission formally encouraged the use of dry cooling technology in Resolution No. 2015-02 for the conservation of the waters of the Susquehanna River Basin. Additionally, Wells RW-1 and RW-2 will extract water from the Good Spring Mine Pool Complex, which is impaired by mine drainage. The Commission formally encouraged the use of lesser quality

water in Resolution No. 2012-01, especially when that use is consumptive, to reduce reliance on higher quality waters of the Susquehanna River Basin. Consistent with Resolutions Nos. 2012-01 and 2015-02, and consistent with Commission Regulations 18 CFR §§ 806.22 and 806.23, staff recommended approval of the revised requested withdrawals and consumptive use, subject to the conditions provided herein.

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: | Future Power PA, LLC |
| Approval Types: | Groundwater Withdrawal and Consumptive Water Use |
| Authorized Water Use Purpose: | Construction and Operation of a Thermoelectric Generation Facility, including Process Water and Related Incidental Uses |
| Municipality: | Porter and Frailey Townships |
| County: | Schuylkill 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: | Wells RW-1 and RW-2 | |
| Subbasin: | Lower Susquehanna | |
| Watershed Boundary Dataset (WBD): | 0205030506 (Upper Swatara Creek) | |
| Withdrawal Location (degrees): | | |
| Well RW-1 | Lat: 40.627433 N | Long: 76.462076 W |
| Well RW-2 | Lat: 40.627593 N | Long: 76.460858 W |
| Special Flow Protection Required: | No | |

Section 4. Aquifer Testing

Due to project schedule constraints, the project sponsor completed aquifer testing prior to approval of an aquifer testing plan and subsequently requested that the pre-approval of 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 the required groundwater availability analysis and a hydrogeologic report providing the results of a combined aquifer test of Wells RW-1 and RW-2. The 72-hour, constant-rate aquifer test was conducted from September 1 through 4, 2015, pumping at an average rate of 1,855 gallons per minute (gpm).

Staff provided technical comments to Future Power on June 3, 2016, and in response to staff's comments, Future Power modified the facility design to incorporate the use of dry cooling technology, thereby significantly reducing the water demand at the facility.

Staff evaluated the aquifer testing data and supplemental historical mine discharge flow data with respect to the significantly reduced water demand of the redesigned facility. Staff determined that the aquifer testing data, combined with the historical mine discharge data, meets the essential purpose of testing and provides sufficient hydrogeologic data for staff to evaluate the revised reduced requested withdrawal and consumptive use. Accordingly, staff determined that the withdrawal from Wells RW-1 and RW-2 at the revised requested withdrawal rates should not cause permanent loss of aquifer storage, render competing supplies unreliable, or cause adverse impacts to the water resources of the basin, subject to the conditions set forth below. Therefore, the prior approval of aquifer testing required pursuant to Commission Regulation 18 CFR § 806.12 for Wells RW-1 and RW-2 is 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 | | |
|--|------------------|------------------|
| | Well RW-1 | Well RW-2 |
| 30-Day Average Withdrawal (mgd): | 0.252 | 0.252 |
| Maximum Instantaneous Withdrawal Rate (gpm) (Not to Exceed): | 220 | 220 |
| Total System Withdrawal Limit – Wells RW-1 and RW-2 (30-Day Average) (mgd): | 0.252 | |

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

Section 6. Approved Consumptive Water Use Quantities and Limitations

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

| Approved Consumptive Water Use Quantities and Limitations | |
|--|---|
| Sources for Project Consumptive Water Use: | Wells RW-1 and RW-2 |
| Peak Day Consumptive Water Use Amount (mgd): | 0.063 (Not to Exceed) |
| Authorized Project Consumptive Water Uses: | 1. Construction and Operation of a Thermoelectric Generation Facility 2. Related Incidental Uses |
| Consumptive Water Use Mitigation Type: | Payment of consumptive use mitigation fee |

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

Section 7. Standard Conditions

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

2. The project sponsor shall maintain 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 consumptive water use, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

3. The project sponsor shall keep daily records of the project’s withdrawals, consumptive use, and groundwater elevation and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure, and any modifications proposed for the groundwater elevation monitoring plan, shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

4. The project’s consumptive water use is subject to mitigation requirements, as per Commission Regulation 18 CFR § 806.22(b). To satisfy the Commission’s current mitigation requirements for consumptive water use, the project sponsor shall make quarterly payments to the Commission at the rate specified in the effective Regulatory Program Fee Schedule, as modified from time to time by the Commission. Payments shall be made quarterly and shall be

calculated by applying this rate to the total amount of water consumptively used by the project during the preceding calendar quarter. Quarterly payments are due and payable within thirty (30) days after the close of the preceding quarter. The rate of payment, after appropriate notice to consumptive users of water using this method of compliance, is subject to change at the Commission's discretion.

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

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

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

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

9. If the project sponsor fails to comply with the provisions of the Susquehanna River Basin Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the project sponsor is subject to enforcement actions pursuant to Commission Regulation 18 CFR Part 808.

10. Commission approval shall not be construed to exempt the project sponsor from obtaining and maintaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. 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. The Commission may at any time reopen any project approval or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment, pursuant to Commission Regulation 18 CFR § 806.32.

12. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

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

14. The project sponsor is required to apply for and obtain approval prior to any increase in withdrawal or consumptive use that would exceed the amounts listed herein or to add a source used for consumptive use that is not listed in Sections 3 or 6.

15. 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.

16. If the Commission determines that the operation of the project's groundwater withdrawals adversely affect 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 8. Special Conditions

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

18. Within sixty (60) days from the date of this approval, the project sponsor shall submit an interim metering and accounting plan for review and, if appropriate, approval by Commission staff that accounts for all consumptive use and withdrawals to include incidental construction-related activities and commissioning activities undertaken with the facility that may consumptively use water.

19. Prior to the initiation of any withdrawal or consumptive use for the interim period of construction and commissioning of the facility, the project sponsor shall install and maintain metering on the withdrawals in accordance with Commission Regulation 18 CFR § 806.30 and the approved plan. The project sponsor shall notify the Commission, in writing, and submit digital photographs of the meter(s) when installed, provide the serial number of the meter(s), and certify the accuracy of the measuring device(s) to within five (5) percent of actual flow. Consumptive use for construction and related incidental uses shall not commence until Commission staff has approved the implementation of the approved interim metering and accounting plan, and notified the project sponsor of such approval.

20. 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, certify the accuracy of the measuring devices, and provide additional items as specified in Item 4 of the approved groundwater elevation monitoring plan. Withdrawals or consumptive use shall not commence until Commission staff has approved the implementation of the approved groundwater elevation monitoring plan and notified the project sponsor of such approval.

21. No less than six (6) months prior to the initiation of consumptive use for operation of the facility for electric generation, the project sponsor shall submit a metering and accounting plan for review and, if appropriate, approval by Commission staff that accounts for all withdrawals and consumptive use during operation of the facility. The metering and accounting plan shall address operations and procedures during outages and maintenance periods.

22. Prior to initiation of the operation of the facility for electric generation, the project sponsor shall install and maintain metering on the withdrawals and consumptive use in accordance with Commission Regulation 18 CFR § 806.30 and the approved plan. The project sponsor shall notify the Commission, in writing, and submit digital photographs of the meter(s) when installed, provide the serial number of the meter(s), and certify the accuracy of the measuring device(s) to within five (5) percent of actual flow. Consumptive use during operation of the facility shall not commence until Commission staff has approved the implementation of the revised metering and accounting plan, and notified the project sponsor of such approval.


Section 9. Term

23. 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.

24. This approval is effective until December 7, 2031. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 7, 2031, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20161207

Approval Date: December 8, 2016

GILBERTON POWER COMPANY

**Groundwater Withdrawal (30-Day Average) of 1.870 mgd
from the Gilberton Mine Shaft Well (Gilberton Mine Pool) and
Consumptive Water Use (Peak Day) of up to 1.510 mgd
from the Gilberton Mine Pool**

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission has determined that no significant adverse impacts are anticipated by the operation of this project as described and conditioned herein, 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.

On December 11, 1985, the Commission approved consumptive water use of up to 1.510 million gallons per day (mgd) under Commission Docket No. 19851202. On May 21, 2015, the project sponsor submitted an application requesting approval to continue to consumptively use up to 1.510 mgd (peak day) from the Gilberton Mine Pool and submitted a groundwater withdrawal application on November 9, 2015, requesting to withdraw up to 1.870 mgd (30-day average) from the Gilberton Mine Shaft Well (Gilberton Mine Pool). The project sponsor has not requested or indicated any changes in the facility operations. This approval authorizes the project sponsor to withdraw and consumptively use water from the Gilberton Mine Pool at the requested rates.

The Gilberton Power Company operates withdrawals from the Gilberton Mine Pool and two wells (Wells AN-P03 and AN-P04) located in the Delaware River Basin. According to information provided by Gilberton Power Company, no other sources are used by the project. An application for into-basin diversion is being considered and acted on separately at the Commission's December 8, 2016, business meeting.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), the Pennsylvania Fish and Boat Commission (PFBC), and the Delaware River Basin Commission 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: | Gilberton Power Company |
| Approval Types: | Groundwater Withdrawal and Consumptive Water Use |
| Past Docket No.: | 19851202 |
| Authorized Water Use Purpose: | Electric Power Generation, Steam Generation and Supply, and Related Incidental Uses |
| Municipality: | Gilberton Borough and West Mahanoy Township |
| County: | Schuylkill County |
| State: | Pennsylvania |

Section 3. Source Information

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

| Source Information | |
|--|---|
| Withdrawal Type: | Groundwater |
| Approved Source: | Gilberton Mine Shaft Well (Gilberton Mine Pool) |
| Subbasin: | Lower Susquehanna |
| Watershed Boundary Dataset (WBD): | 0205030105 (Mahanoy Creek) |
| Withdrawal Location (degrees): | Lat: 40.800209 N Long: 76.209081 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 aquifer testing waiver request, the project sponsor provided the required groundwater availability analysis and historical withdrawal and water level data. The requested withdrawal rate is supported by the historical 30-day average withdrawals from the Gilberton Mine Pool.

Commission staff finds that the project sponsor's continued withdrawal from the Gilberton Mine Pool at the requested withdrawal rate should not cause permanent loss of aquifer storage, render competing supplies unreliable, or cause adverse impacts to the water resources of the basin. Therefore, the aquifer testing requirements for the Gilberton Mine Pool are hereby waived.

Section 5. Approved Withdrawal Quantities and Limitations

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

| Approved Withdrawal Quantities and Limitations | |
|---|-----------------------|
| 30-Day Average Withdrawal (mgd): | 1.870 |
| Maximum Instantaneous Withdrawal Rate (gpm): | 1,500 (Not to Exceed) |
| Peak Day Withdrawal (mgd): | 2.160 |
| gpm – gallons per minute | |

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

Section 6. Approved Consumptive Water Use Quantities and Limitations

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

| Approved Consumptive Water Use Quantities and Limitations | |
|--|---|
| Source for Project Consumptive Water Use: | Gilberton Mine Pool |
| Peak Day Consumptive Water Use Amount (mgd): | 1.510 (Not to Exceed) |
| Authorized Project Consumptive Water Uses: | 1. Electric Power Generation 2. Steam Generation 3. Related Incidental Uses |
| Consumptive Water Use Mitigation Type: | Payment of consumptive use mitigation fee |

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

Section 7. Grandfathering Determination – Withdrawals and Consumptive Water Use

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

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

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 and consumptive use 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 consumptive use, and certify to the Commission once every five (5) years, or as otherwise requested, the accuracy of all measuring devices and methods to within five (5) percent of actual flow.

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

6. The project sponsor shall keep daily records of the project's withdrawal, consumptive use, and groundwater elevation and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure, and any modifications proposed for the groundwater elevation monitoring plan, shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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 groundwater 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 or consumptive use that would exceed the amounts listed herein or to add a source used for consumptive use that is not listed in Sections 3 or 6.

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 ninety (90) days from the date of this approval, the project sponsor shall certify and maintain metering on the Gilberton Mine Shaft Well groundwater withdrawal and the cooling tower and equipment cooling blowdown effluent in accordance with Commission Regulation 18 CFR § 806.30. The project sponsor shall notify the Commission, in writing, and certify the accuracy of the measuring device(s) to within five (5) percent of actual flow.

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


Section 10. Term

22. This approval shall be effective January 1, 2017, and shall remain effective until December 31, 2031. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 30, 2031, 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. 19851202 shall remain effective through December 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 December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

4423 North Front Street • Harrisburg, Pennsylvania 17110-1788

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Docket No. 20161208

Approval Date: December 8, 2016

KEYSTONE CLEARWATER SOLUTIONS, LLC

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

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission has determined that no significant adverse impacts are anticipated by the operation of this project as described and conditioned herein, 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. 20120910 that was originally approved September 20, 2012, with a peak day withdrawal rate of 1.000 million gallons per day (mgd) and no special flow protection requirements. The project sponsor has requested a reduction in the peak day withdrawal. Commission staff recommended that the special flow protection requirements be required 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: | Keystone Clearwater Solutions, LLC |
| Approval Type: | Surface Water Withdrawal |
| Past Docket No.: | 20120910 |
| Authorized Water Use Purpose: | Bulk Supply for Hydrocarbon Development and Related Incidental Uses |
| Municipality: | Snow Shoe Township |
| County: | Centre 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: | Moshannon Creek |
| Subbasin: | West Branch Susquehanna |
| Watershed Boundary Dataset (WBD): | 0205020105 (Moshannon Creek) |
| Water Use Designation: | Trout Stocked Fishery (TSF) |
| Withdrawal Location (degrees): | Lat: 41.036917 N Long: 78.057611 W |
| Site Flow Statistics (cfs): | Q7-10 = 23.5; Average Daily Flow = 461 |
| Impairment: | Abandoned Mine Drainage |
| Drainage Area (square miles): | 263 |
| Aquatic Resource Class*: | 4 |
| 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): | 0.999 (Not to Exceed, When Available) | |
| Maximum Instantaneous Withdrawal Rate (gpm): | 1,440 (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 01547950; Beech Creek at Monument, 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 | -- | -- |

| 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 | 47 | 29 |
| August | 29 | 19 |
| September | 26 | 17 |
| October | 29 | 19 |
| November | 38 | 24 |
| December | -- | -- |
| USGS– U.S. Geological Survey 1 cfs = 448.8 gallons per minute (gpm) | | -- -- No special flow protection required * Flow Protection Threshold |

Flow protection standards may be modified by the Commission in accordance with Special Condition 24. 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 approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

9. 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. 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.

Section 6. Special Conditions

18. Effective January 1, 2017, the project sponsor shall cease all withdrawals from the approved source when streamflow, as measured at the U.S. Geological Survey stream gage specified in Section 4, is less than the applicable flow protection threshold specified in Section 4, and shall not reinstate withdrawals until the streamflow has remained above such flow protection threshold for 48 hours.

19. The project sponsor shall, on a daily basis, collect and record streamflow as measured at the U.S. Geological Survey stream gage specified in Section 4, and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. The project sponsor may propose alternative flow monitoring to the Commission for staff review and, if appropriate, approval.

20. Except as authorized pursuant to Special Condition 22, the project sponsor shall only supply water for use in hydrocarbon development to persons who have properly registered this approval pursuant to Commission Regulation 18 CFR § 806.22(f)(12).

21. The project sponsor shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for use in hydrocarbon development, including daily quantities supplied. The project sponsor also shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water

from the project for uses other than hydrocarbon development authorized pursuant to Special Condition 22, including daily quantities supplied.

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

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.

24. 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. Due to the impairment at the point of withdrawal from the presence of abandoned mine drainage (AMD), discretion under Commission Policy No. 2012-01 (Low Flow Protection Policy) has been exercised, resulting in adjusted flow protection standards as provided in Section 4. Without limiting the foregoing, and upon notice, the Commission may modify the flow protection standards set forth in Section 4 above in the event that AMD treatment and/or water quality improvements occur upstream of the withdrawal site and affect the impaired nature of the water being withdrawn. In this event, the conventional passby flow standards may be applied.

Section 7. Term

25. This approval shall be effective January 1, 2017, and shall remain effective until December 31, 2020. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 30, 2020, 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. 20120910 shall remain effective through December 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 December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20161209

Approval Date: December 8, 2016

LYCOMING COUNTY WATER AND SEWER AUTHORITY – HALLS STATION SYSTEM

**Groundwater Withdrawal (30-Day Average) of 0.158 mgd
from Production Well 1**

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission has determined that no significant adverse impacts are anticipated by the operation of this project as described and conditioned herein, 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 Lycoming County Water and Sewer Authority (Authority) provides public water supply service for portions of Fairfield and Muncy Townships, Lycoming County, Pennsylvania. To provide the service to these areas, the Authority operates two separate public water supply systems (Halls Station and Village Water Company) that maintain an emergency interconnect between the systems. Each system currently operates below the Commission's regulatory threshold. Although the Authority intends to combine the systems when all current sources are approved, the systems are presently operated independently. Because once combined, the Authority will operate a public water supply system with total withdrawals in excess of 0.100 million gallons per day (mgd), Commission review and approval of all sources will be required. This approval applies to the Halls Station system only. In addition to existing Production Well 1, the Halls Station system can also be supplied water via an interconnection with the Muncy Borough Municipal Authority's public water supply system. The Authority has also received a Pennsylvania Department of Environmental Protection (PADEP) water allocation permit for a withdrawal from the Susquehanna River that is under development. Prior to operation of the Susquehanna River withdrawal, the Authority intends to combine the Village Water Company and Halls Station systems, and Commission approval of all sources will be required prior to interconnection of these two systems. No other sources are operated by the Authority to serve the Halls Station system.

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

Section 2. Project Information

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

| Project Information | |
|--------------------------------------|---|
| Project Sponsor: | Lycoming County Water and Sewer Authority |
| Approval Type: | Groundwater Withdrawal |
| Authorized Water Use Purpose: | Public Water Supply |
| Municipality: | Muncy Township |
| County: | Lycoming County |
| State: | Pennsylvania |

Section 3. Source Information

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

| Source Information | |
|--|--|
| Withdrawal Type: | Groundwater |
| Approved Source: | Production Well 1 |
| Subbasin: | West Branch Susquehanna |
| Watershed Boundary Dataset (WBD): | 0205020606 (West Branch Susquehanna River) |
| Withdrawal Location (degrees)*: | Lat: -- Long: -- |
| Special Flow Protection Required: | No |
| * Specific location information concerning discrete water-related project features has been withheld for security reasons. | |

Section 4. Aquifer Testing

The constant-rate aquifer testing required by Commission Regulation 18 CFR § 806.12 for groundwater withdrawals was completed with prior Commission approval. A 73-hour, constant-rate aquifer test of Production Well 1 was conducted from September 21 through 24, 2016, pumping at an average rate of 110 gallons per minute (gpm).

Commission staff determined that the withdrawal from Production Well 1 at the requested withdrawal rate should not cause permanent loss of aquifer storage, render competing supplies unreliable, or cause adverse impacts to the water resources of the basin, subject to the conditions set forth below.

Section 5. Approved Withdrawal Quantities and Limitations

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

| Approved Withdrawal Quantities and Limitations | |
|---|---------------------|
| 30-Day Average Withdrawal (mgd): | 0.158 |
| Maximum Instantaneous Withdrawal Rate (gpm): | 110 (Not to Exceed) |
| Peak Day Withdrawal (mgd): | 0.158 |

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 supplying the Halls Station system.

Section 7. Grandfathering Determination – Withdrawals and Consumptive Water Use

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

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

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 source listed in Section 3. The project sponsor shall maintain and monitor the accuracy of the measuring devices in accordance with the manufacturer's specifications.

6. The project sponsor shall keep daily records of the project's withdrawal and groundwater elevation and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure, and any modifications proposed for the groundwater elevation monitoring plan, shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

8. 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. 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 date of the last meter certification was March 11, 2013; therefore, the next meter certification is due no later than March 11, 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.

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 until December 7, 2031. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 7, 2031, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2016.

Dated: December 9, 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. 20150907-1

Approval Date: September 10, 2015

Modification Date: December 8, 2016

MOXIE FREEDOM LLC

**Groundwater Withdrawal (30-Day Average) of 0.062 mgd
from Production Well 1,
and Consumptive Water Use (Peak Day) of up to 0.092 mgd
from Production Well 1 and Production Well 2**

Section 1. Approval

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

This approval is a modification to Commission Docket No. 20150907, which was originally approved on September 10, 2015, and authorized the consumptive use of 0.092 million gallons per day (mgd) (peak day) from Production Well 1. In accordance with Commission Regulation § 806.18(c)(3), the project sponsor has requested the addition of Production Well 2 as a source of consumptive water use. Groundwater withdrawal from Production Well 2 was approved on December 8, 2016, under Commission Docket No. 20161210.

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: | Moxie Freedom LLC |
| Approval Types: | Groundwater Withdrawal and Consumptive Water Use |
| Original Docket No.: | 20150907 |
| Authorized Water Use Purpose: | Construction and Operation of a Natural Gas Power Plant, including Potable and Process Water and Related Incidental Uses |
| Municipality: | Salem Township |
| County: | Luzerne County |
| State: | Pennsylvania |

Section 3. Approved Consumptive Water Use Quantities and Limitations

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

| Approved Consumptive Water Use Quantities and Limitations | |
|--|---|
| Sources for Project Consumptive Water Use: | 1. Production Well 1 2. Production Well 2 |
| Peak Day Consumptive Water Use Amount (mgd): | 0.092 (Not to Exceed) |
| Authorized Project Consumptive Water Uses: | Development, Construction, and Operation of a Natural Gas Power Plant |
| Consumptive Water Use Mitigation Type: | Payment of consumptive use mitigation fee |

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

Section 4. 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 |
| Production Well 1 | 0.062 | 20150907 | September 9, 2030 |
| Production Well 2 | 0.062 | 20161210 | December 7, 2031 |

Section 5. Standard Conditions

1. The project sponsor shall comply with all Commission regulations, 18 CFR Parts 801, 806, and 808.
2. This project is approved for inclusion in the Commission's Comprehensive Plan for the Water Resources of the Susquehanna River Basin.

Section 6. Special Conditions

3. All other conditions in Commission Docket No. 20150907 not inconsistent herewith shall remain effective.

Section 7. Term

4. This modified approval shall be effective January 1, 2017. The term of Commission Docket Nos. 20150907 and 20150907-1 shall remain effective until September 9, 2030. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before March 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 December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

4423 North Front Street • Harrisburg, Pennsylvania 17110-1788

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Docket No. 20161210

Approval Date: December 8, 2016

MOXIE FREEDOM LLC

**Groundwater Withdrawal (30-Day Average) of 0.062 mgd
from Production Well 2, and
Total System Withdrawal Limit (30-Day Average) of 0.062 mgd**

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission has determined that no significant adverse impacts are anticipated by the operation of this project as described and conditioned herein, 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 is proposing to develop, construct, and operate a combined-cycle natural gas power plant using air-cooled condensers (dry cooling). The Commission formally encouraged the use of dry cooling technology in Resolution No. 2015-02 for the conservation of the waters of the Susquehanna River Basin. Consistent with Resolution No. 2015-02, the technical review of the Production Well 2 groundwater withdrawal application was prioritized by Commission staff. Production Well 2 was developed to serve as a redundant source to Production Well 1 (approved under Commission Docket No. 20150907). The project will utilize Production Well 1, Production Well 2, and storage of approximately 800,000 gallons to meet its consumptive water use demand.

The system will include two sources (Production Well 1 and Production Well 2), both of which are incorporated into the total system limit. According to information provided by the project sponsor, no other sources are used by the project. Should demand exceed the total system limit established herein, the project sponsor may seek a minor modification in accordance with Commission Regulation 18 CFR § 806.18(c)(7) to increase the total system limit, as the total system limit is based on the 15-year projected demand.

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

Section 2. Project Information

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

| Project Information | |
|--------------------------------------|--|
| Project Sponsor: | Moxie Freedom LLC |
| Approval Type: | Groundwater Withdrawal |
| Authorized Water Use Purpose: | Construction and Operation of a Natural Gas Power Plant, including Potable and Process Water and Related Incidental Uses |
| Municipality: | Salem Township |
| County: | Luzerne County |
| State: | Pennsylvania |

Section 3. Source Information

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

| Source Information | |
|--|---|
| Withdrawal Type: | Groundwater |
| Approved Source: | Production Well 2 |
| Subbasin: | Middle Susquehanna |
| Watershed Boundary Dataset (WBD): | 0205010703 (Middle Susquehanna River) |
| Withdrawal Location (degrees): | Lat: 41.117618 N Long: 76.157197 W |
| Special Flow Protection Required: | No |

Section 4. Aquifer Testing

Due to project schedule constraints, the project sponsor requested that the pre-approval of 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 the required groundwater availability analysis and a hydrogeologic report providing the results of an aquifer test of Production Well 2. The 71-hour, constant-rate aquifer test was conducted from August 17 through 20, 2015, pumping at an average rate of 43 gallons per minute (gpm). Commission staff was notified of the aquifer testing and an inspection of the monitoring network was completed on July 1, 2015, prior to initiation of the Production Well 2 aquifer test. The aquifer test included an extensive monitoring network consisting of fifteen monitoring wells (including the test well), thirteen piezometers to monitor wetlands and surface water features, and one weir. The aquifer testing and data were sufficient for staff to complete the required technical review. Therefore, the prior approval of aquifer testing required pursuant to Commission Regulation 18 CFR § 806.12 for Production Well 2 is hereby waived.

Commission staff finds that the withdrawal from Production Well 2 at the requested withdrawal rate should not cause permanent loss of aquifer storage, render competing supplies unreliable, or cause adverse impacts to the water resources of the basin, subject to the conditions set forth below.

Section 5. Approved Withdrawal Quantities and Limitations

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

| Approved Withdrawal Quantities and Limitations | |
|---|--------------------|
| 30-Day Average Withdrawal (mgd): | 0.062 |
| Maximum Instantaneous Withdrawal Rate (gpm): | 43 (Not to Exceed) |
| Peak Day Withdrawal (mgd): | 0.062 |
| Total System Withdrawal Limit – Production Wells 1 and 2 (30-Day Average) (mgd): | 0.062 |

The withdrawal is 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 |
| Production Well 1 | 0.062 | 20150907 | September 9, 2030 |

| Existing Approved Consumptive Water Uses | | | |
|---|---|------------------------------|-------------------------------|
| Source | Peak Day Consumptive Water Use (mgd) | Commission Docket No. | Docket Expiration Date |
| Production Well 1 | 0.092 | 20150907 | September 9, 2030 |

Section 7. Grandfathering Determination – Withdrawals and Consumptive Water Use

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

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

Section 8. Standard Conditions

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

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

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

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

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

6. The project sponsor shall keep daily records of the project's withdrawal and groundwater elevation and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure, and any modifications proposed for the groundwater elevation monitoring plan, shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

7. The project sponsor or any other person representing the project sponsor shall allow authorized employees or agents of the Commission, without advance notice, at any reasonable time and upon presentation of appropriate credentials, and without delay, to have access to and to

inspect all areas where the project is being constructed, operated, or maintained, or otherwise exercise all investigative powers authorized under Commission Regulation 18 CFR § 808.12.

8. 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. Except as authorized pursuant to Special Condition 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).

20. The project sponsor shall keep daily records, and shall report the same to the Commission upon request, of all persons supplied water from the project for use in hydrocarbon development, including daily quantities supplied. The project sponsor also shall keep 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 21, including daily quantities supplied.

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

Section 10. Term

22. 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.

23. This approval is effective until December 7, 2031. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 7, 2031, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20161211

Approval Date: December 8, 2016

TOWN OF NICHOLS

**Groundwater Withdrawals (30-Day Averages) of 0.250 mgd
from Well PW-1 and 0.250 mgd from Well PW-2, and
Combined Withdrawal Limit of 0.250 mgd
from Wells PW-1 and PW-2**

Section 1. Approval

After review of the record, including the technical findings of Susquehanna River Basin Commission (Commission) staff, the Commission has determined that no significant adverse impacts are anticipated by the operation of this project as described and conditioned herein, 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 Town of Nichols (Town) operates a public water supply system that consists of Wells PW-1 and PW-2, which were previously operated at withdrawal rates below the Commission's regulatory threshold. Because of planned expansion of the system and corresponding increases in withdrawals, total system withdrawals will exceed 0.100 million gallons per day (mgd) and requires Commission review and approval. The system will include two sources (Wells PW-1 and PW-2). According to information provided by the Town, no other sources are used by the project. This approval authorizes the use of Wells PW-1 and PW-2 at the requested rates and establishes a combined withdrawal limit from Wells PW-1 and PW-2.

Commission staff has coordinated with the New York Department of Health (NYDOH) and the New York State Department of Environmental Conservation (NYSDEC) during review of this project.

Section 2. Project Information

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

| Project Information | |
|--------------------------------------|------------------------|
| Project Sponsor: | Town of Nichols |
| Approval Type: | Groundwater Withdrawal |
| Authorized Water Use Purpose: | Public Water Supply |
| Municipality: | Town of Nichols |
| County: | Tioga County |
| State: | New York |

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: | Wells PW-1 and PW-2 | |
| Subbasin: | Upper Susquehanna | |
| Watershed Boundary Dataset (WBD): | 0205010305 (Pipe Creek – Susquehanna River) | |
| Withdrawal Location (degrees)*: | | |
| Well PW-1 | Lat: -- | Long: -- |
| Well PW-2 | Lat: -- | Long: -- |
| Special Flow Protection Required: | No | |
| * Specific location information concerning discrete water-related project features has been withheld for security reasons. | | |

Section 4. Aquifer Testing

The constant-rate aquifer testing required by Commission Regulation 18 CFR § 806.12 for groundwater withdrawals was completed with prior Commission approval. A 72-hour, constant-rate aquifer test of Well PW-1 was conducted from September 13 through 16, 2016, pumping at an average rate of 203 gallons per minute (gpm). A 72-hour, constant-rate aquifer test of Well PW-2 was conducted from August 30 through September 2, 2016, pumping at an average rate of 331 gpm.

Commission staff's review of the aquifer testing results indicates that significant and unacceptable well interference will occur if Wells PW-1 and PW-2 are operated concurrently. Therefore, to avoid significant and unacceptable interference between the production wells, Commission staff recommended that concurrent operation of Wells PW-1 and PW-2 be prohibited in accordance with Special Condition 22.

Commission staff determined that withdrawals from Wells PW-1 and PW-2 at the requested withdrawal rates should not cause permanent loss of aquifer storage, render competing supplies unreliable, or cause adverse impacts to the water resources of the basin, subject to the conditions set forth below.

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 PW-1 | Well PW-2 |
| 30-Day Average Withdrawal (mgd): | 0.250 | 0.250 |
| Maximum Instantaneous Withdrawal Rate (gpm) (Not to Exceed): | 200 | 325 |
| Combined Withdrawal Limit – Wells PW-1 and PW-2 (30-Day Average) (mgd): | 0.250 | |

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 did not utilize surface water withdrawals or groundwater withdrawals 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 withdrawals in accordance with Commission Regulation 18 CFR § 806.30.

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

5. The project sponsor shall adhere to the groundwater elevation monitoring plan reviewed and approved by Commission staff for the sources listed in Section 3. Within ninety (90) days from the date of this approval, the project sponsor shall install and maintain water level monitoring equipment in accordance with Commission Regulation 18 CFR § 806.30. 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.

6. The project sponsor shall keep daily records of the project's withdrawals and groundwater elevation and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure, and any modifications proposed for the groundwater elevation monitoring plan, shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

8. 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. The project sponsor shall also satisfy annual usage, capacity, and conservation reporting requirements in the form and manner prescribed by NYSDEC's Division of Water.

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. The foregoing shall include, but not be limited to, any applicable permitting requirements of NYSDEC. All such permits and/or approvals shall be obtained prior to the withdrawal of water.

The Commission may modify, suspend, or revoke this approval if the project sponsor fails to obtain or maintain such permits and/or approvals. Furthermore, no water withdrawn by this project may be used in natural gas well development using High Volume Hydraulic Fracturing in New York State.

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. Without limiting the foregoing, and upon notice, the Commission may modify the flow protection standards set forth in Section 4 above in the event the Commission or the host member jurisdiction adopts or modifies flow protection standards, or the Commission otherwise determines that a modification is necessary and appropriate to avoid adverse impacts to the sources identified in Section 3 above.

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. 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. In accordance with the approved metering plan and within sixty (60) days from the date of this approval, the project sponsor shall submit photographs of the meter when it has been installed in accordance with specifications provided by the manufacturer of the meter.

20. The date of the last meter certification was January 3, 2014; therefore, the next meter certification is due no later than January 3, 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.

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


22. Concurrent operation of Wells PW-1 and PW-2 is prohibited.

Section 10. Term

23. This approval is effective until December 7, 2031. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 7, 2031, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20161212

Approval Date: December 8, 2016

TOWN OF RISING SUN

**Transfer (30-Day Average) of up to 0.625 mgd from an
Interconnection with Chester Water Authority, and
Total System Withdrawal Limit (30-Day Average) of 0.625 mgd**

Section 1. Approval

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

This approval authorizes the transfer via interconnection at a reduced withdrawal rate and establishes a total system limit. The project sponsor requested approval to receive bulk water supply from Chester Water Authority (CWA) of up to 1.800 million gallons per day (mgd) (peak day) and up to 1.000 mgd (30-day average), basing the requested quantity on a 30-year projected demand. The bulk water supply is proposed to replace the project sponsor's existing groundwater sources, including sources approved under Commission Docket Nos. 19890303 and 20031009. The groundwater sources will not be used once the interconnect is operational and would only be maintained for emergency use. The project sponsor also requested an extended approval term of 30 years. Staff recommended that the requested 30-year term be reduced to 22 years to coincide with the Pennsylvania Department of Environmental Protection's (PADEP's) water allocation permit under which CWA operates the withdrawals from their sources. Staff also recommends that the maximum quantity of transfer and the total system limit be based on the projected demand coincident with the reduced term, which using demand projects provided and supplemented by staff, was determined to be 0.625 mgd (30-day average). This approval incorporates those recommendations. Should demand exceed the total system limit established herein, the project sponsor may seek a minor modification in accordance with Commission Regulation 18 CFR § 806.18(c)(7) to increase the total system limit, as the total system limit is based on the 22-year projected demand.

Commission staff has coordinated with PADEP, the Department of Conservation and Natural Resources (DCNR), the Pennsylvania Fish and Boat Commission (PFBC), and the Maryland Department of the Environment (MDE) 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: | Town of Rising Sun |
| Approval Type: | Interstate Project/Interconnection |
| Authorized Water Use Purpose: | Public Water Supply |
| Municipality: | Rising Sun District |
| County: | Cecil County |
| State: | Maryland |

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: | Chester Water Authority (Susquehanna River and Octoraro Creek Reservoir) |
| Subbasin: | Lower Susquehanna |
| Interconnection Location (degrees)*: | Lat: -- Long: -- |
| * Specific location information concerning discrete water-related project features has been withheld for security reasons. | |

Section 4. Approved Interconnection/Transfer of Bulk Water Supply Quantities and Limitations

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

| Approved Interconnection Quantities and Limitations | |
|---|-------|
| 30-Day Average Interconnection/Transfer of Bulk Water (mgd): | 0.625 |
| Total System Withdrawal Limit (30-day average) (mgd): | 0.625 |

The interconnection 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 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.

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

4. This approval is conditioned on the project sponsor maintaining legal access to the interconnection pipeline and associated infrastructure location for the duration of the approval.

5. 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.

6. 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.

7. 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.

8. 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.

9. 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.

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

Section 6. Special Conditions

11. Measurement and accounting of the bulk supply via interconnection from CWA is required to be completed in accordance with the metering plan reviewed and approved by Commission staff and as approved by Commission Docket No. 20161203 issued to CWA. Using the metering equipment approved under Commission Docket No. 20161203 and maintained by CWA, the project sponsor shall keep daily records of the project's bulk supply 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. Should the metering arrangement change, any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

12. The project sponsor is required to apply for and obtain Commission approval prior to any increase in the total system limit and transfer quantity of bulk water established herein. Application for increase to the total system limit and transfer quantity of bulk water can be made in accordance with Commission Regulation 18 CFR § 806.18(c)(7) for a minor modification to increase the total system limit, as the total system limit and the transfer quantity of bulk water are both based on the 22-year projected demand.

13. The project sponsor shall abide by requirements of MDE in completing transition from the existing well sources to the source from interconnection. Both the wells and the interconnection may be operated simultaneously until completion of the transition activities, if approved by MDE. Following completion of the transition, the project sponsor shall not use existing groundwater wells or any other sources without Commission approval (Commission docket or Emergency Certificate) and notification to and approval from MDE prior to introduction of water from other sources into the public water supply distribution system. The project sponsor can operate the withdrawals at a rate under the Commission's withdrawal threshold to "exercise" equipment consistent with MDE guidelines to maintain the equipment in workable fashion in case of need to use during an emergency condition. No water shall be introduced from the wells into the distribution system during the "exercising" of the wells.

14. The project sponsor shall notify the Commission in writing within forty-eight (48) hours of completion of transitioning and cessation of use of groundwater sources for public water supply. Within fifteen (15) days of providing written notice, the project's groundwater withdrawal data, up to the date of completion of transition, must be uploaded on the Commission's Monitoring Data Website.

15. Upon completion of transition to the source approved herein for fully operational uses, the project's existing approvals for withdrawal from groundwater wells under Commission Docket Nos. 19890303 and 20031009 shall result in concurrent and automatic rescission.

16. The project sponsor is required to apply for and obtain approval prior to any supply or expansion of service area that results in diversion of water out of the Susquehanna River Basin.

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


Section 7. Term

18. The project sponsor has a period of three (3) years from the date of this approval to commence the bulk supply through interconnection 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.

19. This approval is effective until March 31, 2038. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before September 30, 2037, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2016.

Dated: December 9, 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. 20161213
Approval Date: December 8, 2016

SUNOCO PIPELINE L.P.

**Surface Water Withdrawal (Peak Day) of up to 2.880 mgd
 from Conodoguinet Creek**

Section 1. Approval

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

This project is temporary and therefore the associated withdrawal infrastructure does not include permanent installation. Additionally, this approval has a reduced term of 5 years from the date of approval.

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: | Sunoco Pipeline L.P. |
| Approval Type: | Surface Water Withdrawal |
| Authorized Water Use Purpose: | Hydrostatic Testing of Pipeline, Horizontal Directional Drilling, and Related Incidental Uses |
| Municipality: | North Middleton Township |
| County: | Cumberland 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: | Conodoguinet Creek |
| Subbasin: | Lower Susquehanna |
| Watershed Boundary Dataset (WBD): | 0205030504 (Lower Conodoguinet Creek) |
| Water Use Designation: | Warm Water Fishery (WWF) |
| Withdrawal Location (degrees): | Lat: 40.241697 N Long: 77.188769 W |
| Site Flow Statistics (cfs): | Q7-10 = 52.0; Average Daily Flow = 498 |
| Drainage Area (square miles): | 387 |
| Aquatic Resource Class*: | 4 |
| 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): | 2.880 (Not to Exceed, When Available) | |
| Maximum Instantaneous Withdrawal Rate (gpm): | 2,000 (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 01570000; Conodoguinet Creek near Hogestown, 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 | 173 | 211 |
| February | 214 | 261 |
| March | 311 | 379 |
| April | 305 | 371 |
| May | 218 | 265 |
| June | 149 | 182 |
| July | 107 | 131 |
| August | 92 | 113 |

| 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> |
| September | 81 | 99 |
| October | 79 | 97 |
| November | 103 | 127 |
| December | 139 | 170 |
| mgd – million gallons per day 1 cfs = 448.8 gallons per minute (gpm) | | USGS– U.S. Geological Survey * Flow Protection Threshold |

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

Section 5. Standard Conditions

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

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

3. 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 approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

10. The project sponsor shall register with the appropriate agency all surface water 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.

Section 6. Special Conditions

17. 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. Additionally, the sign shall state: "Approved for a temporary, short-duration withdrawal for horizontal directional drilling and hydrostatic testing of pipeline." 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 withdrawal 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.

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. The project sponsor shall keep daily records, and shall report the same to the Commission upon request, of the daily quantities supplied and consumptively used for the purpose of horizontal directional drilling and related incidental uses. The project sponsor is required to apply for and obtain approval prior to the total consumptive use that would exceed the regulatory threshold in Commission Regulation 18 CFR § 806.4(a)(1)(i).

21. The project sponsor should adhere to recommendations provided by PFBC in the September 20, 2016, Pennsylvania Natural Diversity Inventory (PNDI) response for avoiding adverse impact to documented occurrences of rare species at or in proximity to the project location. The documented species are the elktoe mussel (*Alasmidonta marginata*) and triangle floater mussel (*Alasmidonta undulata*).

22. 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. Prior to any withdrawal from the source listed in Section 3, the project sponsor shall submit an aquatic nuisance species control plan to the Commission for review and approval by Commission staff that details equipment decontamination procedures.

23. Prior to initiation of construction of the water withdrawal project, the project sponsor shall submit evidence of finalized legal site access.

Section 7. Term

24. The project sponsor has a period of three (3) years from the date of this approval to commence the withdrawal or this approval will automatically expire, unless an extension is requested, in writing, by the project sponsor no later than one hundred twenty (120) days prior to such expiration and approved by the Commission as provided in Commission Regulation 18 CFR § 806.31(b). In accordance with Commission Regulation 18 CFR § 806.31(d), if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project.

25. This approval is effective until December 7, 2021. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 7, 2021, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20161214

Approval Date: December 8, 2016

SUNOCO PIPELINE L.P.

**Surface Water Withdrawal (Peak Day) of up to 2.880 mgd
from the Frankstown Branch Juniata River**

Section 1. Approval

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

This project is temporary and therefore the associated withdrawal infrastructure does not include permanent installation. Additionally, this approval has a reduced term of 5 years from the date of approval.

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: | Sunoco Pipeline L.P. |
| Approval Type: | Surface Water Withdrawal |
| Authorized Water Use Purpose: | Hydrostatic Testing of Pipeline, Horizontal Directional Drilling, and Related Incidental Uses |
| Municipality: | Frankstown Township |
| County: | Blair 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: | Frankstown Branch Juniata River |
| Subbasin: | Juniata |
| Watershed Boundary Dataset (WBD): | 0205030203 (Lower Frankstown Branch Juniata River) |
| Water Use Designation: | Warm Water Fishery (WWF) |
| Withdrawal Location (degrees): | Lat: 40.434339 N Long: 78.297033 W |
| Site Flow Statistics (cfs): | Q7-10 = 37.4; Average Daily Flow = 315 |
| Wild Trout Classification: | Naturally Reproducing Wild Trout |
| Impairment: | Total Suspended Solids (TSS) |
| Drainage Area (square miles): | 228 |
| Aquatic Resource Class*: | 4 |
| 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): | 2.880 (Not to Exceed, When Available) | |
| Maximum Instantaneous Withdrawal Rate (gpm): | 2,000 (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 01556000; Frankstown Branch Juniata River at Williamsburg, 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 | 97 | 126 |
| February | 119 | 154 |
| March | 243 | 312 |
| April | 219 | 282 |
| May | 148 | 191 |

| 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> |
| June | 89 | 116 |
| July | 63 | 82 |
| August | 52 | 69 |
| September | 49 | 64 |
| October | 50 | 66 |
| November | 58 | 76 |
| December | 74 | 96 |
| mgd – million gallons per day 1 cfs = 448.8 gallons per minute (gpm) | | USGS – U.S. Geological Survey * Flow Protection Threshold |

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

Section 5. Standard Conditions

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

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

3. 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 approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

10. The project sponsor shall register with the appropriate agency all surface water 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.

Section 6. Special Conditions

17. 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. Additionally, the sign shall state: "Approved for a temporary, short-duration withdrawal for horizontal directional drilling and hydrostatic testing of pipeline." 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 withdrawal 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.

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. The project sponsor shall keep daily records, and shall report the same to the Commission upon request, of the daily quantities supplied and consumptively used for the purpose of horizontal directional drilling and related incidental uses. The project sponsor is required to apply for and obtain approval prior to the total consumptive use that would exceed the regulatory threshold in Commission Regulation 18 CFR § 806.4(a)(1)(i).

21. The project sponsor shall adhere to recommendations provided by PFBC for avoiding adverse impact to documented occurrences of naturally reproducing wild trout population at or in proximity to the project location by avoiding instream construction from October 1 through December 31, unless otherwise approved by PFBC in writing and submitted to the Commission.

22. 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. Prior to any withdrawal from the source listed in Section 3, the project sponsor shall submit an aquatic nuisance species control plan to the Commission for review and approval by Commission staff that details equipment decontamination procedures.


Section 7. Term

23. 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.

24. This approval is effective until December 7, 2021. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 7, 2021, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

4423 North Front Street • Harrisburg, Pennsylvania 17110-1788

(717) 238-0423 Phone • (717) 238-2436 Fax

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Docket No. 20161215

Approval Date: December 8, 2016

SUNOCO PIPELINE L.P.

**Surface Water Withdrawal (Peak Day) of up to 2.880 mgd
from the Susquehanna River**

Section 1. Approval

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

This project is temporary and therefore the associated withdrawal infrastructure does not include permanent installation. Additionally, this approval has a reduced term of 5 years from the date of approval.

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: | Sunoco Pipeline L.P. |
| Approval Type: | Surface Water Withdrawal |
| Authorized Water Use Purpose: | Hydrostatic Testing of Pipeline, Horizontal Directional Drilling, and Related Incidental Uses |
| Municipality: | Highspire Borough and Lower Swatara Township |
| County: | Dauphin 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: | Lower Susquehanna |
| Watershed Boundary Dataset (WBD): | 0205030510 (Susquehanna River) |
| Water Use Designation: | Warm Water Fishery (WWF) |
| Withdrawal Location (degrees): | Lat: 40.204258 N Long: 76.787853 W |
| Site Flow Statistics (cfs): | Q7-10 = 3,230; Average Daily Flow = 35,100 |
| Impairment: | Polychlorinated Biphenyl (PCB) |
| Drainage Area (square miles): | 24,354 |
| 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): | 2.880 (Not to Exceed, When Available) | |
| Maximum Instantaneous Withdrawal Rate (gpm): | 2,000 (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 01570500; Susquehanna River at Harrisburg, 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 | 4,470 | 4,430 |

| 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 | 3,550 | 3,520 |
| September | 3,020 | 3,000 |
| October | 3,190 | 3,170 |
| November | 4,220 | 4,180 |
| December | 6,060 | 6,010 |
| mgd – million gallons per day | | USGS – U.S. Geological Survey |
| 1 cfs = 448.8 gallons per minute (gpm) | | -- – No special flow protection required |
| * Flow Protection Threshold | | |

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

Section 5. Standard Conditions

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

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

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

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

5. The project sponsor shall adhere to the intake design reviewed and approved by Commission staff, and shall obtain necessary general or individual permits from the jurisdictional permitting agency prior to use of the intake. The project sponsor shall provide the Commission with a copy of the permit prior to operating the withdrawal. If subsequent design

review by the permitting agency requires modification to the intake design, the project sponsor shall submit to the Commission a revised intake design for review and, if appropriate, approval by Commission staff prior to permit issuance by the permitting agency. Thereafter, any modifications proposed by the project sponsor for the permitted intake structure shall be submitted for review and, if appropriate, approval by Commission staff in accordance with Commission Regulations 18 CFR § 806.21 and § 806.23 prior to undertaking such modification(s).

6. The project sponsor shall keep daily records of the project's withdrawal and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

10. The project sponsor shall register with the appropriate agency all surface water 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.

Section 6. Special Conditions

17. 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. Additionally, the sign shall state: "Approved for a temporary, short-duration withdrawal for horizontal directional drilling and hydrostatic testing of pipeline." 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 withdrawal 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.

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. The project sponsor shall keep daily records, and shall report the same to the Commission upon request, of the daily quantities supplied and consumptively used for the purpose of horizontal directional drilling and related incidental uses. The project sponsor is

required to apply for and obtain approval prior to the total consumptive use that would exceed the regulatory threshold in Commission Regulation 18 CFR § 806.4(a)(1)(i).

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. Prior to any withdrawal from the source listed in Section 3, the project sponsor shall submit an aquatic nuisance species control plan to the Commission for review and approval by Commission staff that details equipment decontamination procedures.

22. Prior to initiation of construction of the water withdrawal project, the project sponsor shall submit evidence of finalized legal site access.


Section 7. Term

23. 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.

24. This approval is effective until December 7, 2021. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 7, 2021, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20161216

Approval Date: December 8, 2016

SUNOCO PIPELINE L.P.

**Surface Water Withdrawal (Peak Day) of up to 2.880 mgd
from Swatara Creek**

Section 1. Approval

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

This project is temporary and therefore the associated withdrawal infrastructure does not include permanent installation. Additionally, this approval has a reduced term of 5 years from the date of approval.

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: | Sunoco Pipeline L.P. |
| Approval Type: | Surface Water Withdrawal |
| Authorized Water Use Purpose: | Hydrostatic Testing of Pipeline, Horizontal Directional Drilling, and Related Incidental Uses |
| Municipality: | Londonderry Township |
| County: | Dauphin 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: | Swatara Creek |
| Subbasin: | Lower Susquehanna |
| Watershed Boundary Dataset (WBD): | 0205030509 (Lower Swatara Creek) |
| Water Use Designation: | Warm Water Fishery (WWF) |
| Withdrawal Location (degrees): | Lat: 40.219028 N Long: 76.724606 W |
| Site Flow Statistics (cfs): | Q7-10 = 71.7; Average Daily Flow = 961 |
| Drainage Area (square miles): | 558 |
| Aquatic Resource Class*: | 4 |
| 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): | 2.880 (Not to Exceed, When Available) | |
| Maximum Instantaneous Withdrawal Rate (gpm): | 2,000 (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 01573560; Swatara Creek at Hershey, 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 | 254 | 224 |
| February | 335 | 294 |
| March | 524 | 457 |
| April | 534 | 466 |
| May | 393 | 344 |
| June | 243 | 214 |
| July | 159 | 142 |
| August | 123 | 110 |

| 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> |
| September | 104 | 94 |
| October | 121 | 109 |
| November | 179 | 159 |
| December | 289 | 254 |
| mgd – million gallons per day 1 cfs = 448.8 gallons per minute (gpm) | | USGS – U.S. Geological Survey * Flow Protection Threshold |

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

Section 5. Standard Conditions

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

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

3. 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 approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

10. The project sponsor shall register with the appropriate agency all surface water 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.

Section 6. Special Conditions

17. 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. Additionally, the sign shall state: "Approved for a temporary, short-duration withdrawal for horizontal directional drilling and hydrostatic testing of pipeline." 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 withdrawal 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.

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. The project sponsor shall keep daily records, and shall report the same to the Commission upon request, of the daily quantities supplied and consumptively used for the purpose of horizontal directional drilling and related incidental uses. The project sponsor is required to apply for and obtain approval prior to the total consumptive use that would exceed the regulatory threshold in Commission Regulation 18 CFR § 806.4(a)(1)(i).

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. Prior to any withdrawal from the source listed in Section 3, the project sponsor shall submit an aquatic nuisance species control plan to the Commission for review and approval by Commission staff that details equipment decontamination procedures.


Section 7. Term

22. 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.

23. This approval is effective until December 7, 2021. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 7, 2021, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20161217

Approval Date: December 8, 2016

SUNOCO PIPELINE L.P.

**Surface Water Withdrawal (Peak Day), Variable, of up to 2.880 mgd
from Tuscarora Creek**

Section 1. Approval

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

The project sponsor requested a peak day withdrawal of 2.880 million gallons per day (mgd) at a maximum instantaneous rate of 2,000 gallons per minute (gpm). In consideration of the drainage area, flows in Tuscarora Creek, and the magnitude of the proposed withdrawal, staff informed the project sponsor of staff's intention to recommend a reduction in the withdrawal rates and adjustments to the passby flows to be protective during low flow conditions. The project sponsor subsequently requested peak day monthly withdrawal rates and monthly maximum instantaneous rates of 500 to 2,000 gpm. Considering the revised requested withdrawal rates, Commission staff recommended that special flow protection requirements be required to reflect current policy. This approval incorporates those modified rates and staff's recommendations.

This project is temporary and therefore the associated withdrawal infrastructure does not include permanent installation. Additionally, this approval has a reduced term of 5 years from the date of approval.

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: | Sunoco Pipeline L.P. |
| Approval Type: | Surface Water Withdrawal |
| Authorized Water Use Purpose: | Hydrostatic Testing of Pipeline, Horizontal Directional Drilling, and Related Incidental Uses |
| Municipality: | Lack Township |
| County: | Juniata 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: | Tuscarora Creek |
| Subbasin: | Juniata |
| Watershed Boundary Dataset (WBD): | 0205030409 (Tuscarora Creek) |
| Water Use Designation: | Cold Water Fishery (CWF) |
| Withdrawal Location (degrees): | Lat: 40.301508 N Long: 77.696519 W |
| Site Flow Statistics (cfs): | Q7-10 = 2.2; Average Daily Flow = 75.2 |
| Impairment: | Pathogens |
| Drainage Area (square miles): | 60.3 |
| Aquatic Resource 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): | 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 |

| Approved Withdrawal Quantities and Limitations (continued) | | | | |
|---|----------------------------------|--|---|---|
| Method for Monitoring Flow Protection: | | Off-site monitoring of USGS Real-Time Gage 01566000; Tuscarora Creek near Port Royal, 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 | 2.880 | 2,000 | 23 | 92 |
| February | 2.880 | 2,000 | 28 | 112 |
| March | 2.880 | 2,000 | 51 | 194 |
| April | 2.880 | 2,000 | 51 | 192 |
| May | 2.880 | 2,000 | 32 | 124 |
| June | 2.448 | 1,700 | 15 | 64 |
| July | 1.354 | 940 | 8.5 | 36 |
| August | 0.936 | 650 | 6.2 | 26 |
| September | 0.720 | 500 | 5.1 | 21 |
| October | 1.080 | 750 | 6.8 | 29 |
| November | 1.584 | 1,100 | 10 | 44 |
| December | 2.160 | 1,500 | 14 | 59 |
| USGS– U.S. Geological Survey 1 cfs = 448.8 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, 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 approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

10. The project sponsor shall register with the appropriate agency all surface water 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.

Section 6. Special Conditions

17. 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. Additionally, the sign shall state: "Approved for a temporary, short-duration withdrawal for horizontal directional drilling and hydrostatic testing of pipeline." 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 withdrawal 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.

18. The project sponsor shall cease all withdrawals from the approved source when streamflow, as measured at the U.S. Geological Survey stream gage specified in Section 4, is less than the applicable flow protection threshold specified in Section 4, and shall not reinstate

withdrawals until the streamflow has remained above such flow protection threshold for 48 hours.

19. The project sponsor shall, on a daily basis, collect and record streamflow as measured at the U.S. Geological Survey stream gage specified in Section 4, and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. The project sponsor may propose alternative flow monitoring to the Commission for staff review and, if appropriate, approval.

20. The project sponsor shall keep daily records, and shall report the same to the Commission upon request, of the daily quantities supplied and consumptively used for the purpose of horizontal directional drilling and related incidental uses. The project sponsor is required to apply for and obtain approval prior to the total consumptive use that would exceed the regulatory threshold in Commission Regulation 18 CFR § 806.4(a)(1)(i).

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. Prior to any withdrawal from the source listed in Section 3, the project sponsor shall submit an aquatic nuisance species control plan to the Commission for review and approval by Commission staff that details equipment decontamination procedures.

Section 7. Term

22. 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.

23. This approval is effective until December 7, 2021. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 7, 2021, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

4423 North Front Street • Harrisburg, Pennsylvania 17110-1788

(717) 238-0423 Phone • (717) 238-2436 Fax

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Docket No. 20161218

Approval Date: December 8, 2016

SWEPI LP

**Surface Water Withdrawal (Peak Day), Variable, of up to 2.000 mgd
from the Cowanesque River**

Section 1. Approval

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

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), the Department of Conservation and Natural Resources (DCNR), and the Pennsylvania Fish and Boat Commission (PFBC) during review of this project.

Section 2. Project Information

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

| Project Information | |
|--------------------------------------|---|
| Project Sponsor: | SWEPI LP |
| Approval Type: | Surface Water Withdrawal |
| Authorized Water Use Purpose: | Hydrocarbon Development and Related Incidental Uses |
| Municipality: | Deerfield 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: | Cowanesque River |
| Subbasin: | Chemung |
| Watershed Boundary Dataset (WBD): | 0205010408 (Cowanesque River) |
| Water Use Designation: | Warm Water Fishery (WWF) |
| Withdrawal Location (degrees): | Lat: 41.954112 N Long: 77.417388 W |
| Site Flow Statistics (cfs): | Q7-10 = 2.7; Average Daily Flow = 246 |
| Impairment: | Siltation |
| Drainage Area (square miles): | 201 |
| Aquatic Resource Class*: | 4 |
| 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 01518862; Cowanesque River at Westfield, 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 | 2.000 | 1,389 | 44 | 22 |
| February | 2.000 | 1,389 | 60 | 29 |
| March | 2.000 | 1,389 | 140 | 65 |
| April | 2.000 | 1,389 | -- | -- |
| May | 2.000 | 1,389 | 55 | 27 |
| June | 2.000 | 1,389 | 22 | 12 |
| July | 1.000 | 694 | 10 | 5.2 |
| August | 1.000 | 694 | 6.2 | 3.5 |

| 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> |
| September | 1.000 | 694 | 6.7 | 3.7 |
| October | 1.000 | 694 | 12 | 6.3 |
| November | 2.000 | 1,389 | 24 | 13 |
| December | 2.000 | 1,389 | 62 | 30 |
| mgd – million gallons per day | | USGS – U.S. Geological Survey | | |
| 1 cfs = 448.8 gallons per minute (gpm) | | -- – No special flow protection required | | |
| * Flow Protection Threshold | | | | |

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

Section 5. Standard Conditions

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

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

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

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

5. The project sponsor shall adhere to the intake design reviewed and approved by Commission staff, and shall obtain necessary general or individual permits from the jurisdictional permitting agency prior to use of the intake. The project sponsor shall provide the Commission with a copy of the permit prior to operating the withdrawal. If subsequent design review by the permitting agency requires modification to the intake design, the project sponsor

shall submit to the Commission a revised intake design for review and, if appropriate, approval by Commission staff prior to permit issuance by the permitting agency. Thereafter, any modifications proposed by the project sponsor for the permitted intake structure shall be submitted for review and, if appropriate, approval by Commission staff in accordance with Commission Regulations 18 CFR § 806.21 and § 806.23 prior to undertaking such modification(s).

6. The project sponsor shall keep daily records of the project's withdrawal and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

7. 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. The project sponsor shall adhere to recommendations provided by the United States Fish and Wildlife Service in the Bald Eagle Project Screening Form executed by the project sponsor on October 24, 2016, for avoiding adverse impact to documented occurrences of threatened species at or in proximity to the project location. The documented species is the bald eagle (*Haliaeetus leucocephalus*).

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 minor modification under Commission Regulation 18 CFR § 806.18(c)(4) for such new use to the Executive Director. The project sponsor shall not supply water for such use unless and until such authorization is granted, and pursuant to any supplemental terms and conditions contained in such approval.

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


Section 7. Term

25. The project sponsor has a period of three (3) years from the date of this approval to commence the withdrawal or this approval will automatically expire, unless an extension is requested, in writing, by the project sponsor no later than one hundred twenty (120) days prior to such expiration and approved by the Commission as provided in Commission Regulation 18 CFR § 806.31(b). In accordance with Commission Regulation 18 CFR § 806.31(d), if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project.

26. This approval is effective until December 7, 2020. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 7, 2020, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

4423 North Front Street • Harrisburg, Pennsylvania 17110-1788

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Docket No. 20161219

Approval Date: December 8, 2016

TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC

**Surface Water Withdrawal (Peak Day) of up to 2.880 mgd
from Fishing Creek, and
Consumptive Water Use (Peak Day) of up to 0.100 mgd
from Fishing Creek**

Section 1. Approval

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

This project is temporary and therefore the associated withdrawal infrastructure does not include permanent installation. Additionally, this approval has a reduced term of 5 years from the date of approval.

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: | Transcontinental Gas Pipe Line Company, LLC |
| Approval Types: | Surface Water Withdrawal and Consumptive Water Use |
| Authorized Water Use Purpose: | Hydrostatic Testing of Pipeline, Horizontal Directional Drilling, and Related Incidental Uses |
| Municipality: | Hemlock Township |
| County: | Columbia County |
| State: | Pennsylvania |

Section 3. Source Information

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

| Source Information | |
|--|---|
| Approved Source: | Fishing Creek |
| Subbasin: | Middle Susquehanna |
| Watershed Boundary Dataset (WBD): | 0205010707 (Fishing Creek) |
| Water Use Designation: | Warm Water Fishery (WWF) |
| Withdrawal Location (degrees): | Lat: 41.016456 N Long: 76.475603 W |
| Site Flow Statistics (cfs): | Q7-10 = 22.1; Average Daily Flow = 647 |
| Drainage Area (square miles): | 361 |
| Aquatic Resource Class*: | 4 |
| 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): | 2.880 (Not to Exceed, When Available) | |
| Maximum Instantaneous Withdrawal Rate (gpm): | 2,000 (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 01539000; Fishing Creek near Bloomsburg, 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 | 188 | 147 |
| February | 211 | 164 |
| March | -- | -- |
| April | -- | -- |
| May | 255 | 198 |
| June | 118 | 94 |
| July | 58 | 48 |

| | | |
|--|---|---|
| August | 42 | 36 |
| 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> |
| September | 39 | 33 |
| October | 55 | 46 |
| November | 152 | 119 |
| December | 237 | 184 |
| mgd – million gallons per day 1 cfs = 448.8 gallons per minute (gpm) * Flow Protection Threshold | | |
| USGS – U.S. Geological Survey -- – No special flow protection required | | |

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

Section 5. Approved Consumptive Water Use Quantities and Limitations

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

| | |
|--|--|
| Approved Consumptive Water Use Quantities and Limitations | |
| Source for Project Consumptive Water Use: | Fishing Creek |
| Peak Day Consumptive Water Use Amount (mgd): | 0.100 (Not to Exceed) |
| Authorized Project Consumptive Water Uses: | 1. Horizontal directional drilling (HDD) 2. Related incidental uses |
| Consumptive Water Use Mitigation Type: | Payment of consumptive use mitigation fee |

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

Section 6. 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 consumptive water uses, 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 consumptive use and shall report the data to the Commission quarterly, and as otherwise required, in the form and manner as prescribed by Commission staff. Quarterly monitoring reports shall be submitted online and are due within thirty (30) days after the close of the preceding quarter. Any alternative measuring, monitoring, or accounting procedure requested by the project sponsor shall be submitted for review and approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

to consumptive users of water using this method of compliance, is subject to change at the Commission's discretion.

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 or consumptive use that would exceed the amounts listed herein or to add a source used for consumptive use that is not listed in Section 5.

Section 7. Special Conditions

18. 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. Additionally, the sign shall state: "Approved for a temporary, short-duration withdrawal for horizontal directional drilling and hydrostatic testing of pipeline." 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 withdrawal 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.

19. 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 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. Prior to any withdrawal from the source listed in Section 3, the project sponsor shall submit an aquatic nuisance species control plan to the Commission for review and approval by Commission staff that details equipment decontamination procedures.

22. Prior to initiation of construction of the water withdrawal project, the project sponsor shall submit evidence of finalized legal site access.

Section 8. Term

23. 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.

24. This approval is effective until December 7, 2021. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 7, 2021, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2016.

Dated: December 9, 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. 20161220

Approval Date: December 8, 2016

GILBERTON POWER COMPANY

**Into-Basin Diversion (Peak Day) of up to 0.099 mgd
from Wells AN-P03 and AN-P04
in the Delaware 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 significant adverse impacts are anticipated by the operation of this project as described and conditioned herein, 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 Wells AN-P03 and AN-P04 located on property owned by Gilberton Power Company in West Mahanoy Township, Schuylkill County, into the Susquehanna River Basin for potable water and use in various supporting services for cogeneration facility processes that require higher quality water than can be obtained from the Gilberton Mine Pool. Wastewater from these processes is discharged to the Susquehanna River Basin via an on-lot septic system and a sediment pond located above the Boston Run Mine Pool and near the Gilberton Mine Pool. The into-basin diversion of water from the wells was initiated in 1988. The cogeneration facility was first reviewed and approved by the Commission on December 11, 1985, under Commission Docket No. 19851202. A groundwater withdrawal application and an application to renew the previously approved consumptive use from the Gilberton Mine Pool are being considered and acted on separately at the Commission's December 8, 2016, business meeting.

Commission staff has coordinated with the Pennsylvania Department of Environmental Protection (PADEP), the Pennsylvania Fish and Boat Commission (PFBC), and the Delaware River Basin Commission (DRBC) 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: | Gilberton Power Company |
| Approval Type: | Into-Basin Diversion from the Delaware River Basin |
| Authorized Water Use Purpose: | Potable Water and Supporting Services for Cogeneration Facility Processes |
| Municipality: | West Mahanoy Township |
| County: | Schuylkill County |
| State: | Pennsylvania |

Section 3. Source Information

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

| Source Information | | |
|--|-------------------------------------|-------------------|
| Approved Sources: | Wells AN-P03 and AN-P04 | |
| Basin: | Delaware River Basin | |
| Watershed Boundary Dataset (WBD): | 0204020302 (Upper Schuylkill River) | |
| Withdrawal Locations (degrees): | | |
| AN-P03 | Lat: 40.789350 N | Long: 76.192880 W |
| AN-P04 | Lat: 40.790658 N | Long: 76.187798 W |

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): | 0.099 (Not to Exceed) |
| mgd – million gallons per day | |

The into-basin diversion is also subject to all other conditions set forth in this docket approval.

Section 5. Standard Conditions

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

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

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

3. The project sponsor shall maintain metering 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 approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

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

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

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

10. If the project sponsor fails to comply with the provisions of the Susquehanna River Basin Compact or any rule, regulation, or order of the Commission, or any term or condition of this docket, the project sponsor is subject to enforcement actions pursuant to Commission Regulation 18 CFR Part 808.

11. Commission approval shall not be construed to exempt the project sponsor from obtaining and maintaining all necessary permits and/or approvals required for the project from other federal, state, or local government agencies having jurisdiction over the project. The

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

12. The Commission may at any time reopen any project approval or issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts or otherwise to protect public health, safety, welfare, or the environment pursuant to Commission Regulation 18 CFR § 806.32.

13. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

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

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

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

Section 6. Special Conditions

17. Within ninety (90) days from the date of this approval, the project sponsor shall certify and maintain metering on the plant demineralizer and domestic water supplies, and the prison condensate return, in accordance with Commission Regulation 18 CFR § 806.30. The project sponsor shall notify the Commission, in writing, and certify the accuracy of the measuring device(s) to within five (5) percent of actual flow.


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

Section 7. Term

19. This approval is effective until December 7, 2031. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 7, 2031, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20161221

Approval Date: December 8, 2016

JKLM ENERGY, LLC

Into-Basin Diversion (Peak Day) of up to 1.100 mgd from the Goodwin and Son's Sand and Gravel 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 significant adverse impacts are anticipated by the operation of this project as described and conditioned herein, 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 Goodwin and Son's Sand and Gravel Quarry in Roulette Township, Potter County, into the Susquehanna River Basin for hydrocarbon development for downhole use only. Water will be diverted by truck from the source to be used at drilling pad locations approved by the Commission to consumptively use water.

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: | JKLM Energy, LLC |
| Approval Type: | Into-Basin Diversion from the Ohio River Basin |
| Authorized Water Use Purpose: | Hydrocarbon Development (Downhole Use Only) |
| Municipality: | Roulette Township |
| County: | Potter 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: | Goodwin and Son's Sand and Gravel Quarry |
| Basin: | Ohio River Basin |
| Watershed Boundary Dataset (WBD): | 0501000103 (Headwaters Allegheny River) |
| Withdrawal Location (degrees): | Lat: 41.762731 N Long: 78.119748 W |
| Impairment: | No state-listed impairment; quarry water exhibits iron concentration exceeding Title 25 Pa. Code Chapter 93 Water Quality Standards |

Section 4. Approved Into-Basin Diversion Quantities and Limitations

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

| Approved Into-Basin Diversion Quantities and Limitations | |
|--|-----------------------|
| Peak Day Diversion Amount (mgd): | 1.100 (Not to Exceed) |
| mgd – million gallons per day | |

The into-basin diversion is also subject to all other conditions set forth in this docket approval.

Section 5. Standard Conditions

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

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

3. Prior to any diversion from the source listed in Section 3, the project sponsor shall install and maintain metering on the diversion 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 and 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 implementation of the 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 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 approval by Commission staff in accordance with Commission Regulation 18 CFR § 806.30. Modifications shall not be made until the project sponsor receives written approval of the amended plan. All data collected and submitted as required under this approval shall be maintained by the project sponsor for the duration of the approval and all subsequent renewals.

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

17. Except as authorized pursuant to Special Condition 19, the project sponsor shall only supply water for use in hydrocarbon development to persons who have properly registered this approval pursuant to Commission Regulation 18 CFR § 806.22(f)(12).

18. 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 19, including daily quantities supplied.

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

20. 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

21. 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.

22. This approval is effective until December 7, 2020. As specified in Commission Regulation 18 CFR § 806.31(e), if the project sponsor submits an application on or before June 7, 2020, the project sponsor may continue operation of this project pursuant to the terms and conditions of this approval until such time as the Commission acts on such application, or until otherwise notified by the Executive Director.

CERTIFICATION: I, Stephanie L. Richardson, Secretary to the Susquehanna River Basin Commission, do hereby certify that the foregoing project docket was approved by the Susquehanna River Basin Commission on December 8, 2016.

Dated: December 9, 2016


Stephanie L. Richardson